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Career satisfaction of beginning teachers in Iowa

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Career satisfaction of beginning teachers in Iowa

by

Seung-Ho Kang

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CHAPTER I. INTRODUCTION

The satisfaction of school teachers with their jobs is an issue of increasing concern in education. Several trends contribute to this concern. First, the public schools and public school teachers have been the target of considerable criticism in the popular news media. Social status and respect for teachers, in the view of some, have declined. Faced with growing negative public opinion, educators are concerned about maintaining teacher morale and understanding better the ingredients of career satisfaction (Chapman, 1983a).

Second, recent evidence suggests that the academic ability or quality of those choosing to enter and remain in teaching is on the decline (Schlechty & Vance, 1981; Weaver, 1984). If the quality of teachers declines, the quality of education is likely to follow. If students are to learn more and better, then high-quality teachers must be retained in the profession. This issue has motivated researchers to examine the nature of teaching as a career and factors related to career satisfaction.

Third, the factors that influence job satisfaction take on a more urgent sense of importance when we read statistics from polls of the National Education Association (1980) indicating that 35 percent of all public school teachers are dissatisfied with their current teaching jobs and 41 percent would not become teachers if they could start over again. The percentage of dissatisfaction shows a significant increase over the relatively low level (10%) consistently reported since

1935 when the first survey of teacher job satisfaction was conducted (Hoy & Miskel, 1982). The percentage of those who would not become teachers again greatly increased between 1971 and 1981 from about 10 percent to almost 40 percent (Darling-Hammond, 1984).

Despite multiple definitions of job satisfaction and competing notions of how to measure it, research has identified relationships between teacher satisfaction and various aspects of teaching (Chapman, 1983a; Kyriacou &Sutcliffe, 1979; Sergiovanni, 1966). Literature reveals that teacher job satisfaction is positively associated with a teacher's age (DiCaprio, 1974; Sweeney, 1981), self-rated skills, values and professional achievements (Chapman, 1983a; Chapman & Lowther, 1982), career persistence or retention (Chapman, 1983b, 1984; Super & Hall, 1978), needs fulfillment (Kreis, 1983), and physical and mental health (Locke, 1983). It is negatively associated with teaching level (Lester, 1984), size of the school district (Lester, 1984), teacher stress and frequency of absences (Kyriacou & Sutcliffe, 1979), teacher burnout (Kreis, 1983), and turnover rates (Kremer & Hofman, 1981). In addition, teacher job satisfaction is significantly related to sex, and female teachers are more likely to be satisfied with their jobs than male teachers (Chapman & Lowther, 1982; Lortie, 1975).

Career satisfaction plays an important role in teachers' persistence in teaching, particularly as it mediates the influence of other factors on their career decisions (Chapman, 1983b). Indeed, Chapman (1984) found that career satisfaction was an important factor in explaining teachers' decision to leave or

remain in teaching. Harris and associates (1985) reported that teachers left teaching because they had not been satisfied during their teaching careers.

A national concern currently exists regarding the qualifications of beginning teachers. The National Commission on Excellence in Education suggested that today's beginning teachers are not as well qualified as those who entered teaching previously (Gardner, 1983). Low salaries, reduced status for teachers, and limited preparation in subject matter courses have produced a generation of teachers who may need "more formal assistance than has heretofore been provided" (Griffin, Barnes, Defino, Edwards, Hoffman, Hukill & O'Neal, 1983). The most critical time in a teacher's career is the first year. The first-year of teaching appears to influence teachers and the teaching profession in many ways (Chapman, 1983b). Early frustration of beginning teachers may act to discourage teachers from pursuing their career. It leads to job dissatisfaction and it shapes beginning teachers' professional and social patterns that affect retention. A positive first teaching experience would promote retention and would increase the likelihood of a person's ratings on adequacy of his or her teacher preparation program (p. 45).

Research indicates that teacher attrition is greatest during the transition or early years of teaching (Pavalko, 1970; Schlechty & Vance, 1981; Wolf & Wolf, 1964), and many people who are certified never enter teaching, or enter but leave within a few years (Feistritzer, 1984). Much of the attrition in the teaching profession can be attributed to teachers' dissatisfaction with extrinsic and intrinsic

rewards, as well as with the lack of professional working conditions (Murphy, 1982). Gaede (1978) and Lortie (1975) recognized the transition phase as a critical period for beginning teachers as many teachers realize that their preparation programs have not adequately prepared them for the realities of classroom teaching. The quality of teacher preparation programs and teachers' sense of efficacy are likely to influence beginning teachers' career plans. Indeed, Murphy (1982) reported that inadequate preparation and unrealistic training for the job can bring about dissatisfaction in teachers and lead many of them to leave teaching. Sweeney (1987) suggested that improving the quality of preparation programs may ease the role transition from student to teacher as well as teacher attrition. In addition, the program effects may be reflected in the performance of beginning teachers and their job satisfaction.

In summary, evidence suggests that there is increased concern about the satisfaction of school teachers with their jobs and there has been much decline in teacher satisfaction. Job satisfaction has been found to be positively related to a teacher's age, self-rated skills, values and professional achievements, teacher retention, needs fulfillment, and physical and mental health, but it is negatively related to teaching level, size of the school district, teacher stress, frequency of absences, teacher burnout, and turnover rates. In addition, teacher job satisfaction is significantly related to sex and female teachers are more likely to be satisfied with their jobs than male teachers. The decline in quality of teachers, the high rate of teacher attrition, especially during the early years following

teacher preparation, can be attributed to teachers' dissatisfaction with extrinsic and intrinsic rewards, as well as the lack of professional working conditions, and inadequacy of their teacher preparation programs. This complicated issue has motivated researchers to study the nature of teaching profession and to examine the factors related to career satisfaction.

Need for the Study

Many educators express concern over the satisfaction of teachers with their jobs. Considerable research efforts have been made to understand the factors related to career satisfaction, but most studies have concentrated on experienced teachers' job satisfaction. There has been little systematic investigation in the area of beginning teachers' job satisfaction. Furthermore, there has been little study of the relationship between factors related to teacher preparation programs and career satisfaction of teachers. While a number of factors have been found to be related to teacher satisfaction, there is little agreement about the significance of the factors and the relationship among those factors. Therefore, additional study is needed to confirm previous studies, and to supplement the lack of previous research.

Statement of the Problem

The decline in teacher satisfaction, the decline in quality of teachers, and the high rate of attrition during the early years following teacher preparation

seriously chalienge the profession.

In this research, factors that may influence career satisfaction of beginning teachers and relationships among career satisfaction and those factors will be examined. These factors include personal characteristics (age, sex), teaching level, academic preparation level, self-rated adequacy of teacher preparation areas, self-rated importance of teacher preparation areas to the first-year teaching position, length of student teaching experience, length of clinical experience, overall satisfaction with student teaching experience, overall satisfaction with clinical experience, amount of support received during the first-year of teaching, and decision to choose teaching again.

Purpose of the Study

The purpose of this study is to identify attitudes and perceptions of beginning teachers in Iowa about many factors related to teacher career satisfaction and to examine the relationships between teacher career satisfaction and those factors. In this study, a beginning teacher has been operationally defined as a teacher who has been teaching in the public or private schools at the level of kindergarten to twelfth grade for one year or less.

Objectives of the Study

The specific objectives of the study are as follows:

1. To determine the degree of satisfaction with specific aspects of the first-year

teaching position of beginning teachers.

2. To determine the degree of overall career satisfaction of beginning teachers during the first-year of teaching.
3. To determine the relationships between overall career satisfaction of beginning teachers and related factors, including age, sex, teaching level, academic preparation level, self-rated adequacy of teacher preparation areas, self-rated importance of teacher preparation areas to the first-year teaching position, length of student teaching experience, length of clinical experience, overall satisfaction with student teaching experience, overall satisfaction with clinical experience, amount of support received during the first-year teaching, and decision to choose teaching again.
4. To determine the relationships between overall career satisfaction and satisfaction with specific aspects of the first-year teaching position of beginning teachers.
5. To determine the relationship between overall career satisfaction of beginning teachers and the decision to choose teaching again.
6. To determine factors which most contribute to the prediction of overall career satisfaction of beginning teachers.
7. To determine factors which most contribute to the prediction of decision to choose teaching again.
8. To examine the formulated hypotheses regarding the relationships between overall career satisfaction or decision to choose teaching again and related

factors.

9. To develop a theoretical model of teacher career satisfaction.

Independent and Dependent Variables

Dependent variables

The dependent variables used in this study are overall career satisfaction of beginning teachers and decision to choose teaching again. The first dependent varabie, overall career satisfaction was measured by the average response on two items (item 18 and item 20) in this study:

1. On a scale of 0 (very low) to 10 (very high), how would you rate your satisfaction with teaching as a career?
2. On a scale of 0 (very low) to 10 (very high), how would you rate your overall job satisfaction during your first-year of teaching?

These two items are highly correlated (r=0.74). The second dependent variable, decision to choose teaching again was measured by responding 'yes', 'no', or 'undecided' on item 17 indicating whether they would or would not choose teaching as a career if they could start over again.

Independent variables

The independent variables for the first dependent variable, overall career satisfaction, are as follows:

1) current teaching level, 2) academic preparation level, 3) age, 4) sex, 5) self-rated adequacy of teacher preparation program, 6) self-rated importance of teacher preparation program to the first-year teaching position, 7) length of student teaching experience, 8) overall satisfaction with student teaching experience, 9) length of clinical experience, 10) overall satisfaction with clinical experience, 11) amount of support received during the first-year of teaching, and 12) satisfaction with specific aspects of the first-year teaching position.

The independent variables for the second dependent variable, decision to choose teaching again, are overall career satisfaction of beginning teachers, and the12 independent variables listed above for the first dependent variable.

Research Hypotheses

In order to achieve the purpose of this study, the following 14 hypotheses were formulated on the basis of review of literature and the theoretical framework for the study:

1. There is a positive relationship between age and overall career satisfaction of beginning teachers.
2. There is a significant difference between male and female beginning teachers' overall career satisfaction.
3. There is a significant difference in the overall career satisfaction of beginning teachers at different teaching levels.
4. There is a significant interaction effect in the overall career satisfaction of

beginning teachers between sex and teaching level.

5. There is a significant difference in the overall career satisfaction of beginning teachers at different academic preparation levels.
6. There is a positive relationship between self-rated adequacy of teacher preparation areas and overall career satisfaction of beginning teachers.
7. There is no relationship between self-rated importance of teacher preparation areas to the first-year teaching position and overall career satisfaction of beginning teachers.
8. There is a significant difference in the overall career satisfaction of beginning teachers at different length of student teaching experience and there is a positive relationship between overall satisfaction with student teaching experience and overall career satisfaction of beginning teachers.
9. There is a significant difference in the overall career satisfaction of beginning teachers at different length of clinical experience and there is a positive relationship between overall satisfaction with clinical experience and overall career satisfaction of beginning teachers.
10. There is a positive relationship between amount of support received during the first-year of teaching and overall career satisfaction of beginning teachers.
11. There is a significant difference in the overall career satisfaction of beginning teachers who would or would not choose teaching as a career again.
12. There is a significant relationship between overall career satisfaction of beginning teachers and the combination of factors on satisfaction with

specific aspects of the first-year teaching position.

13. There is a significant relationship between overall career satisfaction of beginning teachers and the combination of all independent variables.
14. There is a significant relationship between the decision to choose teaching again and the combination of all independent variables.

Basic Assumptions

The data used in this study were collected from the "Iowa Beginning Teacher Survey" conducted by the Research Institute for Studies in Education (RISE) in Fall semester 1986.

The basic assumptions underlying this study were:

1. The instruments, survey procedures, and data collection methods used by RISE were reliable and valid.
2. The questions described in the "Iowa Beginning Teacher Survey" were effective in measuring career satisfaction of beginning teachers in Iowa.
3. Beginning teachers have generalized attitudes toward their careers and current employment.
4. Beginning teachers in the same type of employment vary in the intensity of their satisfaction with the employment.

Delimitations of the Study

This study has the following delimitations:

1. This study was limited to 586 teachers who completed a "Iowa Beginning Teacher Survey", through a mail questionnaire sent to 916 teachers identified by the Iowa Department of Education as first-year teachers in the 1985-86 school year.
2. The questions described in the "Iowa Beginning Teacher Survey" do not represent all the aspects by which career satisfaction of beginning teachers can be measured.
3. Caution should be used in generalizing the results of this study to beginning teachers outside the state of Iowa.

Significance of the Study

How beginning teachers feel about and perceive their jobs and their working conditions, or how beginning teachers are satisfied with their overall jobs and specific aspects of their first-year teaching position, should be of interest and of importance to school administrators and to the faculty of teacher training institutions. The results of the study will provide valuable information about career satisfaction of beginning teachers in Iowa.

First, educational administrators can obtain useful information concerning how beginning teachers evaluate their present teaching positions in order to determine the level of their career satisfaction with the job and working

conditions.

Second, this study may help discover those aspects of working conditions that contribute to teacher job satisfaction. Some sources of job satisfaction or dissatisfaction should be enhanced or reduced for the professional development of beginning teachers or school effectiveness if it is feasible.

CHAPTER II. REVIEW OF LITERATURE

For the purpose of this study, the review of literature focuses on the theoretical framework necessary in the study and a discussion of previous studies of teacher job satisfaction and related factors, including a teacher's age, sex, teaching level, academic preparation level, teacher preparation program, decision to choose teaching again, working conditions, rewards, professional achievement, and skills and abilities.

The Theoretical Framework

There has been a lack of comprehensive theoretical frameworks for examining teacher career satisfaction. However, Chapman and Lowther's (1982) model and Chapman's (1983b) model help us to understand the factors which influence teacher career satisfaction. Chapman and Lowther's model is based on Holland's (1973) theory of vocational choice and the work of Super and Hall (1978), while Chapman's model is based on Krumboltz's (1979) social learning theory of career decision making.

Chapman and Lowther's model

Holland (1973), in his theory of vocational choice, posits that vocational satisfaction, stability, and achievement depend on the congruence between one's personality and one's work environment. Holland describes six personality types

(realistic, investigative, social, conventional, enterprising, and artistic), which he uses to characterize different vocations. The work environment also can be classified into these same six categories. According to Holland's theory, teachers are described as exhibiting a combination of, in descending amounts, social, artistic, and enterprising skills and abilities. Hence, within Holland's model, teachers should be good at explaining things to others, supervising others, organizing, and getting people to do things their way (Chapman & Lother, 1982).

The work of Super and Hall (1978) in reviewing the research on career development can be used to identify values that should relate to career satisfaction. Super and Hall pointed out that people who feel challenged by their work, who have autonomy in carrying out their tasks, and who feel adequately rewarded are more likely to persist in and be satisfied with their employment. In addition, Super (1980) contends that although individuals possess the potential for success and satisfaction in a number of occupations, career satisfaction is determined by congruence between interests and abilities required in a particular occupation and those developed by the individual.

Chapman and Lowther (1982), drawing from Holland's theory of vocational choice and the work of Super and Hall, conducted a study designed to investigate the factors that influence career satisfaction of public school teachers. They proposed a recursive conceptual model of the influences affecting teacher satisfaction and reported a study of the relationships between teachers' personal

characteristics, skills and abilities, values, professional achievement, and career satisfaction.

The model suggests that career satisfaction is influenced by 1) a teacher's personal characteristics; 2) a teacher's skills and abilities, particularly in organizing time and activities, and communicating effectively; 3) the criteria a teacher uses to judge his or her professional success, particularly with respect to job challenge and rewards; and 4) professional achievement to date, with particular respect to job challenge and rewards.

Figure 1 shows a model of the influences affecting teacher satisfaction developed by Chapman and Lowther (1982).

Chapman and Lowther (1982) tested the model with a sample of 542 teachers who had taught continuously since their graduation. This group included those who graduated from the University of Michigan every other year between 1946 and 1976. Results supported the model. Specifically, women teachers reported greater satisfaction with their career than men teachers. The abilities to speak effectively and persuade others to accept one's ideas were related to career satisfaction in a positive direction, while writing effectively and communicating with others were negatively related. The importance assigned to leadership activities as a basis for judging professional success was negatively related to career satisfaction, but actual accomplishments in that area had a strong positive relationship. Likewise, the importance assigned to the opportunity to learn new things was negatively related, while actual accomplishments in

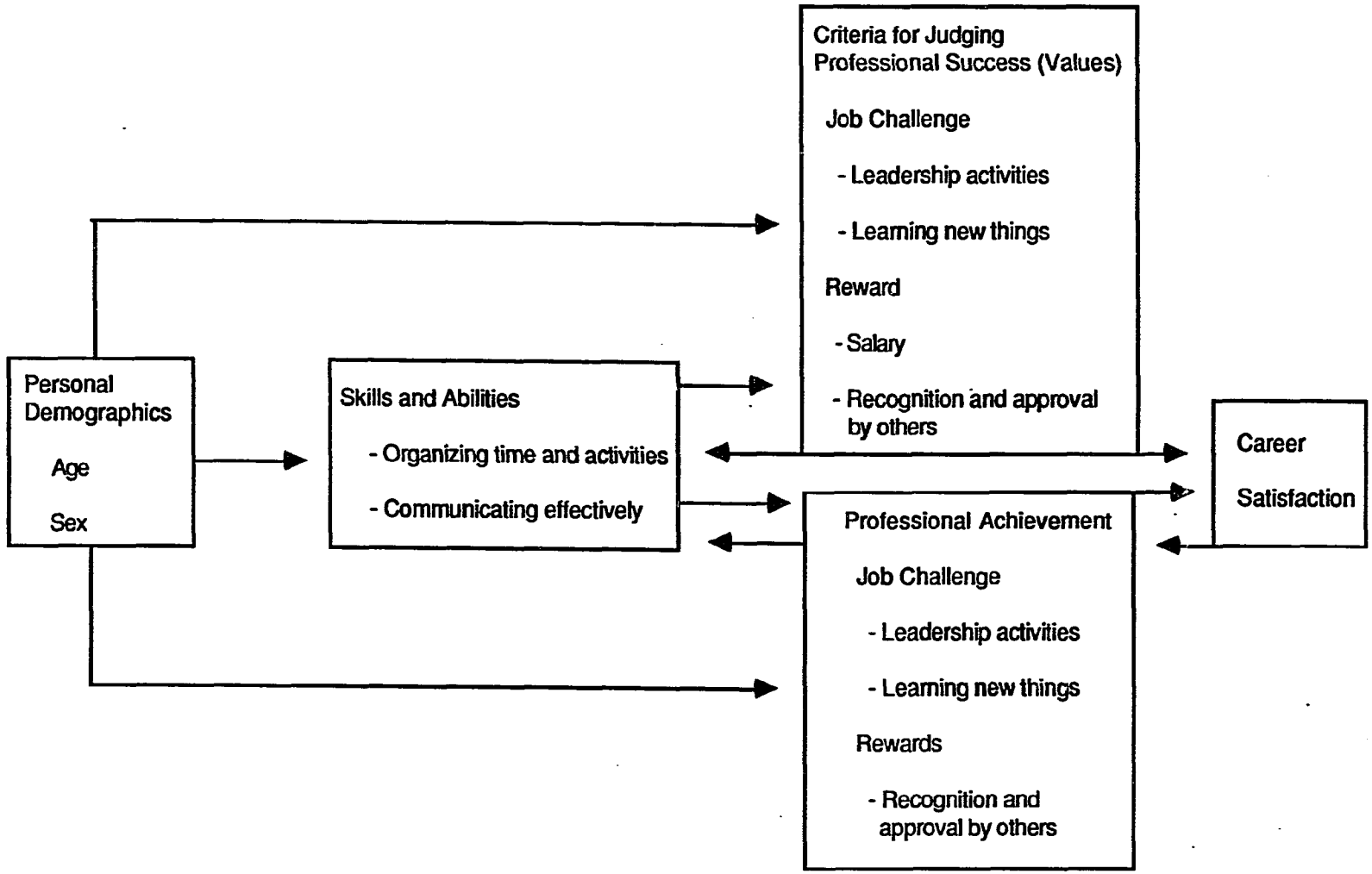


Figure 1. A model of the influences affecting teacher satisfaction

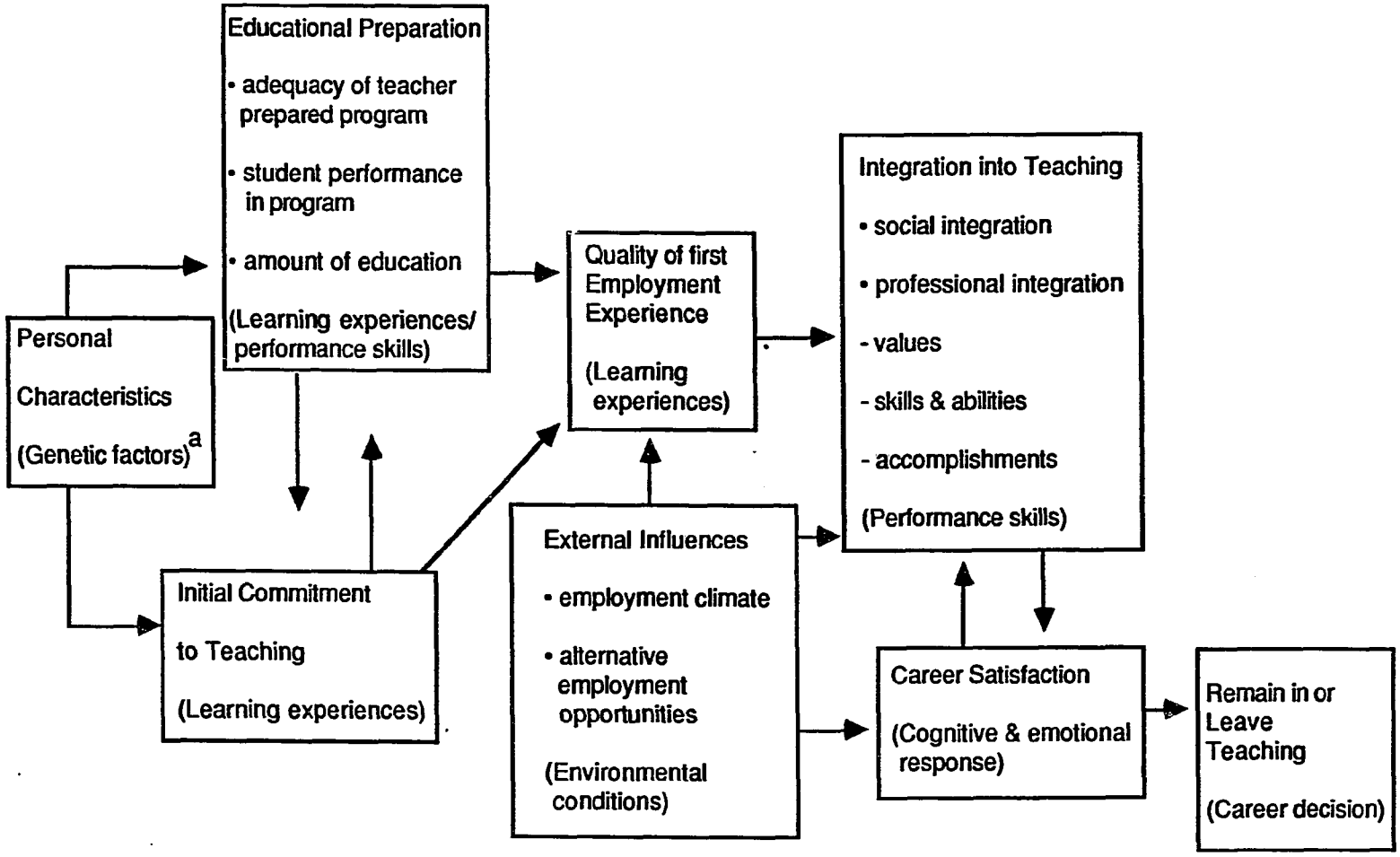
learning new things was positively related. In addition, there was a positive relationship between the recognition actually received from administrators and supervisors, and career satisfaction.

In addition, Chapman (1983a) conducted a study in which he hypothesized that teachers differing in career satisfaction would differ in their skills, abilities, values, and professional achievement. Subjects consisted of a sample of 437 teacher education graduates from three public universities in Indiana who graduated in selected years between 1967 and 1978 and whose first employment following graduation was teaching. Results indicated that after differences due to age, sex, and income had been removed, satisfaction of high school teachers was related significantly to their self-rated skills and abilities. For elementary teachers, career satisfaction was related significantly to the importance they assigned to selected criteria of professional success. For both groups, career satisfaction was significantly related to teachers' professional achievement in a pattern consistent with Holland's model.

Chapman's model

Chapman (1983b) proposed a longitudinal model to explain teacher satisfaction and retention. Figure 2 shows a model of the influences affecting teacher satisfaction and retention that specifies the important variable sets and their relationships.

Chapman states that this model is based on social learning theory, which



[a]Words in parentheses indicate the relationship of components of the model to the more general tenets of social learning theory.

Figure 2. A model of the influences affecting teacher satisfaction and retention

posits the belief that psychological functioning can be explained in terms of the interaction of personal characteristics, previous behavior (e.g., learning), and environmental determinants. Krumboltz (1979), in his social learning theory of career decision making, argues that social learning theory can be used to identify the interaction of genetic factors, environmental conditions, learning experiences, cognitive and emotional responses, and performance skills that produce movement along one career path or another. Combinations of these factors interact in different ways to produce different career decisions (Krumboltz, 1979).

Although social learning theory offers a general explanation of career choice, Chapman's model offers a more specific application of Krumboltz's theory to the teaching career (Chapman, 1983b). The present model suggests that career satisfaction is influenced by 1) the personal characteristics of the teacher, 2) the nature of teacher preparation and early teaching experience, 3) the degree to which the teacher is socially and professionally integrated into the teaching profession, and 4) the external environmental influences impinging on the teacher's career. The relationship of Chapman's model to Krumboltz's social learning theory of career decision making is indicated by noting in parentheses in Figure 2 how each component of the model might be labeled in the more general theory. Chapman (1984) subsequently tested the model with a sample of 1282 teaching certificate recipients who graduated from the University of Michigan every other year between 1946 and 1978. Results supported this model for the most part.

In testing the model, discriminant analysis was used to study differences among three groups of people with teaching certificates: (a) those who taught continuously, (b) those who started teaching but left teaching within five years, and (c) those who never taught. A meaningful distinction was found between those who prepared for teaching but never taught and those who entered teaching only to leave it within five years. Both groups differed from those who taught continuously since graduation. Career satisfaction, in this study, was significantly related to individuals' decisions to leave or never enter teaching. Those who left teaching indicated less satisfaction with their job, but greater overall life satisfaction, than those who never taught.

In addition, they rated the relevance of their educational experiences lower even than those who never entered teaching. On the other hand, those who taught continuously rated their first teaching experience more positively than those went directly into other careers. Chapman suggested that if an administrator is concerned with teacher retention, work with beginning teachers is a key intervention point. Moreover, among those who entered teaching the quality of first teaching experience was more strongly related to subsequent attrition than was either their academic performance or the perceived adequacy of their educational program. This finding supports arguments for the importance of student teaching experience as part of preservice teacher preparation.

A theoretical model of teacher career satisfaction

On the basis of Chapman and Lowther's model and Chapman's model, a theoretical model of teacher career satisfaction for this study can be developed. This model of the relationships among personal characteristics, teacher preparation program factors, job employment factors, the integration of support received during the first-year of teaching, specific satisfaction (satisfaction with specific aspects of the first-year teaching position) of beginning teachers, overall career satisfaction of beginning teachers, and decision to choose teaching again is presented in Figure 3.

In this model, personal characteristics affect teacher preparation program factors and job employment factors, which, in turn, influence the integration of support received during the first-year of teaching. Teacher preparation program factors influence job employment factors. The integration of support received during the first-year of teaching affects specific satisfaction of beginning teachers and specific satisfaction affects overall career satisfaction of beginning teachers. In addition, overall career satisfaction can influence individuals' decisions to choose teaching again.

In this study, the personal characteristics include a teacher's age and sex. Self-rated adequacy of teacher preparation, self-rated importance of teacher preparation to the first-year teaching position, length of student teaching experience, length of clinical experience, overall satisfaction with student teaching experience, overall satisfaction with clinical experience, and academic

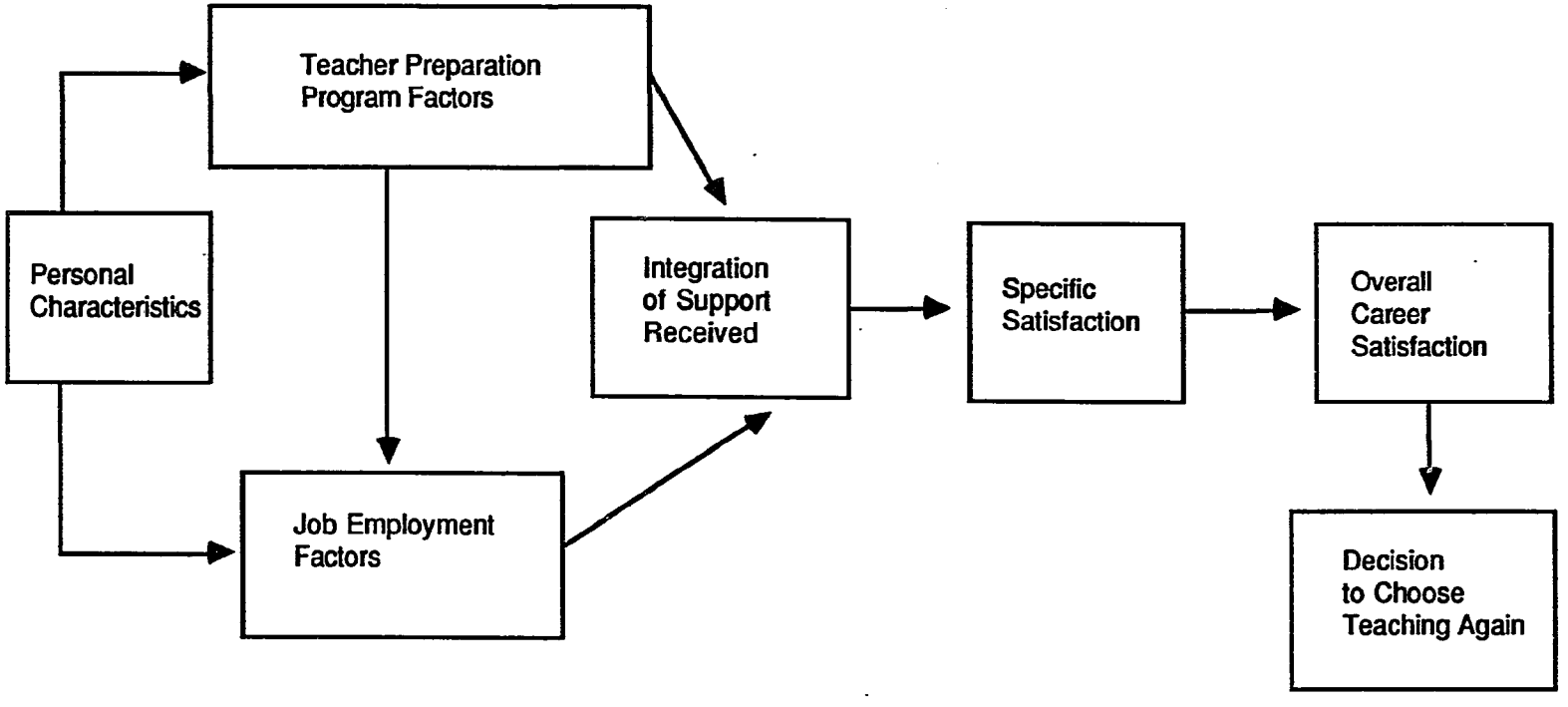


Figure 3. A theoretical model of teacher career satisfaction

preparation level represent teacher preparation program factors. Job employment factors include current teaching level. The integration of support received includes six sources of support received during the first-year of teaching. Specific satisfaction includes four factors identified by the factor analysis.

A discussion of previous studies of teacher career satisfaction and related factors in the theoretical model of teacher career satisfaction is included in the following sections.

Age

Studies of job satisfaction among teachers have indicated that job satisfaction tends to be higher for older and more experienced teachers (DiCaprio, 1974; Price, 1971; Start & Laundy, 1973; Sweeney, 1981). · Sweeney (1981) reported that older, more experienced teachers were more satisfied in their positions than colleagues in the other age groups. Herzberg (1966) reported a U-shaped function between age and job satisfaction indicating that job satisfaction starts high, declines, and then starts to improve again with increasing age. He suggests that this may not be so much a function of age, per se, but the increased opportunity older workers have to find jobs which suit them most. In contrast, Chapman (1983a) reported that differences in personal characteristics (sex, age, income) did not significantly predict level of career satisfaction for either elementary or high school teachers.

Sex

A number of studies reported higher job satisfaction for female teachers than male teachers (Chapman & Lowther, 1982; Charters, 1970; Lortie, 1975; NEA, 1980; Price, 1971), but some failed to indicate sex differences (DiCaprio, 1974; Start & Laundy, 1973; Sweeney, 1981).

Chapman and Lowther (1982), with a sample of 616 full time teachers in the public schools, reported that female teachers were more satisfied with their teaching career than male teachers. While this study differed from the findings of Chapman (1983a) and Chapman and Hutcheson (1982), in which personal characteristics (sex, age, income) were not significantly related to career satisfaction, it was consistent with earlier work by Lortie (1975) and Charters (1970). Lortie (1975) found men teachers less satisfied with their work than either single or married women teachers; he found men teachers considerably less certain than women teachers that they would repeat their decision to teach again. Charters (1970) states that career satisfaction for women teachers is often related to the flexible time arrangements that teaching allows for home and family.

Teaching level

Lester (1984) reported that elementary school teachers were more satisfied than senior high school teachers on the factors of colleagues, working conditions, pay, responsibility, and work itself. This finding is consistent with the findings of

the National Education Association (1980), which found that elmentary school teachers are the most satisfied, and senior high school teachers are the most dissatisfied. In another study, Pigge and Lovett (1985) examined the possibility that job satisfaction of beginning teachers might vary among elementary, secondary, specialized and special education teaching fields. Results revealed that special education teachers were most satisfied with teaching and the secondary school teachers were the least satisfied. Elementary and specialized teachers were between these two extremes. These findings were consistent with Bentzen, Williams, and Heckman's (1980) study which indicated that elementary school teachers had more job satisfaction than did secondary school teachers, but they were in conflict with Sergiovanni's (1966) finding that there were no satisfaction differences between elementary and secondary school teachers.

Academic preparation level

When the relationship between educational level and job satisfaction was examined, while controlling for occupational level, unskilled and semiskilled workers with more than a high school diploma showed a greater tendency to be dissatisfied with their jobs than did persons with lower levels of education (Sheppard & Herrick, 1972). Education appears to be related to job satisfaction and, as education level increases, job satisfaction subsequently increases with the prestige of the job held (Campbell, Gardner & Seitz, 1982). In contrast, Corwin (1965) suggests that increased levels of education often lead to

increased conflict with principals and other administrators, leading to a less satisfying work situation and an increased willingness of teachers to consider a job change.

Teacher preparation program

There has been little study that examined the relationship between factors related to teacher preparation program and career satisfaction. However, there is evidence suggesting that the teacher preparation program tends to influence teacher career satisfaction and retention. For example, Murphy (1982) indicated that both inadequate preparation and unrealistic training for the job influence dissatisfaction of teachers and lead many teachers to leave the profession. Chapman (1984) also reported that the teacher preparation program plays a significant role in leading teacher education graduates to enter and remain in teaching. Indeed, teachers consistently report that their teacher education programs have not prepared them adequately for the reality or classroom teaching (Gaede, 1978; Lortie, 1975).

Ashton, Webb, and Doda (1983) reported that teachers with a strong sense of the efficacy (the extent to which teachers believe that they have the capacity to affect student performance) were more satisfied with their choice of teaching as a career than were teachers with a lower sense of efficacy. The teacher preparation program and the sense of efficacy derived from it are likely to influence beginning teachers' career plans.

Veenman (1984) reviewed 83 studies that were conducted since 1960 in nine countries and reported that the more problems beginning teachers experienced, the more likely they were to leave the profession. However, teachers who expressed satisfaction with their training perceived fewer problems during their early teaching years (Adams & Martray, 1980).

The student teaching experience is a major component of the teacher preparation program. The student teaching experience appears to have a significant impact on the professional development of the teachers. Hays (1982) suggested that the feeling of satisfaction that student teachers derive from their student teaching experience can be an important determinant of their decision to enter or not enter the teaching profession and shapes their attitudes about the teaching profession. Indeed, in a study with a sample of 741 Iowa State University teacher education graduates, Williams (1985) found that teacher education graduates who expressed higher level of satisfaction with their student teaching experience were more likely to report an intention to teach the academic year following graduation than were those less satisfied with student teaching. Those more satisfied were more likely to select teaching for their long-range career plans. Williams also found that students who spent eight weeks or less of student teaching were less satisfied with their student teaching experience than those who spent more than eight weeks of student teaching. Williams reported that the best predictor of overall student teaching satisfaction was working with people.

Jimmar (1986) indicated that student teacher satisfaction with teaching as a career had the most significant relationship with long-range career plan defined as teaching only and non-teaching and it was the best predictor of long-range career plan of women teacher education graduates.

Fletcher and Dotson (1976) examined students' satisfaction with their teacher education courses and student teaching experiences. They reported that student teachers' perceptions of their teacher education courses and experiences significantly changed after the student teaching experience. Data indicated that the student teachers rated lower in both instruction and value of their courses after the student teaching experiences. In contrast, they rated considerably higher in their perceptions relating to the understanding of their professional areas and skills after the student teaching experience.

Brottman and Soltz (1971) examined 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 classroom climate. The findings revealed that there was a decrease in satisfaction with classroom climate during the student teaching experience. In addition, data showed that there was no relationship between student teachers' perceptions of role, personality, needs, attitudes toward children, and classroom climate measures.

Decision to choose teaching again

It appears that the level of teacher job satisfaction influences teachers' decisions to choose teaching again. There is evidence suggesting that to ask teachers if they would become a teacher again would be a useful indicator of career satisfaction (Sweeney, 1987). Indeed, Lortie (1975) used willingness to repeat one's career choice as the indicator of teacher satisfaction. He found that men teachers were less likely than women teachers to indicate that they would choose teaching as a career again.

In another study, results of polls of the National Education Association (1980) with a sample of 1738 public school teachers revealed that: (a) only 43 percent plan to continue until they are eligible for retirement; (b) 9 percent stated that they are planning to leave the classroom as soon as possible; and (c) 41 percent stated that they would not become teachers if they could start over again. The percentage of those who would not become teachers again greatly increased between 1971 and 1981 from about 10 percent to almost 40 percent (Darling-Hammond, 1984).

Working conditions

Herzberg (1966) and Sergiovanni (1966) have shown that qualities of the work and characteristics of the work environment are associated with an employee's level of job satisfaction. Sergiovanni (1966) contended that teacher job satisfaction can be explained in terms of two sets of factors, satisfaction and

dissatisfaction. Sergiovanni found that the factors that contributed predominantly to teacher job satisfaction tend to focus on the work itself: achievement, recognition, and responsibility. He reported that the absence of these factors does not necessarily produce job dissatisfaction. In contrast, the factors that contributed most to their dissatisfaction tended to focus on the working conditions: interpersonal relations with students and peers, supervision, school policy and administration, matters of personal life, status, and unfair administrative practices.

Engelking (1986) found two factors that appeared to play an important role in teacher satisfaction: recognition and achievement. In contrast, relations with students and parents, lack of achievement by students or teachers, district policy and its administration, and communication with administrators were the factors that played the most important role in the dissatisfaction of teachers.

Lortie (1975) has shown that teachers are not at all pleased with the conditions under which they work. In addition to the absence of a broad reward structure, teachers are unhappy with the range of quality of interpersonal relations, with the low status they are afforded, with the absence of possibility for growth, and with the physical environment in which they work. In contrast, Veenman (1984), based on the review of 83 studies on the perceived problems of beginning teachers in nine countries, reported that although beginning teachers reported many problems in their first-year of teaching, they were not discontented with their working conditions. A number of studies in his review indicated that more than 80 percent of the beginning teachers were satisfied with their school.

In another study, Sweeney (1981) found that job satisfaction had a strong relationship with professional discretion. In other words, the greater the extent to which the school teachers felt they were able to exercise control over professional matters, the greater their overall satisfaction in their positions.

Rewards

Sergiovanni (1980) states that most studies of teacher job satisfaction consistently reveal that the psychic rewards derived from the teaching task itself and the pleasure of working with children are far more important to teachers than extrinsic rewards.

Chapman (1983a) reported that differences in salary as an extrinsic reward for teachers were not related to differences in career satisfaction. This is quite consistent with Lortie's (1975) observations that teaching as a career is relatively unstaged and front-loaded. That is, beginning teachers know what they will earn and that long service will bring limited salary increases. As Chapman and Hutcheson (1982) showed, people who assigned high importance to salary tended to leave teaching. Chapman and Hutcheson (1982) observed that people who persisted as teachers tended to value the recognition and approval of other people while those leaving teaching appeared to value more extrinsic rewards, such as salary. Chapman and Lowther (1982) suggested that, for those staying in teaching, greater recognition by administrators was related to greater satisfaction. Chapman (1983b) extended the study of Chapman and Hutcheson

(1982), arguing that not all who find they dislike teaching leave the profession.

In another study, Murphy (1982) has indicated, as one of important reasons why teachers leave their profession, that the rewards for the difficult teaching task range from nonexistent to indistinct. He contended that the absence of a broad and stable base of rewards for teachers provides a weak foundation upon which to build job satisfaction and it leads so many teachers leave the profession.

Professional achievement

Chapman and Lowther (1982) reported that if teachers are challenged by new ideas or find ways of offering leadership, those accomplishments are strongly positively related to career satisafctlon. They suggest that increased opportunities for teachers to exercise leadership and to continue their learning might foster greater career satisfaction, despite evidence that teachers may not seem overtly to value those activities. They also reported that career satisfaction was related to assigning little importance to activities and accomplishments that may be difficult to achieve. However, actual accomplishments in these areas had a strong positive relationship to job satisfaction.

In another study, Chapman (1983a) found that teachers' career satisfaction was significantly related to their professional achievements in a pattern consistent with Holland's (1973) model and previous study by Super and Hall (1978). Specifically, for elementary teachers, career satisfaction was significantly related to their achievement in learning new things, leadership activities, and the

recognition and approval they received from supervisors or administrators, family, and close friends. For high school teachers, satisfaction was related primarily to the recognition and approval of family, friends, and administrators.

Skills and abilities

Chapman (1983a) hypothesized that teachers differing in career satisfaction would differ in their skills, abilities and values. He found that the relationships of specific skills and abilities to job satisfaction is different for elementary and high school teachers. After differences due to age, sex, and income had been removed, satisfaction of high school teachers was significantly related to their self-rated skills and abilities. Specifically, more satisfied teachers rated themselves higher in supervising or leading and planning or organizing activities, and communicating with others, but they rated lower in organizing time, writing and speaking effectively.

For elementary school teachers, career satisfaction was related significantly to the importance they assigned to selected criteria of professional success. Specifically, more satisfied teachers assigned less importance to salary increases and more importance to recognition by administrators and supervisors. Chapman suggests that the greater importance of skills and abilities in the career satisfaction of high school teachers may reflect the basic difference between the structure of the elementary and high school environments. These findings are consistent with those of Chapman and Lowther (1982).

Chapman and Hutcheson (1982) in the study related to job satisfaction sought to determine why some teachers decide to leave the field of teaching while others stay in the profession. They investigated differences in skills and abilities and the criteria individual teachers use to judge success in their professional endeavors. Results showed that those who did and did not leave teaching differed significantly. People remaining in teaching were characterized as having greater organizational skills such as managing time, developing new approaches in the classroom, and planning and scheduling activities. Those leaving had better analytic skills such as evaluating and interpreting numerical data.

CHAPTER III. METHODS

This study was designed to identify attitudes and perceptions of beginning teachers in Iowa about many factors related to teacher career satisfaction and to examine the relationships between teacher career satisfaction and those factors.

Data Source and Collection

In 1980, the Research Institute for Studies in Education (RISE) began implementation of a comprehensive model designed to evaluate and improve the teacher preparation program at Iowa State University. The model was designed to be a longitudinal study and included the collection of data from teacher education students and graduates at major points in their preparation and careers. These data provide information about the attitudes, competencies, personal characteristics, and career paths of the teacher education students and graduates at various stages in their career development. In Fall 1986, RISE conducted the "Iowa Beginning Teacher Survey" for the purpose of expanding the RISE research base as a part of a larger research effort which is directed toward the development and testing of a comprehensive teacher career path model. The data used in this study were collected from the "Iowa Beginning Teacher Survey" conducted by RISE. Although the researcher did not participate in development of the survey, he did participate in the preparation for mailing and response coding. He was solely responsible for carrying out review of literature and the data analyses reported in this document.

Subjects

The target population for this study is all first-year teachers in Iowa in the 1985-86 school year. The accessible population for the study consisted of 916 teachers identified by the Iowa Department of Education as first-year teachers in Iowa in the 1985-86 school year. Completed questionnaires were received from a sample of 586 first-year teachers, for a response rate of 64 persent.

Demographic information about the characteristics of beginning teachers in Iowa during the 1985-86 academic year is provided in Table 1. As shown in Table 1, three-fourths of the respondents were female teachers (74.9%) and one-fourth were male teachers (25.1%). The majority of the respondents (51.9%) were 23 or 24 years old and approximately 38 percent were between the ages of 25 and 35. About nine percent of beginning teachers were over the age of 35. In addition, the greatest percentage of respondents were employed at the elementary level (32.8%) and the smallest percentage were at the kindergarten level (4.6%). Secondary teachers accounted for about one-fifth (20.9%) of the respondents, and about 30 percent were teaching at more than one level.

Table 1. Characteristics of the respondents

Characteristics	Number	Relative percent	Adjusted percent
Sex			
Female	439	74.9	74.9
Male	147	25.1	25.1
Total	586	100.0	100.0
Age			
22	8	1.4	1.4
23	175	29.9	30.4
24	124	21.2	21.5
25 through 27	135	23.0	23.4
28 through 35	83	14.2	14.4
36 through 63	51	8.7	8.8
No response	10	1.7	****
Total	586	100.0	100.0
Teaching level			
Kindergarten	27	4.6	4.6
Elementary	191	32.6	32.8
Junior high/middle school	71	12.1	12.2
Secondary	122	20.8	20.9
More than one level	172	29.4	29.5
No response	3	0.5	****
Total	586	100.0	100.0

Procedures

In conducting the survey, RISE closely followed the procedures for conducting a mail survey recommended by Dillman (1978).

For the first mailing, the superintendent at each school district which employed a new teacher in 1985-86 received a packet containing 1) a copy of the survey, 2) a letter to the superintendent explaining the purpose of the study, 3) a request for address information on each teacher, and 4) packets for identified first-year teachers consisting of a beginning teacher survey and a cover letter. The superintendents agreed to distribute the teacher packets to those 1985-86 first-year teachers currently employed in the district and forward packets to those no longer employed in the district. Three weeks later, a second questionnaire was mailed to those who had not respond to the first mailing, with a reminder postcard mailed after another three weeks. A total of 586 (64%) questionnaires were returned and included in this study.

Reasons for nonresponse to the survey include the following: 1) Some first-year teachers may have left the profession by the time the survey was sent; 2) Some packets may not have been distributed by the superintendent; 3) Some of the names of first-year teachers provided by the Department of Education were for those who were teaching for the first-year in a particular district, but not for the first-year in their career; 4) Some Iowa school districts were not contacted since, according to the Department of Education list, no first-year teachers were teaching in those districts. Some errors may have been present in that listing.

teaching in those districts. Some errors may have been present in that listing.

A follow-up of nonrespondents would have been difficult since they could only be identified through the superintendents.

In other research on teacher education graduates conducted by RISE, nonrespondents tended to be those who never taught after graduation and those who had low college grades. Males were more likely to be in this group than females.

Instrumentation

The instrument used in this study was developed by RISE personnel. This questionnaire was designed to obtain baseline information from the first-year teachers in Iowa regarding ways in which teacher preparation programs can enhance the professional development of beginning teachers and to examine attitudes and perceptions of beginning teachers about many issues related to education in Iowa.

This questionnaire is composed of 25 items. Fifteen of these items were relevant to this study. These items asked the subjects to report 1) current teaching level (item 2); 2) academic preparation level (item 6); 3) personal information: age and sex (item 7); 4) self-rated adequacy of teacher preparation program (item 8--this item contains 33 separate subitems); 5) self-rated importance of teacher preparation program to the first-year teaching position (item 8--this item contains 33 separate subitems); 6) the length of student

teaching experience (item 9 and item 10); 7) overall satisfaction with student teaching experience (item 11); 8) the length of clinical experience (item 14 and item15); 9) overall satisfaction with clinical experience (item 16); 10) whether, if they had it to do over, they would become a teacher again (item 17); 11) self-rated satisfaction with teaching as a career (item 18); 12) self-rated satisfaction with specific aspects of the first-year teaching position (item 19--this item contains 18 separate subitems); 13) self-rated overall job satisfaction during the first-year of teaching (item 20); and 14) the amount of support received during the first-year of teaching (item 24). A copy of the instrument is contained in Appendix B.

Analysis of Data

The data were analyzed using the Statistical Package for the Social Sciences (SPSSx) (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1983). There were two steps in the data analysis: 1) preliminary analyses, and 2) hypothesis testing.

Preliminary analyses

The preliminary analyses include frequency counts, percentages, factor analysis, and reliability analysis. In particular, factor analysis was carried out in order to ascertain if there were underlying dimensions to some of the variables under study on each of the following sets of items: the 33 subitems about the adequacy of teacher preparation, the 33 subitems concerning the importance of

teacher preparation, and the 18 subitems about satisfaction with specific aspects of the first-year teaching position. The data were analyzed using the principal axis factoring (other name--principal factor method) and varimax rotation program from SPSSx (Nie et al., 1983). In each analysis, seven guidelines were considered when decisions were made concerning: (a) which factors to select for further study, and (b) which items loaded on a particular factor.

Guidelines relevant to the selection of a factor are as follows:

1. Eigenvalue of each factor should be 1 or greater.
2. Percentage of variance explained in each factor should be about 4% or greater for initial statistics.
3. Cronbach's alpha, as an estimate of reliability of items forming each factor, should be .60 or greater.
4. The factors extracted within each area should be independent or lowly correlated.

Guidelines relevant to the selection of items for a factor are as follows:

1. Factors should be formed by including those items with factor loadings of .40 or greater, and items with factor loadings between .38 and .40 if they were similar in content to those with loadings equal to or above .40.
2. Composite of items forming each factor should be similar in content as far as possible.
3. Previous studies of factor analysis relating to this study should be considered (e.g., Sweeney, 1987).

Factors and subitems forming a factor which did not meet these guidelines were not selected. Selected subitems forming a factor have equal weights.

Adequacy of teacher preparation

A factor analysis was carried out on the 33 subitems that comprise the adequacy of teacher preparation (questionnaire item 8). After examining the results of the analysis (Table 2) and considering the guidelines listed above, five factors were identified. The proportion of variance accounted for by each factor is indicated in Table 2. The five factors accounted for 39.0% of the total variance.

As shown in Table 3, the five factors were: 1) understanding education from a variety of perspectives, 2) assessing and dealing with learning problems, 3) planning instruction and maintaining student interests, 4) developing interpersonal relationships, and 5) testing and evaluating student work.

In addition, the correlations among the five factors identified on the adequacy of teacher preparation are presented in Table 4. The factors had low or moderate intercorrelation coefficients.

Table 2. Factor matrix on the adequacy of teacher preparation

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
RA 30	.56[a]	.10	.10	.12	-.01
RA 32	.55[a]	.13	.07	.19	.14
RA 29	.49[a]	.05	.09	.14	.08
RA 33	.49[a]	.10	.10	.09	.06
RA 28	.47[a]	.21	.28	.28	.06
RA 31	.43[a]	.21	.20	.06	.13
RA 15	.38[a]	.01	.20	.22	.22
RA 16	.37[a]	.04	.29	.09	.25
RA 20	.35[a]	.15	.28	.10	.18
RA 21	.31[a]	.09	.29	.19	.15
RA 2	.24[a]	.08	.13	.13	.05
RA 10	.09	.84[a]	.19	.14	.11
RA 11	.15	.68[a]	.18	.08	.15
RA 9	.12	.68[a]	.07	.15	.12
RA 8	.14	.63[a]	.11	.21	.20
RA 22	.28	.50[a]	.36	.14	.07
RA 18	.13	.17	.65[a]	.20	.07
RA 24	.41	.08	.52[a]	.10	.11
RA 3	.07	.30	.52[a]	.32	-.05
RA 14	.20	.04	.48[a]	.02	.22
RA 23	.28	.14	.47[a]	.17	.14

[a]Items loading on each factor according to SPSSx algorithm.

Table 2 (Continued)

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
RA 1	.08	.22	.44[a]	.06	.16
RA 19	.30	.01	.35[a]	.15	.20
RA 4	.16	.28	.33[a]	.32	-.08
RA 5	.19	.17	.30[a]	.18	.21
RA 27	.34	.17	.16	.69[a]	.06
RA 26	.41	.23	.18	.60[a]	-.10
RA 25	.40	.03	.12	.55[a]	.12
RA 6	.12	.17	.18	.49[a]	.30
RA 7	.12	.19	.15	.48[a]	.13
RA 12	.10	.13	.20	.04	.61[a]
RA 13	.15	.23	.06	.04	.48[a]
RA 17	.20	.14	.27	.28	.42[a]
%variance explained	26.1%	5.0%	3.3%	2.5%	2.1%
	Total 39.0%				

Table 3. Items selected for factors underlying the variable, adequacy of teacher preparation

Factor	Items	Alpha
Factor 1		.74
Understanding Education from a Variety of Perspectives		
RA 28	Assessing and implementing innovations	
RA 29	Appreciating and understanding individual and intergroup differences in values and lifestyles	
RA 30	Using community resources	
RA 31	Techniques of curriculum construction	
RA 32	Influences of laws and policies related to schools	
RA 33	Techniques for infusing multicultural learning	
Factor 2		.85
Assessing and Dealing with Learning Problems		
RA 8	Referring students for special assistance	
RA 9	Skills for mainstreaming handicapped students	
RA 10	Methods of working with children with learning problems	
RA 11	Assessing learning problems	
RA 22	Individualizing instruction	
Factor 3		.76
Planning Instruction and Maintaining Student Interests		
RA 1	Planning units of instruction and individual lessons	
RA 3	Maintaining student interest	

Table 3 (Continued)

Factor	Items	Alpha
RA 14	Content preparation in your area of specialization	
RA 18	Relating activities to interests and abilities of students	
RA 23	Selecting and organizing materials	
RA 24	Using a variety of instructional techniques	
Factor 4		.80
Developing Interpersonal Relationships		
RA 6	Consultation skills in interacting with other professionals	
RA 7	Developing student-student relationships	
RA 25	Understanding teachers' roles in relation to administrators, supervisors, and counselors	
RA 26	Working with parents	
RA 27	Working with other teachers	
Factor 5		.64
Testing and Evaluating Student Work		
RA 12	Developing tests	
RA 13	Interpreting and using standardized tests	
RA 17	Evaluating and reporting student work and achievement	

Table 4. Correlations among five factors on the adequacy of teacher preparation

Factor	1	2	3	4	5
Factor 1	-				
Factor 2	.41	-			
Factor 3	.47	.46	-		
Factor 4	.56	.45	.48	-	
Factor 5	.34	.39	.43	.37	-

Importance of teacher preparation

A factor analysis was carried out on the 33 subitems that comprise the importance of teacher preparation (questionnaire item 8). After examining the results of the analysis (Table 5) and considering guidelines listed above, five factors were identified. The proportion of variance accounted for by each factor is indicated in Table 5. The five factors accounted for 36.1% of the total variance. As shown in Table 6, the five factors were: 1) assessing and dealing with learning problems, 2) planning instruction and maintaining student interests, 3) developing interpersonal relationships, 4) evaluating student work, and 5) understanding curricular, legal, and multicultural concerns.

In addition, the correlations among five factors identified on the importance of teacher preparation are presented in Table 7. The factors showed low or moderate intercorrelation coefficients.

Table 5. Factor matrix on the importance of teacher preparation

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
RI 10	.79[a]	.12	.10	.13	.01
RI 11	.73[a]	.21	.11	.09	-.01
RI 8	.64[a]	.18	.21	.00	.17
RI 9	.64[a]	-.01	.12	.01	.20
RI 22	.48[a]	.16	.19	.21	.24
RI 13	.44[a]	.02	-.05	.18	.31
RI 3	.13	.51[a]	.08	.14	-.02
RI 24	.13	.48[a]	.18	.35	.10
RI 1	.05	.46[a]	.08	.08	.22
RI 2	.06	.39[a]	.07	.02	.23
RI 23	.20	.38[a]	.19	.19	.24
RI 4	.21	.32[a]	.12	.16	-.13
RI 21	.12	.32[a]	.18	.27	.27
RI 5	.28	.30[a]	.13	.16	.08
RI 27	.14	.31	.61[a]	.08	.02
RI 25	.02	.14	.55[a]	.23	.20
RI 26	.34	.31	.47[a]	.13	.06
RI 15	.14	-.06	.45[a]	.30	.38
RI 6	.35	.16	.36[a]	.06	.12
RI 29	.14	.10	.34[a]	.25	.22
RI 7	.25	.19	.30[a]	.16	.10

[a]Items loading on each factor according to SPSSx algorithm.

Table 5 (Continued)

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
RI 16	.08	-.11	.31	.55[a]	.13
RI 17	.11	.28	.20	.51[a]	.08
RI 18	.16	.33	.16	.46[a]	.00
RI 14	.07	.24	.03	.41[a]	.19
RI 19	.05	.23	.19	.38[a]	.14
RI 28	.10	.27	.28	.31[a]	.27
RI 12	.12	.16	-.07	.29[a]	.25
RI 32	.25	-.05	.43	.08	.54[a]
RI 33	.20	.07	.13	.05	.50[a]
RI 31	.08	.23	.14	.22	.48[a]
RI 20	.10	.33	.12	.25	.43[a]
RI 30	.07	.29	.27	.14	.36[a]
%variance explained	23.1%	5.2%	3.4%	2.5%	1.9%
	Total 36.1%				

Table 6. Items selected for factors underlying the variable, importance of teacher preparation

Factor	Items	Alpha
Factor 1		.81
Assessing and Dealing with Learning Problems		
RI 8	Referring students for special assistance	
RI 9	Skills for maintaining handicapped students	
RI 10	Methods of working with children with learning problems	
RI 11	Assessing learning problems	
RI 13	Interpreting and using standardized tests	
RI 22	Individualizing instruction	
Factor 2		.63
Planning Instruction and Maintaining Student Interests		
RI 1	Planning units of instruction and individual lessons	
RI 2	Preparing and using media	
RI 3	Maintaining student interest	
RI 23	Selecting and organizing materials	
RI 24	Using a variety of instructional techniques	
Factor 3		.71
Developing Interpersonal Relationships		
RI 15	Professional ethics and legal obligations	
RI 25	Understanding teachers' roles in relation to administrators, supervisors, and counselors	
RI 26	Working with parents	

Table 6 (Continued)

Factor	Items	Alpha
	RI 27 Working with other teachers	
Factor 4		.61
Evaluating Student Work		
	RI 14 Content preparation in your area of specialization	
	RI 16 Psychology of learning and its application to teaching	
	RI 17 Evaluating and reporting student work and achievement	
	RI 18 Relating activities to interests and abilities of students	
Factor 5		.65
Understanding Curricular, Legal, and Multicultural Concerns		
	RI 20 Locating and using materials and resources in your specialty area	
	RI 31 Techniques of curriculum construction	
	RI 32 Influence of laws and policies related to schools	
	RI 33 Techniques for infusing multicultural learning	

Table 7. Correlations among five factors on the importance of teacher preparation

Factor	1	2	3	4	5
Factor 1	-				
Factor 2	.38	-			
Factor 3	.41	.42	-		
Factor 4	.37	.46	.47	-	
Factor 5	.42	.43	.47	.43	-

Satisfaction with specific aspects of the first-year teaching position

A factor analysis was conducted on the 18 subitems that comprise the satisfaction with specific aspects of the first-year teaching position (questionnaire item 19). The results of the analysis (Table 8) revealed five factors. The proportion of variance accounted for by each factor is indicated in Table 8. The five factors accounted for 40.7% of the total variance. However, four factors were selected for further study because one factor (Factor 4) was unreliable and dropped considering those guidelines listed above. As shown in Table 9, the four factors were: 1) job involvement and responsibility, 2) job performance evaluation, 3) job rewards, and 4) parental and community support.

In addition, the correlations among the four factors selected on the satisfaction with specific aspects of the first-year teaching position are presented

in Table 10. Low intercorrelation coefficients among four factors were observed.

Table 8. Factor matrix on the satisfaction with specific aspects of the first-year teaching position

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
S 3	.72[a]	.13	.07	.05	.20
S 6	.59[a]	.09	.05	.24	.07
S 4	.56[a]	.07	.26	.21	.07
S 2	.38[a]	.19	.31	.16	.24
S 11	.10	.88[a]	.08	.06	.12
S 10	.16	.80[a]	.14	.13	.07
S 1	.01	.05	.66[a]	-.06	.06
S 5	.13	.05	.54[a]	.04	.08
S 12	.10	.15	.42[a]	.18	.11
S 9	.17	.06	.41[a]	.30	.12
S 14	.21	.02	.25[a]	.17	.16
S 8	.19	.18	.03	.64[a]	.11
S 15	.10	-.01	-.02	.50[a]	.31
S 7	.32	.09	.30	.38[a]	.04
S 13	.11	.05	.17	.29[a]	.07

[a]Items loading on each factor according to SPSSx algorithm.

Table 8 (Continued)

Item no.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
S 16	.10	.09	.11	.16	.76[a]
S 18	.21	.09	.20	.16	.56[a]
S 17	.07	.19	.13	.15	.22[a]
%variance explained	22.5%	6.4%	4.9%	4.1%	2.9%
	Total 40.7%				

Table 9. Items selected for factors underlying the variable, satisfaction with specific aspects of the first-year teaching position

Factor	Items	Alpha
Factor 1		.70
Job Involvement and Responsibility		
S 3	Extent of involvement in decision making	
S 4	Job responsibilities	
S 6	Control over what you did in job	
Factor 2		.86
Job Performance Evaluation		
S 10	Method with which job performance evaluated	
S 11	Frequency with which job performance evaluated	

Table 9. (Continued)

Factor	Items	Alpha
Factor 3		.62
Job Rewards		
S 1	Salary	
S 5	Job fringe benefits	
S 9	Opportunities for advancement	
S 12	Size of community in which employed during the first-year of teaching	
Factor 4		.67
Parental and Community Support		
S 16	Level of parental involvement	
S 18	Community support for education	

Table 10. Correlations among four factors on the satisfaction with specific aspects of the first-year teaching position

Factor	1	2	3	4
Factor 1	-			
Factor 2	.28	-		
Factor 3	.32	.25	-	
Factor 4	.33	.20	.32	-

Hypothesis testing

Hypothesis testing includes Pearson correlation analysis, multiple regression analysis, t-test, one-way analysis of variance and multiple range test, two-way analysis of variance, and discriminant analysis. Specifically, Pearson correlation analysis was used to test Hypotheses 1, 6, 7, 8, 9, and 10. The t-test was used to test Hypothesis 9. One-way analysis of variance and multiple range test were used to test Hypotheses 3, 5, 8, 9, and 11. Two-way analysis of variance was used to test Hypotheses 2, 3, and 4. Multiple regression analysis was used to test Hypotheses 12 and 13. In addition, discriminant analysis was used to test Hypothesis 14.

CHAPTER IV. RESULTS

The results of the statistical data analysis are presented in this chapter. Hypothesis testing was conducted to examine the relationships between overall career satisfaction of beginning teachers and variables relating to the overall career satisfaction. The testing was carried out for each hypothesis in terms of three sets of data: 1) combined data of male and female beginning teachers, 2) male beginning teachers, and 3) female beginning teachers. The level of statistical significance for the hypothesis testing was set at the .05.

Hypothesis 1

Hypothesis 1 states that there is a positive relationship between age and overall career satisfaction of beginning teachers.

A Pearson correlation analysis was used to test hypothesis 1. Results of the analyses for the three sets of data are presented in Table 11. As shown in Table 11, there were no significant relationships between age and overall career satisfaction of beginning teachers in the three sets of data at the .05 level. Therefore, research hypothesis 1 was not supported.

Table 11. Correlations of age with overall career satisfaction for males and females separately and combined

Combined	Male	Female
.07	-.04	.08
(n^a=576)	(n=145)	(n=431)

[a]Number of respondents.

Hypothesis 2

Hypothesis 2 states that there is a significant difference between male and female beginning teachers' overall career satisfaction.

A two-way analysis of variance was conducted to test hypotheses 2, 3, and 4. The means and standard deviations for male and female beginning teachers are presented in Table 12.

Results of two-way analysis of variance are presented in Table 13. According to Table 13, in an analysis which takes account of teaching level and sex simultaneously, there was no significant difference in the overall career satisfaction between males and females at the .05 level. Therefore, research hypothesis 2 was not supported.

Table 12. Means and standard deviations on overall career satisfaction for male and female beginning teachers at different teaching levels

Teaching level	Statistic	Male	Female	Combined
Elementary	Mean[a]	8.04	7.93	7.95
	S. D.	1.33	1.69	1.65
	N	24	194	218
Junior high	Mean	7.59	7.73	7.71
	S. D.	1.30	1.57	1.53
	N	11	60	71
Secondary	Mean	6.98	7.16	7.08
	S. D.	1.93	1.89	1.90
	N	57	65	122
More than one level	Mean	6.92	7.15	7.07
	S. D.	2.07	2.06	2.06
	N	55	117	172
Total	Mean	7.18	7.58	7.48
	S. D.	1.89	1.84	1.86
	N	147	436	583

[a]The rating scale for these items with 0 through 10 was 0 = very dissatisfied, 5 = neutral, and 10 = very satisfied.

Table 13. Two-way ANOVA of overall career satisfaction of beginning teachers for sex and teaching level

Source of variation	d. f.	Mean square	F- Ratio	Probability
Sex	1	1.70	.51	.475
Teaching level	3	27.70	8.32***	< .001
Sex x Teaching level	3	.55	.17	.920

***p < .001.

Hypothesis 3

Hypothesis 3 states that there is a significant difference in the overall career satisfaction of beginning teachers at different teaching levels.

Two-way analysis of variance, one-way analysis of variance and multiple range test were used to test this hypothesis. Two-way analysis of variance was carried out for the combined data of male and female beginning teachers. One-way analysis of variance and multiple range test was used for the combined data and male and female beginning teachers separately. In this study, the proportion of respondents on the kindergarten level (n=27; 4.6%) was relatively small as compared to other levels; thus, respondents at this level were combined with respondents at the elementary level. The right-hand column of Table 12 shows means and standard deviations of beginning teachers' overall career satisfaction at different teaching levels.

Results of two-way analysis of variance for the combined data are shown in Table 13. Results revealed that there was a significant difference in the overall career satisfaction of beginning teachers at the .001 level at different teaching levels even after adjusting for sex effect.

In order to examine which groups were significantly different, one-way analysis of variance followed by Scheffe' test was used (Table 14). This indicated that elementary teachers had a significantly higher mean score on overall career satisfaction than secondary teachers, and teachers having more than one level in teaching at the .05 level.

Table 14. One-way ANOVA of overall career satisfaction of beginning teachers at different teaching levels

Teaching level	Mean	S. D.	N	F-Ratio	Probability
Elementary	7.95	1.65	218	9.98***	< .001
Junior high	7.71	1.53	71		
Secondary	7.08	1.90	122		
More than one level	7.07	2.06	172		
Scheffe' test*: Elementary > Secondary, More than one level					

***p < .001.

*p < .05.

Table 15. One-way ANOVA of overall career satisfaction for male and female beginning teachers at different teaching levels

Teaching level	Mean		S. D.		N	
	M	F	M	F	M	F
Elementary	8.04	7.93	1.33	1.69	24	194
Junior high	7.59	7.73	1.30	1.57	11	60
Secondary	6.98	7.16	1.93	1.89	57	65
More than one level	6.92	7.15	2.07	2.06	55	117

F-Ratio: Male = 2.46 (p = .065), (df = 3, 146)
Female = 6.00***, (df = 3, 435)

Scheffe' test*: Female; Elementary > Secondary, More than one level

***p < .001.

*p < .05.

In addition, results of the separate analyses of male and female beginning teachers are presented in Table 15. Results revealed that there was a significant difference in the overall career satisfaction for female teachers at the .001 level at different teaching levels, but not for male teachers, even at the .05 level.

An additional analysis using the Scheffe' test for the female beginning teachers showed that elementary teachers had a significantly higher mean score on overall career satisfaction than secondary teachers, and teachers having more than one level in teaching at the .05 level.

In summary, results of the analysis for the hypothesis 3 showed that there

were significant differences in the overall career satisfaction at the .001 level at different teaching levels for the combined data of male and female beginning teachers and female teachers, but not for male teachers at the .05 level. In particular, elementary teachers had a significantly higher mean score on overall career satisfaction than secondary school teachers, and teachers having more than one level in teaching at the .05 level for both combined data and female beginning teachers. Therefore, research hypothesis 3 was partially supported.

Hypothesis 4

Hypothesis 4 states that there is a significant interaction effect in the overall career satisfaction of beginning teachers between sex and teaching level.

Two-way analysis of variance was used to test this hypothesis.

As shown in Table 13, there was no significant interaction effect in the overall career satisfaction of beginning teachers between sex and teaching level at the .05 level. Therefore, research hypothesis 4 was not supported.

Hypothesis 5

Hypothesis 5 states that there is a significant difference in the overall career satisfaction of beginning teachers at different academic preparation levels.

A one-way analysis of variance and multiple range test were used to test this hypothesis. Results of the analysis for the combined data of male and female beginning teachers are presented in Table 16. Results indicated that there was

Table 16. One-way ANOVA of overall career satisfaction of beginning teachers at different academic preparation levels

Preparation level	Mean	S. D.	N	F-Ratio	Probability
Four-year baccalaureate	7.50	1.89	485	.81	.52
Baccalaureate and other credits	7.78	1.67	25		
Five-year nonmaster's degree	7.38	1.58	45		
Five-year master's degree	6.83	2.45	12		
Other	7.06	1.84	18		

no significant difference in the overall career satisfaction at different academic preparation levels at the .05 level.

Results of the separate analyses of male and female beginning teachers are shown in Table 17.

As can be seen, there were no significant differences in the overall career satisfaction for male and female beginning teachers at the .05 level at different academic preparation levels.

Table 17. One-way ANOVA of overall career satisfaction for male and female beginning teachers at different academic preparation levels

Preparation level	Mean		S. D.		N	
	M	F	M	F	M	F
Four-year baccalaureate	7.20	7.60	1.94	1.86	118	367
Baccalaureate and other credits	7.50	7.83	1.47	1.73	4	21
Five-year nonmaster's degree	7.09	7.55	1.69	1.52	17	28
Five-year master's degree	5.67	7.22	3.40	2.17	3	9
Other	7.63	6.89	0.48	2.06	4	14

F-Ratio: Male = .56 ($p = .69$), ($df = 4, 145$)
Female = .68 ($p = .61$), ($df = 4, 438$)

In summary, results of the analysis for hypothesis 5 revealed that there were no significant differences in the overall career satisfaction of beginning teachers at the .05 level at different academic preparation levels in any of the three sets of data. Therefore, research hypothesis 5 was not supported.

Hypothesis 6

Hypothesis 6 states that there is a positive relationship between self-rated adequacy of teacher preparation areas and overall career satisfaction of beginning teachers.

A Pearson correlation analysis was used to test this hypothesis. For this hypothesis, the five factors identified by factor analysis were used as variables representing the adequacy of teacher preparation. They were: 1) understanding education from a variety of perspectives (Factor 1); 2) assessing and dealing with learning problems (Factor 2); 3) planning instruction and maintaining student interests (Factor 3); 4) developing interpersonal relationships (Factor 4); and 5) testing and evaluating student work (Factor 5).

Results of the analyses for the three sets of data are presented in Table 18. As can be seen, for the combined data, there was a significant, positive, low relationship between each of four factors (understanding education from a variety of perspectives, assessing and dealing with learning problems, planning instruction and maintaining student interests, and developing interpersonal relationships) on the adequacy of teacher preparation and overall career satisfaction of beginning teachers at the .05 level. For male teachers, there was a significant, positive, low relationship between factor 3 (planning instruction and maintaining student interests) and overall career satisfaction at the .05 level. For female teachers, there was a significant, positive, low relationship between each of three factors (assessing and dealing with learning problems, planning

instruction and maintaining student interests, and developing interpersonal relationships) on the adequacy of teacher preparation and overall career satisfaction at the .05 level.

Table 18. Correlations of five factors on adequacy of teacher preparation with overall career satisfaction for males and females separately and combined

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Combined	.08*	.10*	.20***	.14***	.04
	(n=579)	(n=583)	(n=584)	(n=584)	(n=582)
Male	.13	.05	.18*	.15	.06
	(n=146)	(n=147)	(n=147)	(n=147)	(n=147)
Female	.07	.11*	.20***	.14**	.04
	(n=433)	(n=436)	(n=437)	(n=437)	(n=435)

***p < .001.

**p < .01.

*p < .05.

In summary, results of the analysis for the hypothesis 6 showed that there was a significant, positive, low relationship between each of four factors (understanding education from a variety of perspectives, assessing and dealing with learning problems, planning instruction and maintaining student interests, and developing interpersonal relationships) on the adequacy of teacher preparation and overall career satisfaction of beginning teachers at the .05 level. For male teachers, only

factor 3 (planning instruction and maintaining student interests) had a significant, positive, low relationship with overall career satisfaction at the .05 level, whereas for female teachers, three factors (assessing and dealing with learning problems, planning instruction and maintaining student interests, and developing interpersonal relationships) had significant, positive, low relationships with overall career satisfaction at the .05 level. On the basis of the results, research hypothesis 6 was partially supported.

Hypothesis 7

Hypothesis 7 states that there is no relationship between self-rated importance of teacher preparation areas to the first-year teaching position and overall career satisfaction of beginning teachers.

A Pearson correlation analysis was used to test this hypothesis. For this hypothesis, the five factors identified by factor analysis were used as variables representing the importance of teacher preparation. They were: 1) assessing and dealing with learning problems (Factor 1); 2) planning instruction and maintaining student interests (Factor 2); 3) developing interpersonal relationships (Factor 3); 4) evaluating student work (Factor 4); and 5) understanding curricular, legal, and multicultural concerns (Factor 5).

Results of the analyses for the three sets of data are presented in Table 19. As can be seen, there was a significant, positive, low relationship between each of five factors listed above on the importance of teacher preparation and overall

Table 19. Correlations of five factors on importance of teacher preparation with overall career satisfaction for males and females separately and combined

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Combined	.16***	.08*	.12**	.14***	.17***
	(n=575)	(n=576)	(n=575)	(n=573)	(n=575)
Male	.18*	.13	.06	.11	.23**
	(n=145)	(n=145)	(n=145)	(n=145)	(n=145)
Female	.13**	.05	.12**	.15**	.13**
	(n=430)	(n=431)	(n=430)	(n=428)	(n=430)

***p < .001.

**p < .01.

*p < .05.

career satisfaction of beginning teachers at the .05 level. For male teachers, there was a significant, positive, low relationship between each of two factors (assessing and dealing with learning problems, and understanding curricular, legal, and multicultural concerns) on the importance of teacher preparation and overall career satisfaction at the .05 level. For female teachers, there was a significant, positive, low relationship between each of four factors (assessing and dealing with learning problems, developing interpersonal relationships, evaluating student work, and understanding curricular, legal, and multicultural concerns) on the importance of teacher preparation and overall career satisfaction at the .01 level.

Since the findings regarding the importance variable were contrary to what expected in hypothesis 7, factors on the importance of teacher preparation were included for use In the multiple regression analysis and the discriminant analysis to be discussed below for hypotheses 13 and 14.

In summary, results of the analysis for the hypothesis 7 showed that there was a significant, positive, low relationship between each of all five factors on the importance of teacher preparation and overall career satisfaction of beginning teachers at the .05 level. For male teachers, two factors (assessing and dealing with learning problems, and understanding curricular, legal, and multicultural concerns) had significant, positive, low relationships with overall career satisfaction at the .05 level. For female teachers, four factors (assessing and dealing with learning problems, developing interpersonal relationships, evaluating student work, and understanding curricular, legal, and multicultural concerns) had significant, positive, low relationships with overall career satisfaction at the .01 level. On the basis of the analyses, research hypothesis 7 was not supported.

Hypothesis 8

Hypothesis 8 states that there is a significant difference in the overall career satisfaction at different lengths of student teaching experience and there is a positive relationship between overall satisfaction with student teaching experience and overall career satisfaction of beginning teachers.

One-way analysis of variance and multiple range test, and Pearson correlation analysis were used to test this hypothesis. The length of student teaching experience and overall satisfaction with student teaching experience were analyzed separately.

Length of student teaching experience

The length of student teaching experience was measured by item 9 (full day or half day) and item 10 (8, 10, 12, 14, 16 weeks or other) on the questionnaire. Most of respondents (93.6%) responded on 'full day' rather than on 'half day' in item 9. Thus, respondents only on full day were used for the analysis of item 10.

Results of the analyses for males and females separately and combined are presented in Table 20. As can be seen, there were no significant differences in the overall career satisfaction at the .05 level at different lengths of student teaching experience in any of the three sets of data.

Overall satisfaction with student teaching experience

Results of the analyses regarding overall satisfaction with student teaching experience for the three sets of data are presented in Table 21.

As shown in Table 21, there were significant, positive, low relationships between overall satisfaction with student teaching experience and overall career satisfaction at the .001 level for the combined data of male and female beginning teachers and female teachers, but not for male teachers, even at the .05 level.

Table 20. One-way ANOVA of overall career satisfaction for males and females separately and combined at different lengths of student teaching experience

Length of student teaching	Statistic	Male	Female	Combined
8 weeks	Mean	7.10	7.78	7.52
	S. D.	1.92	1.76	1.85
	N	52	85	137
10 weeks	Mean	6.74	7.47	7.25
	S. D.	1.89	1.91	1.92
	N	29	68	97
12 weeks	Mean	7.39	7.59	7.56
	S. D.	2.65	1.87	1.99
	N	9	44	53
14 weeks	Mean	8.25	7.50	7.65
	S. D.	1.55	1.91	1.83
	N	4	16	20
16 weeks	Mean	7.11	7.48	7.41
	S. D.	1.61	1.95	1.90
	N	28	135	163
Other	Mean	8.18	7.67	7.77
	S. D.	1.07	1.68	1.59
	N	14	59	73
	F-Ratio:	Male = 1.49 (p = .20), (df = 5, 135)		
		Female = .36 (p = .87), (df = 5, 406)		
		Combined = .75 (p = .59), (df = 5, 542)		

Table 21. Correlations of overall satisfaction with student teaching experience with overall career satisfaction for males and females separately and combined

Combined	Male	Female
.18***	.06	.21***
(n=543)	(n=135)	(n=408)

***p < .001.

In summary, results of the analysis regarding the length of student teaching experience for hypothesis 8 showed that there were no significant differences in the overall career satisfaction at the .05 level at different lengths of student teaching experience in any of the three sets of data. In addition, results of the analysis regarding overall satisfaction with student teaching experience showed that there were significant, positive, low relationships between overall satisfaction with student teaching experience and overall career satisfaction at the .001 level for the combined data and female teachers. Therefore, research hypothesis 8 was partially supported.

Hypothesis 9

Hypothesis 9 states that there is a significant difference in the overall career satisfaction of beginning teachers at different lengths of clinical experience and there is a positive relationship between overall satisfaction with clinical

experience and overall career satisfaction of beginning teachers.

A t-test, one-way analysis of variance and multiple range test, and Pearson correlation analysis were used to test this hypothesis. The length of clinical experience and overall satisfaction with clinical experience were analyzed separately.

Length of clinical experience

The length of clinical experience was measured by item 14 (yes/no) and item 15 (half semester, one semester, two semesters, and other) in the questionnaire. A t-test is needed for item 14 and one-way analysis of variance is needed for item 15. A t-test was used to test a difference in the overall career satisfaction between beginning teachers who had or had not clinical experiences. Results of t-test for the three sets of data are presented in Table 22.

As can be seen, for the combined data, there was a significant difference in the overall career satisfaction at the .01 level between beginning teachers who had or had not clinical experiences. Beginning teachers who had clinical experiences had a significantly higher mean score (7.63) than those who had not clinical experiences (7.12). In addition, for female teachers, there was a significant difference in the overall career satisfaction at the .05 level between those who had or had not clinical experiences. Female teachers who had clinical experiences showed a significantly higher mean score (7.71) than those who had not clinical experiences (7.22).

Table 22. t-test of difference in overall career satisfaction between clinical experience (yes/no) for males and females separately and combined

Clinical experience	Statistic	Male	Female	Combined
Yes	Mean	7.37	7.71	7.63
	S. D.	1.83	1.84	1.84
	N	97	323	420
No	Mean	6.85	7.22	7.12
	S. D.	1.94	1.85	1.88
	N	48	116	164
t-value:	Male = 1.57 (p = .12)			
	Female = 2.43* (p = .02)			
	Combined = 3.02** (p = .003)			

**p < .01.

*p < .05.

In addition, one-way analysis of variance was used to test differences in the overall career satisfaction of beginning teachers at different lengths of clinical experience. Results of the analyses for the three sets of data are shown in Table 23. As can be seen, there were no significant differences in the overall career satisfaction of beginning teachers at the .05 level at different lengths of clinical experience for all three sets of data.

Table 23. One-way ANOVA of overall career satisfaction for males and females separately and combined at different lengths of clinical experience

Length of clinical experience	Statistic	Male	Female	Combined
Half semester	Mean	7.39	7.72	7.63
	S. D.	1.89	1.90	1.89
	N	27	71	98
One semester	Mean	7.28	7.53	7.47
	S. D.	1.79	1.97	1.92
	N	29	91	120
Two semesters	Mean	7.44	8.08	7.97
	S. D.	2.07	1.63	1.70
	N	9	46	55
Other	Mean	7.45	7.72	7.67
	S. D.	1.84	1.75	1.76
	N	31	114	145
F-Ratio:	Male = .05 (p = .99), (df = 3, 95)			
	Female = .92 (p = .43), (df = 3, 321)			
	Combined = .97 (p = .41), (df = 3, 417)			

Overall satisfaction with clinical experience

Results of the analyses regarding overall satisfaction with clinical experience for three sets of data are presented in Table 24. As can be seen, there were

Table 24. Correlations of overall satisfaction with clinical experience with overall career satisfaction for males and females separately and combined

Combined	Male	Female
.26***	.34***	.23***
(n=419)	(n=97)	(n=322)

***p < .001.

significant, positive, low relationships between overall satisfaction with clinical experience and overall career satisfaction of beginning teachers at the .001 level for all three sets of data.

In summary, results of the analysis for hypothesis 9 showed that there was a significant difference in the overall career satisfaction between beginning teachers who had or had not clinical experiences for the combined data and female teachers at the .05 level. In particular, beginning teachers who had clinical experiences showed significantly higher mean scores on overall career satisfaction than those who had not clinical experiences. However, there were no significant differences in the overall career satisfaction at the .05 level at different lengths of clinical experience in any of the three sets of data.

In addition, results of the analysis regarding overall satisfaction with clinical experience showed that there were significant, positive, low relationships between overall satisfaction with clinical experience and overall career satisfaction at the

.001 level for all three sets of data. Therefore, research hypothesis 9 was partially supported.

Hypothesis 10

Hypothesis 10 states that there is a positive relationship between amount of support received during the first-year of teaching and overall career satisfaction of beginning teachers.

A Pearson correlation analysis was used to test this hypothesis. In this study, the number of respondents to 'other source of support' was relatively small compared to other sources; thus, it was dropped from the analysis. Results of the analyses for the three sets of data are presented in Table 25.

As can be seen, there were significant, positive, low relationships between amount of support received during the first-year of teaching and overall career satisfaction of beginning teachers for all sources of support except for area education agency (AEA) consultants for male teachers at the .05 level.

In summary, results of the analysis for the hypothesis 10 showed that there were significant, positive, low relationships between amount of support received during the first-year of teaching and overall career satisafaction for all three sets of data for all sources of support. The one exception was for the support of area education agency (AEA) consultants in the male teacher data set. Therefore, research hypothesis 10 was supported for all sources of support but one.

Table 25. Correlations of amount of support received during the first-year of teaching with overall career satisfaction for males and females separately and combined

Source of support	Male	Female	Combined
Principals	.29***	.20***	.22***
	(n=144)	(n=431)	(n=575)
Experienced teachers	.25**	.16***	.20***
	(n=144)	(n=432)	(n=576)
Teacher preparation faculty	.20*	.13**	.13**
	(n=142)	(n=408)	(n=550)
AEA consultants	.11	.21***	.19***
	(n=144)	(n=425)	(n=569)
In-school program consultants	.20*	.15**	.17***
	(n=140)	(n=399)	(n=539)

***p < .001.
**p < .01.
*p < .05.

Hypothesis 11

Hypothesis 11 states that there is a significant difference in the overall career satisfaction of beginning teachers who would or would not choose teaching as a career again.

A one-way analysis of variance and multiple range test were used to test this hypothesis. Results of the analysis for the combined data of male and female

beginning teachers are presented in Table 26.

Table 26. One-way ANOVA of overall career satisfaction of beginning teachers for decision to choose teaching again

Decision to choose teaching again	Mean	S. D.	N	F-Ratio	Probability
Yes	8.14	1.28	418	142.15***	< .001
Undecided	6.00	2.08	130		
No	5.06	1.92	35		
Scheffe' test*:	Yes > Undecided, No				
	Undecided > No				

***p < .001.

*p < .05.

As shown in Table 26, there was a significant difference in the overall career satisfaction of beginning teachers who would or would not choose teaching as a career again at the .001 level. An additional analysis using the Scheffe' test indicates that beginning teachers who would choose teaching as a career again had a significantly higher mean score on overall career satisfaction than those who would not choose teaching as a career again and those who were uncertain about choosing teaching again at the .05 level. In addition, beginning teachers who were uncertain about choosing teaching again had a significantly higher mean score on overall career satisfaction than those who would not choose

teaching again at the .05 level.

Results of the separate analyses of male and female beginning teachers are shown in Table 27. Results revealed that there were significant differences in the overall career satisfaction of beginning teachers who would or would not choose teaching as a career again for both male and female beginning teachers at the .001 level.

An additional analysis using the Scheffe' test showed that for male beginning teachers, those who would choose teaching as a career again had significantly a higher mean score on overall career satisfaction than those who would not and those who were uncertain about choosing teaching again at the .05 level. In addition, male beginning teachers who were uncertain about choosing teaching again had a significantly higher mean score on overall career satisfaction than those who would not choose teaching again at the .05 level. For female beginning teachers, the Scheffe' test showed that beginning teachers who would choose teaching as a career again had a significantly higher mean score on overall career satisfaction than those who would not and those who were uncertain about choosing teaching again at the .05 level.

In summary, results of the analysis for the hypothesis 11 revealed that there were significant differences in the overall career satisfaction of beginning teachers who would or would not choose teaching as a career again at the .001 level for all three sets of data. In particular, beginning teachers who would choose teaching as a career again showed significantly higher mean scores on overall career

Table 27. One-way ANOVA of overall career satisfaction of male and female beginning teachers for decision to choose teaching again

Decision to choose teaching again	Mean		S. D.		N	
	M	F	M	F	M	F
Yes	7.94	8.20	1.24	1.29	98	320
Undecided	6.07	5.98	2.04	2.10	35	95
No	4.35	5.48	1.55	2.02	13	22

F-Ratio: Male = 45.70^{***}, (df = 2, 145)
Female = 97.49^{***}, (df= 2, 436)

Scheffe' test*: Male; Yes > Undecided, No
Undecided > No
Female; Yes > Undecided, No

$^{***}p < .001$.
$^{*}p < .05$.

satisfaction than those who would not and those who were uncertain about choosing teaching again at the .05 level. In addition, beginning teachers who were uncertain about choosing teaching again had a significantly higher mean score than those who would not choose teaching as a career again for the combined data and male teachers. On the basis of the analyses, research hypothesis 11 was supported.

Hypothesis 12

Hypothesis 12 states that there is a significant relationship between overall career satisfaction of beginning teachers and the combination of factors on satisfaction with specific aspects of the first-year teaching position.

A multiple regression analysis using the stepwise procedure in SPSSx was used to test this hypothesis. Multiple regression is a method of analyzing the collective and separate contributions of two or more independent variables to the variation of a dependent variable (Kerlinger & Pedhazur, 1973, p. 3). In this hypothesis, four factors on satisfaction with specific aspects of the first-year teaching position identified by factor analysis were used to predict overall career satisfaction of beginning teachers. Four factors were: 1) job involvement and responsibility (Factor 1); 2) job performance evaluation (Factor 2); 3) job rewards (Factor 3); and 4) parental and community support (Factor 4).

Prior to using the multiple regression procedure, Pearson correlation analysis was used to estimate the bivariate relationships between overall career satisfaction of beginning teachers and the four factors on satisfaction with specific aspects of the first-year teaching position which were extracted from the factor analysis on this variable. Results of the Pearson correlation analysis are presented in Table 28 for three sets of data. As can be seen, there was a significant, moderate relationship between each of the four factors on satisfaction with specific aspects of the first-year teaching position and overall career satisfaction of beginning teachers at the .001 level for all three sets of data. In

particular, job involvement and responsibility (Factor 1) showed a significant, strong relationship with overall career satisfaction of beginning teachers for all three sets of data.

Another consideration which was taken into account prior to the multiple regression analysis was the extent of intercorrelation. This is an area of concern since high multicollinearity, which refers to a situation in which the independent variables are highly correlated, leads not only to imprecise estimation of regression coefficients but also to reversals in their signs (Pedhazur, 1982, pp. 233-235). Therefore, the presence of high multicollinearity would pose serious threats to the interpretation of regression coefficients as indices of effects. One solution would be to delete variables that have been identified as causes of high multicollinearity (p. 246). This proved not to be a concern for the independent variables under consideration. The intercorrelation matrix among four factors on satisfaction with specific aspects of the first-year teaching position are shown in Table 10. As can be seen, correlation coefficients among these factors are low.

Results of stepwise multiple regression analysis of four factors on satisfaction with specific aspects of the first-year teaching position on overall career satisfaction for combined data of male and female beginning teachers are presented in Table 29.

As shown in Table 29, this analysis yielded an F-Ratio of 99.54 ($p < .001$) for overall career satisfaction of beginning teachers with four predictor variables entered into the final prediction equation. The final R-Square of .408 ($p < .001$)

Table 28. Correlations of overall career satisfaction of beginning teachers with four factors on satisfaction with specific aspects of the first-year teaching position

Factor	Combined	Male	Female
Job involvement and responsibility	.53*** (n=584)	.53*** (n=146)	.53*** (n=438)
Job performance evaluation	.29*** (n=582)	.36*** (n=145)	.27*** (n=437)
Job rewards	.46*** (n=585)	.34*** (n=147)	.49*** (n=438)
Parental and community support	.40*** (n=585)	.36*** (n=147)	.40*** (n=438)

***$p < .001$.

indicates that approximately 41 percent of the variation in overall career satisfaction of beginning teachers was predicted from the combination of the four variables entered into the equation.

Results showed that job involvement and responsibility was the best predictor of overall career satisfaction of beginning teachers, accounting for about 28 percent of the variance in overall career satisfaction. Job rewards accounted for approximately an additional 10 percent of the variance. In addition, parental

and community support and job performance evaluation explained about 4 percent of the variance. The findings from stepwise regression analysis were consistent with the findings from the Pearson correlation analysis (Table 28) in terms of the extent of association.

Results of stepwise regression analysis for male and female beginning teachers separately are presented in Table 30 and Table 31. The reader will recall that these factors were derived from the combined data set since factor analysis was not possible for the male data set due to a failure in the varimax rotation. Female results were similar to those of combined data set. For male beginning teachers (Table 30), the analysis yielded an F-Ratio of 26.37 ($p < .001$) for overall career satisfaction with three predictor variables entered into the final prediction equation. The final R-Square of .359 ($p < .001$) indicates that approximately 36 percent of the variation in overall career satisfaction was predicted from the combination of the three variables entered into the equation.

Results revealed that job involvement and responsibility was the best predictor of male beginning teachers' overall career satisfaction, accounting for about 28 percent of the variance in overall career satisfaction. Job performance evaluation accounted for approximately an additional 6 percent of the variance. In addition, job rewards accounted for about an additional 2 percent of the variance. For female beginning teachers (Table 31), the analysis yielded an F-Ratio of 107.33 ($p < .001$) for overall career satisfaction with three predictor variables entered in the final prediction equation. The final R-Square of .426 ($p <$

Table 29. Stepwise regression analysis of four factors on satisfaction with specific aspects of the first-year teaching position on overall career satisfaction of beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B[a]	Beta[b]
1.	Job involvement and responsibility	.526	.277	.8916	.3572
2.	Job rewards	.610	.372	.6577	.2668
3.	Parental and community support	.634	.401	.3376	.1796
4.	Job performance evaluation	.639	.408	.1524	.0882
	Constant			.2173	
	$F(4, 577) = 99.54^{***}$				
	Multiple R = .639, R-Square = .408				

[a]Unstandardized regression coefficients in the final prediction equation.
[b]Standardized regression coefficients in the final prediction equation.
$^{***}p < .001$.

.001) indicates that approximately 43 percent of the variation in overall career satisfaction was predicted from the combination of the three variables entered into the equation.

Table 30. Stepwise regression analysis of four factors on satisfaction with specific aspects of the first-year teaching position on overall career satisfaction of male beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B	Beta
1.	Job involvement and responsibility	.529	.279	1.1005	.4247
2.	Job performance evaluation	.583	.340	.4508	.2345
3.	Job rewards	.599	.359	.3839	.1488
	Constant			.1406	
	$F(3, 141) = 26.37^{***}$				
	Multiple R = .599, R-Square = .359				

$^{***}p < .001$.

Results showed that job involvement and responsibility was the best predictor of overall career satisfaction of female beginning teachers, accounting for about 28 percent of the variation in overall career satisfaction. Job rewards accounted for approximately an additional 11 percent of the variance. In addition, parental and community support accounted for about an additional 3 percent of the variance. The findings from the stepwise regression analysis were consistent with the findings from Pearson correlation analysis in terms of the extent of association.

Table 31. Stepwise regression analysis of four factors on satisfaction with specific aspects of the first-year teaching position on overall career satisfaction of female beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B	Beta
1.	Job involvement and responsibility	.530	.281	.9046	.3692
2.	Job rewards	.628	.395	.7704	.3121
3.	Parental and community support	.653	.426	.3636	.1921
	Constant			.2550	
	F (3, 433) = 107.33***				
	Multiple R = .653, R-Square = .426				

***p < .001.

In summary, for the analysis of hypothesis 12, stepwise multiple regression analysis was used to predict overall career satisfaction of beginning teachers with four factors on satisfaction with specific aspects of the first-year teaching position. Results showed that a combination of, in descending order of contribution, job involvement and responsibility, job rewards, parental and community support, and job performance evaluation significantly contributed to the prediction of overall career satisfaction for the combined data of male and female beginning teachers. All together, these four variables accounted for approximately 41

percent of the variation in the overall career satisfaction of beginning teachers.

For male beginning teachers, a combination of, in descending order of contribution, job involvement and responsibility, job performance evaluation, and job rewards significantly contributed to the prediction of overall career satisfaction, accounting for about 36 percent of the variance. For female beginning teachers, a combination of, in descending order of contribution, job involvement and responsibility, job rewards, and parental and community support significantly contributed to the prediction of overall career satisfaction, accounting for about 43 percent of the variance. In particular, job involvement and responsibility was the best predictor of overall career satisfaction of beginning teachers, accounting for approximately 28 percent of the variation in overall career satisfaction for all three sets of data. Therefore, research hypothesis 12 was generally supported.

Hypothesis 13

Hypothesis 13 states that there is a significant relationship between overall career satisfaction of beginning teachers and the combination of all independent variables.

Stepwise multiple regression analysis was used to test the prediction of overall career satisfaction of beginning teachers with the combination of all independent variables in this study. As described in Chapter 3, the number of independent variables which were assessed in relation to overall career satisfaction of beginning teachers was twelve. Among them, five are categorical

variables which have multiple categories or levels. Thus, it was necessary to recode these variables using a dummy coding procedure (Pedhazur, 1982). In addition, other three variables were comprised of many subitems which had been factor-analyzed to yield more than one factor. Thus, for the regression analysis, 44 measures on 12 independent variables were available in the analysis and they were treated as variables as follows: 1) age; 2) sex; 3) teaching level (4 levels--elementary, junior high, secondary, and more than one level); 4) academic preparation level (5 levels--four-year baccalaureate degree, baccalaureate degree and other credits, five-year nonmaster's degree, five-year master's degree, and other); 5) self-rated adequacy of teacher preparation (5 factors--understanding education from a variety of perspectives, assessing and dealing with learning problems, planning instruction and maintaining student interests, developing interpersonal relationships, and testing and evaluating student work); 6) self-rated importance of teacher preparation (5 factors--assessing and dealing with learning problems, planning instruction and maintaining student interests, developing interpersonal relationships, evaluating student work, and understanding curricular, legal, and multicultural concerns); 7) satisfaction with specific aspects of the first-year teaching position (4 factors--job involvement and responsibility, job performance evaluation, job rewards, and parental and community support); 8) length of student teaching experience (6 categories--8 weeks, 10 weeks, 12 weeks, 14 weeks,16 weeks, and other); 9) overall satisfaction with student teaching experience; 10) length of clinical experience

(clinical experience--yes/no, and 4 categories--half semester, one semester, two semesters, and other); 11) overall satisfaction with clinical experience; and 12) amount of support received during the first-year of teaching (6 sources of support -- principals, experienced teachers, teacher preparation faculty, AEA consultants, in-school program consultants, and other).

Seven of the available 44 variables had many cases with missing values and were dropped from the analysis. As listed above, they were: 10) length of clinical experience (4 categories--half semester, one semester, two semesters, and other); 11) overall satisfaction with clinical experience; and a portion of 12) amount of support received during the first-year of teaching (2 categories-- in-school program consultants, and other). Therefore, 37 variables remained in the analysis.

Prior to the regression, it was necessary to examine the correlation matrix of the 37 variables since the presence of high multicollinearity affects the estimation of regression statistics and it poses serious threats to the interpretation of regression coefficients as indices of effects. One solution is to delete variables that have been identified as causes of high multicollinearity (Pedhazur, 1982, p.246). Table 32 gives the description of 2 dependent variables for hypotheses 13 and 14, and 37 independent variables and their coding names. In addition, Table 33 presents correlations among 2 dependent variables and 37 independent variables.

As shown in Table 33, in general, the intercorrelations among 37

Table 32. Description of 2 dependent variables and 37 independent variables, and their coding names

Variable name	Description
1. OCASAT[a]	Overall career satisfaction of beginning teachers, measured by the average response on two items (18 and 20), indicating satisfaction with teaching as a career and overall job satisfaction during the first-year of teaching. Scores range from 0 to 10.
2. AGAIN[b]	Decision to choose teaching again, measured by responding 'yes', 'no', or 'undecided' on item 17, indicating whether they would or would not choose teaching as a career if they could start over again. Coded 1 for yes, 0 for no or undecided.
3. AGE	An individual's age measured in years.
4. SEX	An individual's sex. Coded 1 for females, 0 for males.
5. LAT 1	Elementary school in teaching level. Coded 1 for elementary school, 0 for others.
6. LAT 2	Junior high school in teaching level. Coded 1 for junior high school, 0 for others.
7. LAT 3	Secondary school in teaching level. Coded 1 for secondary school, 0 for others.
8. LAT 4	More than one in teaching level. Coded 1 for more than one in teaching level, 0 for others.
9. PREP 1	Four-year baccalaureate degree in academic preparation level. Coded 1 for four-year baccalaureate degree, 0 for others.
10. PREP 2	Baccaureate degree and other credits in academic preparation

[a]Dependent variable for hypothesis 13.

[b]Dependent variable for hypothesis 14.

Table 32 (Continued)

Variable name	Description
	level. Coded 1 for baccalaureate degree and other credits, 0 for others.
11. PREP 3	Five-year nonmaster's degree in academic preparation level. Coded 1 for five-year nonmaster's degree, 0 for others.
12. PREP 4	Five-year master's degree in academic preparation level. Coded 1 for five-year master's degree, 0 for others.
13. PREP 5	Other in academic preparation level. Coded 1 for other in academic preparation level, 0 for others.
14. FA 1	Factor 1 on adequacy of teacher preparation, defined as understanding education from a variety of perspectives. Scores range from 1 to 5.
15. FA 2	Factor 2 on adequacy of teacher preparation, defined as assessing and dealing with learning problems. Scores range from 1 to 5.
16. FA 3	Factor 3 on adequacy of teacher preparation, defined as planning instruction and maintaining student interests. Scores range from 1 to 5.
17. FA 4	Factor 4 on adequacy of teacher preparation, defined as developing interpersonal relationships. Scores range from 1 to 5.
18. FA 5	Factor 5 on adequacy of teacher preparation, defined as testing and evaluating student work. Scores range from 1 to 5.
19. FI 1	Factor 1 on importance of teacher preparation, defined as assessing and dealing with learning problems. Scores range from 1 to 5.

Table 32 (Continued)

Variable name	Description
20. FI 2	Factor 2 on importance of teacher preparation, defined as planning instruction and maintaining student interests. Scores range from 1 to 5.
21. FI 3	Factor 3 on importance of teacher preparation, defined as developing interpersonal relationships. Scores range from 1 to 5.
22. FI 4	Factor 4 on importance of teacher preparation, defined as evaluating student work. Scores range from 1 to 5.
23. FI 5	Factor 5 on importance of teacher preparation, defined as understanding curricular, legal, and multicultural concerns. Scores range from 1 to 5.
24. FS 1	Factor 1 on satisfaction with specific aspects of the first-year teaching position, defined as job involvement and responsibility. Scores range from 1 to 5.
25. FS 2	Factor 2 on satisfaction with specific aspects of the first-year teaching position, defined as job performance evaluation. Scores range from 1 to 5.
26. FS 3	Factor 3 on satisfaction with specific aspects of the first-year teaching position, defined as job rewards. Scores range from 1 to 5.
27. FS 4	Factor 4 on satisfaction with specific aspects of the first-year teaching position, defined as parental and community support. Scores range from 1 to 5.
28. LST 1	8 weeks in length of student teaching experience. Coded 1 for 8 weeks, 0 for others.

Table 32 (Continued)

Variable name	Description
29. LST 2	10 weeks in length of student teaching experience. Coded 1 for 10 weeks, 0 for others.
30. LST 3	12 weeks in length of student teaching experience. Coded 1 for 12 weeks, 0 for others.
31. LST 4	14 weeks in length of student teaching experience. Coded 1 for 14 weeks, 0 for others.
32. LST 5	16 weeks in length of student teaching experience. Coded 1 for 16 weeks, 0 for others.
33. LST 6	Other in length of student teaching experience. Coded 1 for other, 0 for others.
34. STSAT	Overall satisfaction with student teaching experience. Scores range from 0 to 10.
35. CLIN	Clinical experience, measured by responding 'yes' or 'no' on item 14, indicating clinical experiences or internships during the teacher preparation program. Coded 1 for yes, 0 for no.
36. AR 1	Amount of support received from principals during the first-year of teaching. Scores range from 1 to 5.
37. AR 2	Amount of support received from experienced teachers during the first-year of teaching. Scores range from 1 to 5.
38. AR 3	Amount of support received from teacher preparation faculty during the first-year of teaching. Scores range from 1 to 5.
39. AR 4	Amount of support received from AEA (area education agency) consultants during the first-year of teaching. Scores range from 1 to 5.

Table 33. Correlations among 2 dependent variables and 37 independent variables

Variables	1	2	3	4	5	6	7	8	9	10
1. OCASAT	--									
2. AGAIN	.56	--								
3. AGE	.08	.07	--							
4. SEX	.09	.05	.06	--						
5. LAT 1	.19	.12	.04	.25	--					
6. LAT 2	.05	.03	.02	.08	-.27	--				
7. LAT 3	-.12	-.01	-.03	-.26	-.35	-.19	--			
8. LAT 4	-.14	-.14	-.03	-.10	-.45	-.24	-.31	--		
9. PREP 1	.03	-.02	-.20	.05	.05	-.04	.00	.00	--	
10. PREP 2	.01	.02	.16	.03	.03	.01	.02	-.07	-.46	--
11. PREP 3	-.02	.03	.04	-.10	-.09	-.03	.01	.10	-.66	-.06
12. PREP 4	-.02	-.05	.17	.04	-.03	.13	-.03	-.02	-.29	-.03
13. PREP 5	-.04	.03	.05	-.01	.05	.04	.00	-.08	-.38	-.03
14. FA 1	.09	.01	-.15	-.01	.03	-.07	-.01	-.01	.07	-.07
15. FA 2	.09	.02	-.22	.01	.07	-.04	-.03	-.02	.04	-.08
16. FA 3	.20	.13	-.09	.08	.06	-.06	-.06	.03	.09	-.04
17. FA 4	.15	.05	-.11	-.05	.07	-.05	-.04	-.02	.08	-.08
18. FA 5	.03	.01	-.09	-.04	-.05	-.02	.08	.02	-.04	-.03
19. FI 1	.17	.10	-.09	.22	.20	.05	-.12	-.15	.04	-.02
20. FI 2	.09	.06	-.07	.18	-.01	.01	-.03	.05	.02	.04

Table 33 (Continued)

11	12	13	14	15	16	17	18	19	20	21	22	23	24
--													
-.04	--												
-.05	-.02	--											
.01	-.06	-.04	--										
.02	-.01	-.02	.43	--									
-.04	-.01	-.06	.48	.46	--								
.04	-.08	-.06	.55	.45	.49	--							
.07	-.03	.04	.34	.39	.44	.38	--						
-.03	.01	-.01	.16	.30	.19	.14	.08	--					
-.03	-.01	-.02	.20	.13	.25	.11	.07	.38	--				

Table 33 (Continued)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39

Table 33 (Continued)

Variables	1	2	3	4	5	6	7	8	9	10
21. FI 3	.11	.06	-.14	.11	.00	.10	-.10	.02	.07	-.06
22. FI 4	.12	.07	-.04	.09	-.03	.02	.00	.03	.06	-.01
23. FI 5	.16	.05	-.07	.09	-.04	-.02	.01	.05	.02	-.05
24. FS 1	.51	.21	.01	.00	.05	.00	-.00	-.03	.03	.00
25. FS 2	.29	.09	.01	.01	.07	-.01	-.01	-.10	.10	-.03
26. FS 3	.45	.28	.02	.18	.11	.04	-.02	-.14	.08	-.08
27. FS 4	.40	.14	.06	.13	.14	-.07	-.09	-.09	.04	.07
28. LST 1	.01	.00	.14	-.17	-.09	-.01	.11	.03	-.05	.10
29. LST 2	-.06	-.11	-.04	-.05	-.04	-.07	.05	.04	.05	-.07
30. LST 3	.01	.05	-.03	.06	.00	.06	.01	-.04	-.02	.06
31. LST 4	.02	.04	-.04	.02	.05	.01	-.02	-.02	.03	-.04
32. LST 5	-.03	.02	-.08	.12	.11	.00	-.11	-.04	-.03	-.01
33. LST 6	.06	.04	.01	.05	.00	.05	-.05	.01	.04	-.05
34. STSAT	.18	.14	-.12	.05	.13	.05	-.08	-.14	.04	.00
35. CLIN	.13	.10	-.17	.07	.13	-.02	-.09	-.04	.05	-.04
36. AR 1	.22	.11	-.04	-.04	.01	.01	-.04	.02	.00	-.01
37. AR 2	.17	.10	-.05	.11	.11	.03	-.03	-.13	.13	-.08
38. AR 3	.12	.10	-.21	-.12	.03	-.05	.00	-.01	.16	-.09
39. AR 4	.19	.16	-.02	.13	.16	-.04	-.11	-.10	.00	-.03

Table 33 (Continued)

11	12	13	14	15	16	17	18	19	20	21	22	23	24
.00	-.02	-.06	.26	.22	.23	.26	.12	.41	.45	--			
-.04	-.09	.01	.27	.19	.29	.17	.16	.37	.46	.48	--		
.04	.01	-.05	.33	.20	.25	.16	.14	.41	.44	.49	.42	--	
-.05	.01	-.01	.14	.14	.20	.16	.06	.12	.07	.11	.13	.12	--
-.14	.03	.01	.16	.11	.14	.14	.05	.06	-.02	.07	.04	.06	.28
-.04	.02	-.03	.15	.11	.20	.16	.10	.05	.11	.10	.10	.10	.31
-.07	-.06	-.01	.15	.11	.20	.16	.08	.03	.05	.07	.09	.09	.33
-.03	.02	.03	-.07	-.16	-.09	-.05	.02	-.13	-.01	-.07	.04	-.08	.04
.02	-.02	-.05	.00	-.01	.02	.00	.07	-.03	.06	.05	-.06	.03	-.08
-.02	-.04	-.02	.04	.01	.02	.05	.01	.03	-.04	.01	-.01	.00	-.02
.02	-.03	-.03	.01	.05	.03	-.04	-.02	.00	.00	.02	.06	.03	-.01
-.01	.07	.06	.03	.07	.02	.00	-.10	.12	.05	.01	.04	.01	.00
.00	-.05	-.03	.02	.09	.02	.04	.02	.03	-.08	.01	-.03	.03	.06
.02	-.09	-.05	.15	.16	.26	.19	.16	.19	.08	.10	.12	.04	.03
.02	.05	-.10	.08	.13	.19	.07	.10	.18	.06	.10	.05	.07	.10
-.01	-.02	.03	.06	.04	.05	.14	.00	.06	.05	.08	.10	.07	.24
-.06	-.04	-.07	.07	.02	.08	.10	.01	.02	.03	.08	.02	.06	.15
-.09	-.08	-.04	.18	.12	.17	.19	.09	.05	.09	.18	.12	.14	.03
.04	-.04	.00	.08	.27	.13	.18	.08	.30	.05	.09	.05	.12	.18

Table 33 (Continued)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
--														
.24	--													
.21	.32	--												
-.02	-.06	.03	--											
-.01	.00	-.02	-.27	--										
.00	.02	-.05	-.19	-.15	--									
.06	-.02	-.04	-.11	-.09	-.06	--								
-.02	.02	-.01	-.38	-.30	-.21	-.13	--							
.03	.04	.05	-.23	-.18	-.13	-.08	-.26	--						
.00	.04	.09	-.09	-.05	-.03	.03	.11	.06	--					
.05	.08	.02	-.13	.00	.06	.05	.05	.01	.08	--				
.38	.16	.11	-.03	-.01	.01	-.02	.00	.05	-.05	.01	--			
.08	.25	.12	-.03	-.02	.04	-.05	.02	.04	.09	.02	.12	--		
.12	.05	.11	-.05	.02	.03	.03	.03	-.01	.11	.00	.12	.16	--	
.14	.09	.13	-.12	-.06	-.03	.01	.13	.08	.13	.08	.15	.07	.22	--

independent variables were low. However, the correlation between four-year baccalaureate degree (PREP 1) and five-year nonmaster's degree (PREP 3) in the academic preparation level showed the highest correlation coefficient (-.66). Furthermore, the five levels of academic preparation had near-zero correlations with overall career satisfaction (OCASAT), thus they were deleted from the analysis. The second highest correlations existed among the variables related to adequacy and importance factors (FA 1 to FA 5 and FI 1 to FI 5) of teacher preparation. These intercorrelations, however, were not so high to be dropped in the analysis. In addition, two variables (LAT 1 and LST 1) were dropped from ten dummy-coded variables (LAT 1 to LAT 4 and LST 1 to LST 6) since (n-1) dummy-coded variables can be used in the regression analysis. Therefore, after preliminary screening, finally 30 independent variables were selected in the stepwise regression analysis. Table 34 shows means and standard deviations of 30 independent variables for the combined data of male and female beginning teachers.

Results of multiple regression analysis using stepwise procedure in SPSSx for the combined data of male and female beginning teachers are presented in Table 35. As shown in Table 35, this analysis yielded an F-Ratio of 47.18 ($p < .001$) for overall career satisfaction of beginning teachers with nine predictor variables entered into the final prediction equation. At each step, the default criteria for entry and removal of each variable in the equation in SPSSx program were used. The final R-Square of .442 ($p < .001$) indicates that approximately 44

Table 34. Means and standard deviations of 30 independent variables for the combined data

Variable	Mean	S. D.	N
AGE	26.49	5.20	536
SEX	.75	.43	545
LAT 2	.12	.33	545
LAT 3	.20	.40	545
LAT 4	.29	.45	545
FA 1	3.36	.65	542
FA 2	3.22	.92	543
FA 3	3.80	.64	544
FA 4	3.15	.76	544
FA 5	3.55	.81	542
FI 1	3.93	.67	536
FI 2	4.29	.47	537
FI 3	4.09	.60	536
FI 4	4.21	.50	534
FI 5	3.70	.62	536
FS 1	3.93	.72	544
FS 2	3.45	1.09	543
FS 3	3.28	.75	545
FS 4	3.25	.99	545
LST 2	.18	.38	545
LST 3	.10	.30	545
LST 4	.04	.19	545
LST 5	.30	.46	545
LST 6	.13	.34	545

Table 34 (Continued)

Variable	Mean	S. D.	N
STSAT	8.11	2.15	543
CLIN	.73	.44	543
AR 1	3.37	1.10	535
AR 2	3.95	1.02	535
AR 3	2.35	1.25	512
AR 4	2.30	1.25	529

percent of the variation in overall career satisfaction of beginning teachers was predicted from the combination of nine variables entered into the equation.

Results revealed that job involvement and responsibility was the best predictor of overall career satisfaction of beginning teachers, accounting for about 26 percent of the variance in overall career satisfaction. Job rewards was the second best predictor of overall career satisfaction, accounting for approximately an additional 10 percent of the variance. Parental and community support accounted for about 3 percent of the variance. In addition, overall satisfacton with student teaching experience accounted for about 2 percent of the variance. Together, the rest of five predictor variables including secondary school in teaching level, more than one in teaching level, understanding curricular, legal and multicultural concerns in importance of teacher preparation, understanding education from a variety of perspectives in adequacy of teacher preparation, and

Table 35. Stepwise regression analysis of 30 predictor variables on overall career satisfaction of beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B[a]	Beta[b]
1.	Job involvement and responsibility	.511	.261	.8959	.3478
2.	Job rewards	.597	.356	.6241	.2537
3.	Parental and community support	.623	.388	.3020	.1618
4.	Satisfaction with student teaching experience	.638	.407	.1108	.1283
5.	Secondary school in teaching level	.644	.415	-.5697	-.1221
6.	More than one in teaching level	.651	.423	-.3924	-.0957
7.	Understanding curricular,legal, and multicultural concerns	.655	.429	.3181	.1050
8.	Understanding education from a variety of perspectives	.660	.435	-.2702	-.0945
9.	Job performance evaluation	.665	.442	.1536	.0901
	Constant			-.5276	

[a]Unstandardized regression coefficients in the final prediction equation.

[b]Standardized regression coefficients in the final prediction equation.

Table 35 (Continued)

Step	Variables entered into the equation	Multiple R	R-Square	B	Beta
	F (9, 535) = 47.18***				
	Multiple R = .665, R-Square = .442				

***p < .001.

job performance evaluation accounted for about 4 percent of the variance. In particular, three variables including secondary school and more than one level in teaching levels, and understanding education from a variety of perspectives negatively contributed to the prediction of overall career satisfaction of beginning teachers.

The best prediction equation with nine predictor variables as indicated in Table 35 was as follows:

Overall career satisfaction of beginning teachers=-.5276 + .8959 (job involvement and responsibility) + .6241 (job rewards) + .3020 (parental and community support) + .1108 (satisfaction with student teaching experience) - .5697 (secondary school in teaching level) - .3924 (more than one in teaching level) + .3181 (understanding curricular, legal and multicultural concerns) - .2702 (understanding education from a variety of perspectives) + .1536 (job performance evaluation).

In addition, results of stepwise regression analysis for male and female beginning teachers separately are presented in each section. Twenty-nine variables excluding one variable (sex) were included for use in the multiple regression analysis. Means and standard deviations of 29 independent variables for male and female beginning teachers are given in Table 36.

Male beginning teachers

Results of stepwise regression analysis for male beginning teachers are presented in Table 37. The analysis yielded an F-Ratio of 18.75 ($p < .001$) for overall career satisfaction with four predictor variables entered into the final prediction equation. The final R-Square of .364 ($p < .001$) indicates that approximately 36 percent of the variation in the overall career satisfaction was predicted from the combination of the four variables entered into the equation.

Results revealed that job involvement and responsibility was the best predictor of overall career satisfaction of male beginning teachers, accounting for 25 percent of the variance in overall career satisfaction. The second best predictor of overall career satisfaction was job performance evaluation, accounting for approximately an additional 7 percent of the variance. Job rewards explained an additional 3 percent of the variance. In addition, support from principals accounted for about 2 percent of the variance. Those of all variables positively contributed to the prediction of overall career satisfaction of male beginning teachers.

Table 36. Means and standard deviations of 29 independent variables for male and female beginning teachers

Variable	Mean		S. D.		N	
	M	F	M	F	M	F
AGE	25.94	26.67	3.61	5.63	134	402
LAT 2	.08	.14	.27	.35	136	409
LAT 3	.38	.14	.49	.34	136	409
LAT 4	.37	.26	.48	.44	136	409
FA 1	3.37	3.36	.66	.65	136	406
FA 2	3.21	3.23	.80	.96	136	407
FA 3	3.72	3.83	.65	.63	136	408
FA 4	3.21	3.13	.77	.76	136	408
FA 5	3.61	3.53	.80	.81	136	406
FI 1	3.68	4.01	.62	.66	134	402
FI 2	4.15	4.34	.52	.44	134	403
FI 3	3.97	4.13	.68	.57	134	402
FI 4	4.13	4.24	.52	.49	134	400
FI 5	3.60	3.73	.70	.58	134	402
FS 1	3.93	3.92	.70	.73	135	409
FS 2	3.42	3.46	.99	1.12	134	409
FS 3	3.04	3.35	.73	.75	136	409
FS 4	3.03	3.33	1.01	.98	136	409
LST 2	.21	.17	.41	.37	136	409
LST 3	.07	.11	.25	.31	136	409
LST 4	.03	.04	.17	.19	136	409
LST 5	.21	.33	.41	.47	136	409
LST 6	.10	.14	.31	.35	136	409

Table 36 (Continued)

Variable	Mean		S. D.		N	
	M	F	M	F	M	F
STSAT	7.93	8.17	2.21	2.13	135	408
CLIN	.67	.75	.47	.43	134	409
AR 1	3.44	3.35	1.06	1.12	133	402
AR 2	3.76	4.01	1.05	1.00	133	402
AR 3	2.61	2.26	1.24	1.24	132	380
AR 4	2.02	2.39	1.08	1.29	133	396

Table 37. Stepwise regression analysis of 29 predictor variables on overall career satisfaction of male beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B	Beta
1.	Job involvement and responsibility	.500	.250	1.0061	.3803
2.	Job performance evaluation	.565	.319	.3781	.2006
3.	Job rewards	.585	.343	.4124	.1629
4.	Support from principals	.603	.364	.2760	.1568
	Constant			-.2648	
	F (4, 131) = 18.75***, Multiple R = .603, R-Square = .364				

***p < .001.

The best prediction equation with four predictor variables was as follows:

Overall career satisfaction of male beginning teachers=-.2648 + 1.0061 (job involvement and responsibility) + .3781 (job performance evaluation) + .4124 (job rewards) + .2760 (support from principals).

Female beginning teachers

Results of stepwise regression analysis for the female beginning teachers are presented in Table 38. The analysis yielded an F-Ratio of 43.88 ($p < .001$) for overall career satisfaction with eight predictor variables entered into the final prediction equation. The final R-Square of .467 ($p < .001$) indicates that approximately 47 percent of the variation in overall career satisfaction was predicted from the combination of the eight variables entered into the equation.

Results showed that job involvement and responsibility was the best predictor of overall career satisfaction of female beginning teachers, accounting for about 27 percent of the variance in overall career satisfaction. The second best predictor of overall career satisfaction was job rewards, accounting for approximately an additional 11 percent of the variance. Parental and community support explained about 4 percent of the variance. In addition, overall satisfaction with student teaching experience explained about 2 percent of the variance. Together, the rest of four predictor variables accounted for about 4 percent of the variance. In particular, secondary school in teaching level and 16 weeks of student teaching experience negatively contributed to the prediction of overall

Table 38. Stepwise regression analysis of 29 predictor variables on overall career satisfaction of female beginning teachers

Step	Variables entered into the equation	Multiple R	R-Square	B	Beta
1.	Job involvement and responsibility	.517	.268	.8835	.3473
2.	Job rewards	.617	.381	.7560	.3054
3.	Parental and community support	.646	.417	.3418	.1807
4.	Satisfaction with student teaching experience	.663	.440	.1297	.1494
5.	Age	.670	.449	.0321	.0970
6.	Assessing and dealing with learning problems	.676	.457	.2622	.0929
7.	Secondary school in teaching level	.680	.462	-.4244	-.0790
8.	16 weeks of student teaching experience	.684	.467	-.2883	-.0734
	Constant			-2.3700	
	$F(8, 400) = 43.88^{***}$				
	Multiple R = .684, R-Square = .467				

$^{***}p < .001$.

career satisfaction of female beginning teachers.

The best prediction equation with eight predictor variables were as follows:

Overall career satisfaction of female beginning teachers=-2.3700 + .8835 (job involvement and responsibility) + .7560 (job rewards) + .3418 (parental and community support) + .1297 (satisfaction with student teaching experience) + .0321 (age) + .2622 (assessing and dealing with learning problems) - .4244 (secondary school in teaching level) - .2883 (16 weeks of student teaching experience).

In summary, for the testing of hypothesis 13, stepwise multiple regression analysis was used to predict overall career satisfaction of beginning teachers.

Results showed that a combination of, in descending order of contribution, job involvement and responsibility, job rewards, parental and community support, satisfaction with student teaching experience, secondary school in teaching level, more than one in teaching level, understanding curricular, legal, and multicultural concerns in importance of teacher preparation, understanding education from a variety of perspectives in adequacy of teacher preparation, and job performance evaluation significantly contributed to the prediction of overall career satisfaction for the combined data of male and female beginning teachers. All together, these nine variables accounted for approximately 44 percent of the variation in the overall career satisfaction of beginning teachers. However, secondary school and more than one in teaching levels and adequacy of understanding education from a variety of perspectives negatively contributed to the prediction of overall career

satisfaction.

For male beginning teachers, a combination of, in descending order of contribution, job involvement and responsibility, job performance evaluation, job rewards, and support from principals significantly contributed to the prediction of overall career satisfaction, accounting for approximately 36 percent of the variance.

For female beginning teachers, a combination of, in descending order of contribution, job involvement and responsibility, job rewards, parental and community support, satisfaction with student teaching experience, age, assessing and dealing with learning problems, secondary school in teaching level, and 16 weeks of student teaching experience significantly contributed to the prediction of overall career satisfaction, accounting for about 47 percent of the variance. However, secondary school in teaching level and 16 weeks of student teaching experience negatively contributed to the prediction of overall career satisfaction. In particular, job involvement and responsibility was the best predictor of overall career satisfaction of beginning teachers, accounting for approximately 25 to 27 percent of the variance in overall career satisfaction for all three sets of data. The second best predictor of overall career satisfaction of beginning teachers was job rewards for the combined data and female teachers. For male teachers, job performance evaluation was the second best predictor of overall career satisfaction. Therefore, research hypothesis 13 was generally supported.

Hypothesis 14

Hypothesis 14 states that there is a significant relationship between the decision to choose teaching again and the combination of all independent variables.

Discriminant analysis was used to test this hypothesis. Discriminant analysis is a statistical technique in which linear combinations of variables are used to distinguish between two or more groups, assuming multivariate normality and equal population covariance matrices (Huberty, 1975, p. 549). Because of some common features of discriminant analysis and multivariate analysis of variance (MANOVA), some researchers treat the two as interchangeable methods for studying group differences on multiple variables. More often, however, it is suggested that MANOVA be applied first in order to determine whether there are overall significant differences among the groups. This is accomplished by testing Wilks' lambda. If the null hypothesis is rejected, it is recommended that discriminant analysis be used to identify the variables on which the groups differ most, and the nature of the dimensions on which they differ (Pedhazur, 1982, p. 692, p. 710). The key difference in discriminant analysis is that the dependent variable is not a continuous variable as in the analysis of variance or multiple regression, but a categorical variable. Huberty (1975) emphasized four aspects of a discriminant analysis. They are as follows:

(1) separation--determining inter-group significant differences of group centroids, (i.e., mean vectors);

(2) discrimination--studying group separation with respect to dimensions and to discriminating variable contribution toseparation;

(3) estimation--obtaining estimates of interpopulation distances between centroids and estimates of relationship between the response variables and group membership; and

(4) classification--setting up rules of assigning an individual to one of the predetermined exhaustive populations (p. 545).

In this hypothesis, discriminant analysis was used to determine whether there are significant differences between two groups and to identify the variables on which the groups differ most.

For the hypothesis testing, measures on 45 independent variables (44 variables listed in hypothesis 13 and overall career satisfaction) were available. After preliminary screening including the examination of the intercorrelation matrix among the independent variables (Table 33), 31variables were selected for use in the discriminant analysis. Table 32 gives a specific description of independent variables including overall career satisfaction (OCASAT) and one dependent variable, decision to choose teaching again (AGAIN) in this hypothesis. Decision to choose teaching again was measured by responding 'yes', 'no' or 'undecided' on item 17 indicating whether they would or would not choose teaching as a carer if they could start over again. However, the proportion of respondents on 'no' (n=35; 6%) was too small, thus it was combined with respondents on 'undecided' (n=130; 22.3%). Two groups were used as a

dependent variable for this study:

1) group 1--beginning teachers who would choose teaching as a career again; and

2) group 2--beginning teachers who would not choose teaching as a career again or those who were uncertain about choosing teaching again.

The group means and standard deviations of 31 independent variables for the combined data of male and female beginning teachers are given in Table 39. Description of independent variables and their coding names are given in Table 32.

Results of discriminant analysis using stepwise procedure with selection based on Wilks' lambda in SPSSx for the combined data of male and female beginning teachers are presented in Table 40.

As shown in Table 40, 10 variables entered into the final linear discriminant function with a chi-square value of 191.38 ($p < .001$). The linear discriminant function created by 10 variables was significant at the .001 level, indicating that a linear combination of 10 variables significantly discriminate between two groups of beginning teachers who would choose teaching as a career again and who would not choose teaching as a career again, or those who were uncertain about choosing teaching again. The canonical correlation ($R=.57$), the usual Pearson correlation, in two-group case, showed that the function could account for 32.49 percent of the variance in group membership.

Table 39. The group means and standard deviations of 31 independent variables: combined (n=485)[a]

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
OCASAT	8.09	1.30	5.91	2.04
AGE	26.60	5.61	25.88	3.91
SEX	.75	.44	.72	.45
LAT 2	.14	.35	.12	.33
LAT 3	.21	.40	.21	.41
LAT 4	.24	.43	.35	.48
FA 1	3.37	.65	3.34	.62
FA 2	3.23	.92	3.17	.95
FA 3	3.85	.62	3.67	.65
FA 4	3.19	.74	3.06	.76
FA 5	3.54	.78	3.50	.84
FI 1	3.97	.63	3.86	.70
FI 2	4.32	.46	4.25	.48
FI 3	4.13	.57	4.04	.62
FI 4	4.23	.49	4.17	.51
FI 5	3.71	.61	3.65	.63
FS 1	4.04	.68	3.68	.77
FS 2	3.51	1.05	3.27	1.19
FS 3	3.41	.73	2.93	.75
FS 4	3.33	1.02	3.03	.90

[a]60 of 545 cases were excluded from the analysis. They had at least one missing discriminating variable.

Table 39 (Continued)

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
LST 2	.15	.36	.24	.43
LST 3	.11	.31	.08	.27
LST 4	.04	.19	.03	.17
LST 5	.31	.46	.29	.46
LST 6	.14	.35	.11	.31
STSAT	8.30	2.04	7.64	2.26
CLIN	.75	.43	.67	.47
AR 1	3.47	1.09	3.12	1.09
AR 2	4.02	1.01	3.78	1.00
AR 3	2.43	1.27	2.15	1.19
AR 4	2.38	1.29	1.99	1.10

Among the standardized discriminant function coefficients, overall career satisfaction of beginning teachers with the largest coefficient (1.0866) most contributed to the discriminant function. Thus, it was the most important variable for distinguishing between two groups. Parental and community support (-.2028), and 10 weeks of student teaching experience (-.2015) with the second largest coefficients, negatively contributed to the function. However, this use of standardized coefficients may be questioned on theoretical grounds: These coefficients are actually partial coefficients and, hence, do not pertain to the

Table 40. Discriminant analysis of two groups regarding decision to choose teaching again: combined (n=485)

Step	Variables entered into the function	Wilks' lambda	F-value	Significance	Standardized[a] coefficients
1.	Overall career satisfaction	.71	196.60	.000	1.0866
2.	Parental and community support	.70	102.56	.000	-.2028
3.	10 weeks of student teaching experience	.69	71.06	.000	-.2015
4.	Job rewards	.69	54.17	.000	.1633
5.	Job involvement and responsibility	.68	44.16	.000	-.1791
6.	Secondary school in teaching level	.68	37.31	.000	.1571
7.	Support from AEA consultants	.68	32.40	.000	.1448
8.	Job performance evaluation	.67	28.70	.000	-.1308
9.	Understanding curricular, legal,and multicultural concerns	.67	25.76	.000	-.1660
10.	Developing interpersonal relationships	.67	23.34	.000	.1091

[a]Standardized discriminant function coefficients.

Table 40 (Continued)

Step	Variables entered into the function	Wilks' lambda	F-value	Significance	Standardized coefficients
Chi-Square = 191.38***, Canonical correlation = .57***					

***p < .001.

common parts among the discriminating variables; two discriminating variables having large positive coefficients would not necessarily have anything in common that contributed to group separation (Huberty, 1975, p. 552). Darlington, Weinberg, and Walberg (1973) argue that because of greater stability, use of the correlations of the discriminating variables with the discriminant function ought to be emphasized. These correlations provide information about how each variable within groups is related to the discriminant function. The larger the correlation, the more the variable contributes to group differences. Table 41 provides correlations of the discriminating variables with the function.

As can be seen, overall career satisfacton had a very high relationship (.91) with the discriminant function and most contributed to group differences. Job rewards had the second largest correlation (.42) with the function and the second most contributed to group differences. In addition, job involvement and responsibility (.32), support from AEA consultants (.20), and parental and community support (.19) were positively related to the discriminant function.

Table 41. Correlations of the discriminating variables with the discriminant function: combined

1. Overall career satisfaction	.91
2. Job rewards	.42
3. Job involvement and responsibility	.32
4. Support from AEA consultants	.20
5. Parental and community support	.19
6. 10 weeks of student teaching experience	-.15
7. Job performance evaluation	.14
8. Developing interpersonal relationships	.09
9. Understanding curricular, legal, and multicultural concerns	.06
10. Secondary school in teaching level	-.01

When a discriminant analysis was conducted without overall career satisfaction as an independent variable, the results for the combined data revealed that job rewards was the most important variable to differentiate the two groups. The second most important variable was job involvement and responsibility.

The group centroid, which indicates the point representing the average profile of a group is shown in Table 42. The centroid is the point about which the points for individuals in a group balance in all directions. If groups are well discriminated, centroids are far apart, and the members of each group exist near

their centroid (Nunnally, 1978, p. 454).

Table 42. Group centroids: combined

Group	Group centroid
1. (yes)	.44
2. (no/undecided)	-1.10

The centroid for group 1 is .44, whereas the centroid for group 2 is -1.10. On the average, group 1 has smaller discriminant function scores than group 2 in absolute value. Two groups are well discriminated by group centroids with opposite direction.

In addition, results of classification which tests the accuracy of the discriminant function to correctly classify the cases are presented in Table 43.

As can be seen, 338 of 390 cases in group 1 were classified correctly to be members of group 1 (86.7 %), while 52 (13.3 %) were assigned incorrectly to group 2. Similarly, 110 of 153 (71.9 %) cases in group 2 were identified correctly, and 43 (28.1 %) were misclassified. Overall, 82.50 % (448 of 543) of beginning teachers in two groups were correctly classified. Therefore, the proportion of correct classifications across two groups showed high strength of prediction for group membership.

Table 43. The classification results of two groups: combined

Group	N	Predicted group membership	
		1	2
1. (yes)	390	338	52
		(86.7%)	(13.3%)
2. (no/undecided)	153	43	110
		(28.1%)	(71.9%)

Results of discriminant analysis for male and female beginning teachers separately are presented in each section. Thirty variables excluding one variable (sex) were selected for use in the discriminant analysis for male and female beginning teachers.

Male beginning teachers

The group means and standard deviations of 30 independent variables are given in Table 44. Description of independent variables and their coding names are given in Table 32.

Results of discriminant analysis using stepwise procedure with selection based on Wilks' lambda in SPSSx for the male beginning teachers are presented in Table 45.

Table 44. The group means and standard deviations of 30 independent variables: male teachers (n=127)[a]

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
OCASAT	7.87	1.27	5.77	2.05
AGE	26.13	3.98	25.49	2.65
LAT 2	.09	.29	.08	.27
LAT 3	.38	.49	.44	.50
LAT 4	.32	.47	.50	.41
FA 1	3.40	.67	3.31	.66
FA 2	3.27	.80	3.06	.85
FA 3	3.78	.62	3.58	.70
FA 4	3.29	.74	3.06	.82
FA 5	3.65	.71	3.49	.96
FI 1	3.75	.59	3.54	.70
FI 2	4.21	.49	4.09	.56
FI 3	4.03	.61	3.89	.77
FI 4	4.15	.52	4.07	.53
FI 5	3.67	.66	3.43	.81
FS 1	4.06	.69	3.71	.71
FS 2	3.52	.93	3.23	1.13
FS 3	3.10	.67	2.74	.75
FS 4	3.05	1.09	2.95	.89
LST 2	.17	.38	.31	.47

[a]9 of 136 cases were excluded from the analysis. They had at least one missing discriminating variable.

Table 44 (Continued)

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
LST 3	.07	.25	.08	.27
LST 4	.05	.21	.00	.00
LST 5	.22	.41	.21	.41
LST 6	.11	.32	.03	.16
STSAT	8.02	2.15	7.87	2.34
CLIN	.70	.46	.59	.50
AR 1	3.58	1.05	3.10	1.05
AR 2	3.83	1.04	3.64	1.06
AR 3	2.75	1.22	2.41	1.27
AR 4	2.15	1.13	1.77	.90

As shown in Table 45, 8 variables entered into the final linear discriminant function with a chi-square value of 52.17 ($p < .001$). The discriminant function yielded by 8 variables was significant at the .001 level, indicating that a linear combination of 8 variables significantly discriminate between two groups of male beginning teachers. The canonical correlation (R=.59) showed that the function could account for 34.81 percent of the variance in group membership. Among the standardized coefficients, overall career satisfaction with the largest coefficient (.9754) most contributed to the discriminant function. Parental and community support with the second largest coefficient (-.3291) negatively

Table 45. Discriminant analysis of two groups regarding decision to choose teaching again: male teachers (n=127)

Step	Variables entered into the function	Wilks' lambda	F-Ratio	Probability	Standardized coefficients
1.	Overall career satisfaction	.72	49.71	.000	.9754
2.	Parental and community support	.70	26.62	.000	-.3291
3.	Assessing and dealing with learning problems	.69	18.61	.000	.2859
4.	10 weeks of student teaching experience	.68	14.48	.000	-.2541
5.	Job rewards	.66	10.11	.000	.1861
6.	Job performance evaluation	.66	8.87	.000	-.2743
7.	Support from principals	.65	7.89	.000	.2350
8.	12 weeks of student teaching experience	.65	7.14	.000	-.1930
	Chi-Square = 52.17***, Canonical correlation = .59***				

***p < .001.

contributed to the function, while assessing and dealing with learning problems in adequacy of teacher preparation (.2859) positively contributed to the function.

Table 46 provides correlations of the discriminating variables with the function. As can be seen, overall career satisfaction had very high relationship (.86) with the discriminant function and most contributed to group differences. Job rewards had the second largest correlation (.33) with the function and the second most contributed to group differences. Support from principals (.29) and job performance evaluation (.18) were positively related to the function, whereas 10 weeks of student teaching experience (-.21) was negatively associated with the function.

Table 46. Correlations of the discriminating variables with the discriminant function: male teachers

1. Overall career satisfaction	.86
2. Job rewards	.33
3. Support from principals	.29
4. 10 weeks of student teaching experience	-.21
5. Job performance evaluation	.18
6. Assessing and dealing with learning problems	.16
7. Parental and community support	.06
8. 12 weeks of student teaching experience	-.02

The group centroid is shown in Table 47. The centroid for group 1 is .48, whereas the centroid for group 2 is -1.09. On the average, group 1 has smaller

discriminant function scores than group 2 in absolute value. Two groups are well discriminated by group centroids with opposite direction.

Table 47. Group centroids: male teachers

Group	Group centroid
1. (yes)	.48
2. (no/undecided)	-1.09

In addition, the classification results of two groups are given in Table 48. 78 of 92 cases in group 1 were classified correctly (84.8 %), while 14 (15.2 %) were assigned incorrectly to group 2. Similarly, 28 of 43 (65.1 %) cases in group 2 were classified correctly, and 15 (34.9 %) were misclassified. Overall, 78.52 % (106 of 135) of male beginning teachers in two groups were correctly classified. Therefore, the proportion of correct classification across two groups showed high strength of prediction for group membership.

Table 48. The classification results of two groups: male teachers

Group	N	Predicted group membership	
		1	2
1. (yes)	92	78	14
		(84.8 %)	(15.2 %)
2. (no/undecided)	43	15	28
		(34.9 %)	(65.1 %)

Female beginning teachers

The group means and standard deviations of 30 independent variables are given in Table 49. Description of independent variables and their coding names are given in Table 32.

Results of discriminant analysis using stepwise procedure with selection based on Wilks' lambda in SPSSx for the female beginning teachers are presented in Table 50.

Table 49. The group means and standard deviations of 30 independent variables: female teachers (n=358)[a]

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
OCASAT	8.17	1.30	5.97	2.05
AGE	26.76	6.06	26.04	4.30
LAT 2	.16	.37	.14	.35
LAT 3	.15	.36	.12	.33
LAT 4	.22	.41	.33	.47
FA 1	3.36	.65	3.34	.61
FA 2	3.22	.95	3.21	.99
FA 3	3.87	.62	3.70	.63
FA 4	3.16	.74	3.06	.74
FA 5	3.51	.80	3.51	.80
FI 1	4.04	.63	3.98	.67
FI 2	4.35	.45	4.32	.43
FI 3	4.16	.55	4.10	.55
FI 4	4.25	.48	4.22	.50
FI 5	3.72	.60	3.74	.51
FS 1	4.03	.67	3.68	.79
FS 2	3.51	1.09	3.29	1.22
FS 3	3.51	.72	3.06	.74
FS 4	3.42	.97	3.07	.91

[a]51 of 409 cases were excluded from the analysis. They had at least one missing discriminating variable.

Table 49 (Continued)

Variable	Group 1		Group 2	
	Mean	S. D.	Mean	S. D.
LST 2	.14	.35	.21	.41
LST 3	.12	.33	.08	.27
LST 4	.03	.18	.04	.20
LST 5	.34	.48	.33	.47
LST 6	.15	.36	.14	.35
STSAT	8.40	1.99	7.55	2.24
CLIN	.77	.42	.70	.46
AR 1	3.43	1.11	3.13	1.12
AR 2	4.09	1.00	3.83	.97
AR 3	2.32	1.28	2.05	1.15
AR 4	2.47	1.34	2.08	1.16

As shown in Table 50, 12 variables entered into the final linear discriminant function with a chi-square value of 147.86 ($p < .001$). The discriminant function yielded by 12 variables was significant at the .001 level, indicating that a linear combination of 12 variables significantly discriminate between two groups for female beginning teachers. The canonical correlation (R=.59) showed that the function could account for 34.81 percent of the variance in group membership. Among the standardized coefficients, overall career satisfaction with the largest coefficient (1.0568) most contributed to the discriminant function. 10 weeks of

Table 50. Discriminant analysis of two groups regarding decision to choose teaching again: female teachers (n=358)

Step	Variables entered into the function	Wilks' lambda	F-Ratio	Probability	Standardized coefficients
1.	Overall career satisfaction	.71	145.93	.000	1.0568
2.	10 weeks of student teaching experience	.70	75.35	.000	-.2043
3.	Job involvement and responsibility	.69	52.12	.000	-.1778
4.	Secondary school in teaching level	.69	40.53	.000	.1988
5.	Understanding curricular, legal and multicultural concerns	.68	33.16	.000	-.1661
6.	Parental and community support	.67	28.25	.000	-.1954
7.	Support from AEA consultants	.67	24.50	.000	.1509
8.	Assessing and dealing with learning problems	.67	21.72	.000	-.1657
9.	Job rewards	.66	19.59	.000	.1684
10.	Satisfaction with student teaching experience	.66	17.87	.000	.1231
11.	Job performance evaluation	.66	16.37	.000	-.1186

Table 50. (Continued)

Step	Variables entered Into the function	Wilks' lambda	F-Ratio	Probability	Standardized coefficients
12.	Support from teacher preparation faculty	.66	15.11	.000	.1041
	Chi-Square = 147.86***, Canonical correlation = .59***				

***p < .001.

student teaching experience with the second largest coefficient (-.2043) negatively contributed to the function. In addition, secondary school in teaching level (.1988) positively contributed to the function.

Table 51 provides correlations of the discriminating variables with the function. As can be seen, overall career satisfaction had a very high relationship (.88) with the discriminant function and most contributed to group differences. Job rewards had the second largest correlation (.44) with the function and the second most contributed to group differences. Job involvement and responsibility (.31), satisfaction with student teaching experience (.25), parental and community support (.23), and support from AEA consultants (.19) were positively associated with the discriminant function.

The group centroid is shown in Table 52.

Table 51. Correlations of the discriminating variables with the discriminant function: female teachers

1. Overall career satisfaction	.88
2. Job rewards	.44
3. Job involvement and responsibility	.31
4. Satisfaction with student teaching experience	.25
5. Parental and community support	.23
6. Support from AEA consultants	.19
7. Support from teacher preparation faculty	.14
8. Job performance evaluation	.12
9. 10 weeks of student teaching experience	-.11
10. Secondary school in teaching level	.05
11. Understanding curricular, legal, and multicultural concerns	-.02
12. Assessing and dealing with learning problems	.01

Table 52. Group centroids: female teachers

Group	Group centroid
1. (yes)	.45
2. (no/undecided)	-1.16

The centroid for group 1 is .45, whereas the centroid for group 2 is -1.16. On the average, group 1 has smaller discriminant function scores than group 2 in absolute value. Two groups are well discriminated by group centroids with opposite direction.

In addition, the classification results of two groups are given in Table 53. As can be seen, 261 of 298 cases in group 1 were classified correctly (87.6 %), while 37 (12.4 %) were assigned incorrectly to group 2.

Similarly, 77 of 110 (70.0 %) were classified correctly, and 33 (30.0 %) were misclassified. Overall, 82.84 % (338 of 408) of female beginning teachers in two groups were correctly classified. Therefore, the proportion of correct classification across two groups showed high strength of prediction for group membership.

Table 53. The classification results of two groups: female teachers

Group	N	Predicted group membership	
		1	2
1. (yes)	298	261 (87.6 %)	37 (12.4 %)
2. (no/undecided)	110	33 (30.0 %)	77 (70.0 %)

In summary, for the analysis of hypothesis 14, discriminant analysis using stepwise procedure was used to determine whether there are significant differences between two groups for decision to choose teaching again and to identify the variables on which the groups differ most. Results showed that a linear combination of 10 variables out of 31 independent variables created one discriminant function for the combined data of male and female beginning teachers. The function was significant at the .001 level, indicating that a combination of 10 variables accurately discriminated between two groups, which consisted of group 1, beginning teachers who would choose teaching as a career again, and group 2, beginning teachers who would not choose teaching as a career again or those who were uncertain about choosing teaching again.

For male and female beginning teachers, one discriminant funtion for each group was yielded by linear combinations of 8 and 12 variables respectively. The functions were significant at the .001 level.

For the combined data, overall career satisfaction, among 10 variables identified by the discriminant analysis, had a very high relationship (.91) with the discriminant function and most contributed to group differences. Job rewards had the second largest correlation (.42) with the function and made the second highest contribution to group differences. In addition, job involvement and responsibility (.32), support from AEA consultants (.20), and parental and community support (.19) were positively associated with the function.

For male and female beginning teachers, overall career satisfaction had

high correlations (.86 and .88) with the functions and most contributed to group differences. Job rewards had the second largest correlations (.33 and .44) with the functions and made the second highest contribution to group differences for both male and female beginning teachers. In addition, for male teachers, support from principals (.29) and job performance evaluation (.18) were positively related to the function, whereas 10 weeks of student teaching experience (-.21) was negatively associated with the function. For female teachers, job involvement and responsibility (.31), satisfaction with student teaching experience (.25), parental community support (.23), and support from AEA consultants (.19) were positively associated with the function. In particular, overall career satisfaction was the most important variable to differentiate two groups and predominantly contributed to the group differences for all three sets of data. The second most important variable which contributed to the group differences was job rewards for all three sets of data.

In addition, classification results showed that overall, 82.50 % of beginning teachers in two groups were correctly classified for the combined data. For male and female beginning teachers, overall, 78.52 % of male teachers and 82.84 % of female teachers in two groups were correctly classified. Therefore, the proportion of correct classification across two groups showed high strength of prediction for group membership for all three sets of data. On the basis of the analyses, research hypothesis 14 was generally supported.

CHAPTER V. SUMMARY, DISCUSSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

This chapter presents a summary and discussion of the major findings of this study. Recommendations for further research are presented.

Summary and Discussion

The purpose of this study was to identify attitudes and perceptions of beginning teachers in Iowa about a number of factors related to teacher career satisfaction and to examine the relationships between teacher career satisfaction and those factors. On the basis of a review of literature and a theoretical model of teacher career satisfaction developed for this study, 14 research hypotheses were formulated.

Data for the analysis were obtained from the "Iowa Beginning Teacher Survey" conducted by the Research Institute for Studies in Education (RISE) at Iowa State University, Fall Semester, 1986. The target population was all the first-year teachers in Iowa in the 1985-86 school year. The accessible population consisted of 916 teachers identified by the Iowa Department of Education as first-year teachers in Iowa in the 1985-86 school year. Completed questionnaires were received from 586 first-year teachers, for a response rate of 64 percent.

Two dependent variables used in this study were overall career satisfaction of beginning teachers and decision to choose teaching again. The independent variables for the first dependent variable, overall career satisfaction, were: 1) age, 2) sex, 3) teaching level, 4) academic preparation level, 5) self-rated adequacy of teacher preparation program, 6) self-rated importance of teacher preparation program to the first-year teaching position, 7) satisfaction with specific aspects of the first-year teaching position, 8) length of student teaching experience, 9) overall satisfaction with student teaching experience, 10) length of clinical experience, 11) overall satisfaction with clinical experience, and 12) amount of support received during the first-year of teaching. The independent variables for the second dependent variable, decision to choose teaching again, were overall career satisfaction of beginning teachers, and the 12 independent variables listed above for the first dependent variable.

There were two steps in the data analysis: 1) preliminary analyses, and 2) hypothesis testing. In preliminary analyses, factor analysis was carried out in order to ascertain if there were underlying dimensions to some of the variables under study on each of the following sets of items: the 33 subitems about the adequacy of teacher preparation, the 33 subitems concerning the importance of teacher preparation, and the 18 subitems about satisfaction with specific aspects of the first-year teaching position. In hypothesis testing, relationships were examined between overall career satisfaction of beginning teachers and measures of independent variables relating to the overall career satisfaction. In

addition, the testing was carried out for each hypothesis, in terms of three sets of data: 1) combined data of male and female beginning teachers, 2) male beginning teachers, and 3) female beginning teachers. The level of statistical significance for the hypothesis testing was set at the .05.

Preliminary analyses

Five factors identified using the principal factor method on the adequacy of teacher preparation were: 1) understanding education from a variety of perspectives; 2) assessing and dealing with learning problems; 3) planning instruction and maintaining student interests; 4) developing interpersonal relationships; and 5) testing and evaluating student work. On the importance of teacher preparation, five factors identified were: 1) assessing and dealing with learning problems; 2) planning instruction and maintaining student interests; 3) developing interpersonal relationships; 4) evaluating student work; and 5) understanding curricular, legal, and multicultural concerns. The five factors identified from the subitems on adequacy and importance of teacher preparation were not identical, but they were very similar. It should be noted that factor analyses for male and female beginning teachers separately were not possible due to the failure in the varimax rotation for male subjects. Factor analyses for female teachers were similar to those of the combined data.

These findings were similar to Sweeney's (1987) factor analyses on the adequacy of teacher preparation with the same items, using data collected at the

time of spring graduation, between the years of 1980 and 1985 from graduates of the College of Education at Iowa State University. Sweeney's study, in which the purpose was to develop and test a longitudinal model that examined the influence of various factors on the career paths of ISU teacher education graduates, resulted in seven factors: 1) planning and delivering instruction; 2) interpersonal relationships; 3) student motivation and discipline; 4) assessing and dealing with learning problems; 5) monitoring student achievement; 6) understanding the profession; and 7) understanding individual differences.

Four factors identified on the satisfaction with specific aspects of the first-year teaching position were: 1) job involvement and responsibility; 2) job performance evaluation; 3) job rewards; and 4) parental and community support.

Hypothesis testing

When the personal characteristics of a teacher (age and sex) were examined in relation to overall career satisfaction of beginning teachers, no significant relationships were found. This study was consistent with the earlier findings of Chapman (1983a) and Chapman and Hutcheson (1982), in which personal characteristics (age, sex, income) were not significantly related to career satisfaction, whereas it differed from the previous studies, in which job satisfaction was found to be higher for older and more experienced teachers (DiCaprio, 1974; Price, 1971; Start and Laundy, 1973; Sweeney, 1981), and higher for female teachers than male teachers (Chapman & Lowther, 1982; Charters, 1970; Lortie,

1975; NEA, 1980; Price, 1971). In terms of age, this finding may be due to the fact that majority of the respondents in the current study (51.9 %) were 23 or 24 years old and approximately 38 percent were between the ages of 25 and 35. Herzberg (1966) reported a U-shaped function between age and job satisfaction in which job satisfaction starts high, declines, and then starts to improve again with increasing age. Beginning teachers showed high mean scores (7.18 for males; 7.58 for females; and 7.48 for total) of overall career satisfaction in this study, and the finding of this study supports one of Herzberg's findings, in which job satisfaction starts high. In terms of sex differences, a number of earlier studies reported significant differences in career satisfaction between male and female teachers, but they uniformly neglected teaching level which may be confounded with sex. According to this study, within any teaching level, no significant difference between male and female teachers was found. It appears that sex is irrelevant in explaining overall career satisfaction of beginning teachers.

Another variable which was examined in relation to overall career satisfacton was the teaching level of the teacher. A significant difference in the overall career satisfaction at different teaching levels even after adjusting for sex effect was found for the combined data and for female teachers. Elementary teachers were significantly more satisfied with their teaching as a career than secondary school teachers and than teachers having more than one teaching level. This study is consistent with the findings of the National Education

Association (1980), Lester's (1984) work, and Bentzen, Williams, and Heckman's (1980) study, which found that elementary school teachers were more satisfied with their jobs than secondary school teachers. Teaching level seems to be relevant as a factor in explaining teacher career satisfaction. This finding supports Schofield and Start's (1979-80) suggestion that members of the teaching profession cannot be studied as a single group; different teaching levels, subject areas, and grade levels may require different qualities, understandings, and attitudes in teachers. In this study, since sex is confounded with teaching level, a significant interaction between sex and teaching level was expected, but no significant interaction between them was found.

The relationship of different academic preparation levels to overall career satisfaction was examined, but no significant difference was found in any of the three sets of data. These findings are inconsistent with Campbell and other's (1982) study in which as education level increases, job satisfaction subsequently increases with the prestige of the job. The education level appears to be irrelevant in explaining overall career satisfaction of beginning teachers.

Beginning teachers were questioned about the adequacy of their teacher preparation program. Their perceptions were factor-analyzed, and resulting factors were examined in relation to overall career satisfaction. Among female teachers, three factors (assessing and dealing with learning problems, planning instruction and maintaining student interests, and developing interpersonal relationships) had significant, positive relationships with overall career

satisfaction. In contrast, for male teachers, just one factor (planning instruction and maintaining student interests) had a significant, positive relationship with overall career satisfaction. This may have been due to the fact that the factor structure was not well defined in that group because of the failure in the varimax rotation for male subjects. Self-rated adequacy of planning instruction and maintaining student interests was most highly related to overall career satisfaction for all three sets of data.

These findings suggest that beginning teachers who rate higher levels of adequacy on teacher preparation program tend to be more satisfied with their jobs and the tendency is likely to be higher for female teachers than male teachers.

When the importance of teacher preparation was examined, all five factors were found to have significant, positive relationships with overall career satisfaction for the combined data. The reason for this is not entirely clear, but it appears that a teacher's value orientation (importance) assigned to teacher preparation has a positive relationship with overall career satisfaction. The findings differed from male and female teachers. For male teachers, two factors (assessing and dealing with learning problems, and understanding curricular, legal, and multicultural concerns) had significant, positive relationships with overall career satisfaction. In contrast, for female teachers, four factors (assessing and dealing with learning problems, developing interpersonal relationships, evaluating student work, and understanding curricular, legal, and

multicultural concerns) had significant, positive relationships with overall career satisfaction. In addition, for male teachers, importance assigned to understanding curricular, legal, and multicultural concerns was most highly related to overall career satisfaction, whereas for female teachers, importance assigned to evaluating student work was most highly related to overall career satisfaction. These findings suggest that beginning teachers who assign higher levels of importance of teacher preparation to the first-year teaching position tend to be more satisfied with their jobs and the tendency is likely to be higher for female teachers than male teachers.

The student teaching experience and the clinical experience are important components of the teacher preparation program. The length of neither the student teaching experience nor the clinical experience showed a significant relationship with overall career satisfaction for all three sets of data, whereas overall satisfaction with student teaching experience and clinical experience had significant, positive, low relationships with overall career satisfaction for all three sets of data but one exception. One exception is that for male teachers, no significant relationship between satisfaction with student teaching experience and overall career satisfaction was found. These findings suggest that beginning teachers who perceived higher levels of satisfaction with student teaching experience and/or clinical experience appear to be more satisfied with their jobs. This study does not support Tabachnick's (1980) argument that the more time spent in the field experience the better. As Chapman (1983b) suggests, the

variation in the aspects of the teacher preparation and student teaching which is being investigated may account for the different findings.

Another variable in this study was the amount of support received during the first-year of teaching. This variable had significant, positive relationships with overall career satisfaction for all sources of support except for the support of AEA (area education agency) consultants in the male data set. The findings differed for male and female teachers. For male teachers, support from both principals and experienced teachers was most highly associated with overall career satisfaction, whereas for female teachers, support from the AEA consultants and principals was most highly related to overall career satisfaction. The fact that support from the AEA consultants was an important variable for only female subjects may be due to two factors. First, first-year teachers most may not interact very much with AEA consultants. Second, since most females are elementary teachers who have children with special needs in their classroom, it may be that they have more contact with special education consultants from the AEA. These findings suggest that beginning teachers who received higher amount of support during the first-year of teaching appear to be more satisfied with their teaching as a career. Roper and others (1985) argue that beginning teachers need support and most of them are not getting it. They suggest that the lack of induction programs may lead to undesirable outcomes for beginning teachers: job frustration and job dissatisfaction, isolation and lack of collegial interaction, teacher attrition, and possible negative effects on their pupils'

achievement. These findings suggest that the integration of many sources of support received during the first-year of teaching may play an important role in improving overall career satisfaction of beginning teachers.

From the results of this study, it appears that the level of teacher career satisfaction strongly influences teachers' decisions to choose teaching again. In particular, beginning teachers who would choose teaching as a career again showed significantly higher mean scores on overall career satisfaction than those who would not and than those who were uncertain about choosing teaching again for all three sets of data. In addition, beginning teachers who were uncertain about choosing teaching again had a significantly higher mean score than those who would not choose teaching as a career again for the combined data and male teachers.

When factors dealing with satisfaction with specific aspects of the first-year teaching position (1) job involvement and responsibility, 2) job performance evaluation, 3) job rewards, and 4) parental and community support) were examined, significant, positive relationships with overall career satisfaction were found for all three sets of data. In particular, job involvement and responsibility had a significant, strong relationship with overall career satisfaction of beginning teachers. The combination of four factors listed above significantly contributed to the prediction of overall career satisafction, accounting for approximately 41 percent of the variation in the overall career satisfaction of beginning teachers. The best predictor of overall career satisfaction was job involvement and

responsibility, accounting for approximately 28 percent of the variance for all three sets of data. For male teachers, a combination of three factors accounted for about 36 percent of the variance, whereas for female teachers, a combination of three factors accounted for about 43 percent of the variance. These findings suggest that four factors on satisfaction with specific aspects of the first-year teaching position play an important role in explaining overall career satisfaction of beginning teachers.

In one of the final analyses of this study, overall career satisfaction was predicted from a selected set of 30 independent variables using stepwise regression analysis. For the combined data, a combination of nine variables significantly contributed to the prediction of overall career satisfaction, accounting for approximately 44 percent of the variance. However, teaching at the secondary school level and at more than one in teaching level, as well as perceived adequacy of understanding education from a variety of perspectives, negatively contributed to the prediction of overall career satisfaction. The former can be explained by the fact that secondary school teachers and teachers having more than one level in teaching were significantly less satisfied with their jobs than elementary school teachers. However, the latter can not be easily explained. The adequacy of understanding education from a variety of perspectives had a significant positive, low relationship with overall career satisfaction in the Pearson correlation analysis. Thus, it is inconsistent with the regression analysis. In this study, job involvement and responsibility was the

best predictor of overall career satisfaction, accounting for about 25 to 27 percent of the variance for all three sets of data. The second best predictor of overall career satisfaction was job rewards for the combined data and female teachers, and job performance evaluation for male teachers, accounting for an additional 7 to 11 percent of the variance. The results of the regression analysis demonstrate that the amount of variance explained in the overall career satisfaction is at best modest and more than 50 percent of the variance of overall career satisfaction remains unexplained.

These findings suggest that other significant variables related to unexplained variance in overall career satisfaction of beginning teachers must be identified. Sergiovanni (1980) states that most studies of teacher job satisfaction consistently reveal that the psychic rewards derived from the teaching job itself and the pleasure of working with children are far more important to teachers than extrinsic rewards. Support for Sergiovanni's position comes from the finding of this study, namely, that job involvement and responsibility (including extent of involvement in decision making, job responsibilities, and control over what you did in the job) was the most important variable in the prediction of overall career satisfaction. In contrast, some findings of this study are inconsistent with Chapman's (1983a) finding in which salary as an extrinsic reward is not significantly related to teacher career satisfaction. In this study, job rewards (including salary, job fringe benefits, opportunities for advancement, and size of community in which employed during the first-year of teaching) served as the

second most important variable to predict overall career satisfaction. The difference between Chapman's finding and this study may be due to the changing attitudes of beginning teachers with respect to teaching as a career. This, in turn, may yield important implications for school administrators.

Finally, to differentiate two groups for decision to choose teaching again from a selected set of 31 independent variables, discriminant analysis was conducted. Across three sets of data, differences between two groups of beginning teachers who would choose teaching as a career again, and those who would not or those who were uncertain about choosing teaching again, were most explained by differences in overall career satisfaction, job rewards, job involvement and responsibility, support from AEA consultants or principals, parental and community support, overall satisfaction with student teaching experience, having had 10 weeks of student teaching experience, and job performance evaluation. These findings indicate that personal characteristics (age and sex) and clinical experience would not explain the group differences. Across three sets of data, overall career satisfaction was the most important variable to differentiate two groups. The second most important variable which contributed to group differences was job rewards including salary, job fringe benefits, opportunities for advancement, and size of community in which employed during the first-year of teaching.

These findings support previous studies of Lortie (1975) and Sweeney (1987) which reported that to ask teachers if they would become a teacher again

would be a useful indicator of career satisfaction. In addition, these findings partially support Chapman's (1983b) findings. Chapman noted that career satisfaction plays an important role in teachers' persistence in teaching, particularly as it mediates the influence of other factors on their career decisions. Indeed, Chapman's findings indicated that career satisfaction was an important factor in determining whether individuals entered and remained in teaching. The findings of this study appear to partially support the research hypotheses and the theoretical model of teacher career satisfaction proposed in this study.

Recommendations for Further Research

The findings of this research prompt a number of recommendations for further research. In order to evaluate whether or not some of the unexpected findings of this study result from surveying only first-year teachers, it would be useful to extend this study to a larger group of teachers with a greater range of teaching experience.

In addition, since more than 50 percent of the variance in overall career satisfaction of beginning teachers remained unexplained, other significant variables that may influence teacher career satisfaction must be identified.

Furthermore, the definition of career satisfaction for teachers should be expanded. The items described in the "Iowa Beginning Teacher Survey" do not respresent all important aspects by which career satisfaction of beginning teachers can be measured. Thus, a more comprehensive model of teacher

career satisfaction should be developed to cover all important aspects of this construct. Related to this, path analyses need to be conducted to examine more systematically the theoretical model of teacher career satisfaction proposed in this study.

It should be pointed out that researchers in this area seem to assume that more satisfied teachers are better teachers. This, of course, may not be the case and future research should examine teacher satisfaction in relation to teaching quality.

Finally, factor analysis, which in this study failed in the varimax rotation for the male teachers data set, should be conducted with additional data sets in order to identify the factors on the adequacy and the importance of teacher preparation program as well as on the satisfaction with specific aspects of the first-year teaching position. Male and female beginning teachers should be studied separately in this regard.

BIBLIOGRAPHY

Adams, R. D., & Martray, C. R. (1980). Correlates of teacher perceived problems. Paper presented at the 9th annual conference of the Mid-South Educational Research Association, New Orleans. (ERIC Document Reproduction Service No. ED 195 567).

Ashton, P. T., Webb, R. B., & Doda, N. (1983). A study of teachers' sense of efficacy. (Report No. 400-79-0075). Gainesville, FL: University of Florida. (ERIC Document Reproduction Service No. ED 231 833).

Bentzen, M. M., Williams, R. C., & Heckman, P. A. (1980). A study of schooling: Adult experiences in schools. Phi Delta Kappan, 61(6), 394-397.

Brottman, M. A., & Soltz, D. F. (1971, February). Putting student teaching in context. Paper presented at the annual meeting of the American Educational Research Association, New York.

Campbell, P. B., Gardner, J., & Seitz, P. (1982). Job satisfaction--Antecedents and associations. National Center for Research in Vocational Education, Ohio State University, Columbus.

Chapman, D. W. (1983a). Career satisfaction of teachers. Educational Research Quarterly, 7(3), 40-50.

Chapman, D. W. (1983b). A model of the influences on teacher retention. Journal of Teacher Education, 34(5), 43-49.

Chapman, D. W. (1984). Teacher retention: The test of a model. American Educational Research Journal, 21(3), 645-658.

Chapman, D. W. , & Hutcheson, S. M. (1982). Attrition from teaching careers: A discriminant analysis. American Educational Research Journal, 19(1), 93-105.

Chapman, D. W., & Lowther, M. A. (1982). Teachers' satisfaction with teaching. Journal of Educational Research, 75(4), 241-247.

Charters, W. W., Jr. (1970). Some factors affecting teacher survival in school districts. American Educational Research Journal, 7(1), 1-27.

Corwin, R. (1965). A sociology of education: Emerging patterns of class, status, and power in the public schools. New York: Appleton-Century-Crofts.

Darling-Hammond, L. (1984). Beyond the commission reports. The coming crisis in teaching. Santa Monica: The Rand Corporation.

Darlington, R. B., Weinberg, S. L., & Walberg, H. J. (1973). Canonical variate analysis and related techniques. Review of Educational Research, 43, 433-454.

DiCaprio, P. R. (1974). A study of the relationship of organizational climate at job satisfaction of teachers in selected rural and suburban secondary schools. Unpublished doctoral dissertation, State University of New York at Albany. Dissertation Abstracts International, 1974, 35(6-A), 3334.

Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: Wiley.

Engelking, J. L. (1986). Teacher job satisfaction and dissatisfaction. ERS Spectrum, 4(1), 33-38.

Feistritzer, C. E. (1984). The making of a teacher. A report on teacher education and certification. Washington, DC: National Center for Education information.

Fletcher, R. K., Jr., & Dotson, J. R. (1976, October). Attitudinal changes pre-to-post on the evaluation of program requirement prerequisites to the student teaching experience. Paper presented at the Southeast Regional Meeting of the Association of Teacher Educators, Mobile, Alabama.

Gaede, O. F. (1978). Reality shock: A problem among first-year teachers. Clearing House, 51, 405-409.

Gardner, D. P. (1983). A nation at risk: The imperative for educational reform. Washington, DC: National Commission on Excellence in Education.

Griffin, G. A., Barnes, S., Defino, M., Edwards, S., Hoffman, J., Hukill, H., & O'Neal, S. (1983). Teacher induction: Research design for a

descriptive study. Submitted to the National Institute of Education. Research and Development Center for Teacher Education, The University of Texas at Austin.

Harris, L., & Associates, Inc. (1985). The Metropolitan Life survey of former teachers in America. New York: Metropolitan Life Insurance Company.

Hays, W. L. (1982). Satisfaction with the student teaching experience: A multiple regression approach. (ERIC Document Reproduction Service No. ED 223 571).

Herzberg, F. (1966). Work and the nature of man. Cleveland: World Publishing Company.

Holland, J. L. (1973). Making vocational choices: A theory of careers. Englewood Cliffs, NJ: Prentice-Hall.

Hoy, W. K., & Miskel, C. G. (1982). Educational administration: Theory, research, and practice (2nd ed.). New York: Random House, Inc.

Huberty, C. J. (1975). Discriminant analysis. Review of Educational Research, 45(4), 543-598.

Jimmar, D. (1986). Factors relating to the long-range career plan of women teacher education graduates from Iowa State University. Unpublished doctoral dissertation, Iowa State University, Ames, IA.

Kerlinger, F. N., & Pedhazur, E. J. (1973). Multiple Regression in Behavioral Research. New York: Holt, Rinehart & Winston.

Kreis, K. (1983). The relationship between job satisfaction and needs fulfillment among urban high school teachers. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. (ERIC Document Reproduction Service No. ED 230 656).

Kremer, L., & Hofman, J. E. (1981). Teachers' professional indentity and job-leaving inclination. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, CA. (ERIC Document Reproduction Service No. ED 202 851).

Krumboltz, J. (1979). A social learning theory of career decision making. In A. M. Mitchell, G. B. Jones, & J. D. Krumboltz (Eds.), Social Learning and Career Decision Making (pp. 19-49). Cranston, RI: Carroll.

Kyriacou, C., & Sutcliffe, J. (1979). Teacher stress and satisfaction. Educational Research, 21(2), 89-96.

Lester, P. E. (1984). Teacher job satisfaction: Myth or reality? Paper presented at the convocation of the Northeastern Educational Research Association. (ERIC Document Reproduction Service No. ED 260 026).

Locke, E. A. (1983). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology (pp. 1297-1349). New York: John Wiley and Sons.

Lortie, D. C. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.

Murphy, J. F. (1982). Why teachers drop out. Illinois Schools Journal, 61(1-4), 35-41.

National Education Association. (1980, September). Poll probes teacher dissatisfaction. NEA Reporter, 19, 2.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. (1983). SPSSx: Statistical Package for the Social Sciences. Chicago, IL: McGraw-Hill, Inc.

Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill.

Pavalko, R. (1970). Recruitment to teaching: Patterns of selection and retention. Sociology of Education, 43, 340-353.

Pedhazur, E. J. (1982). Multiple regression in behavioral research. New York: Holt, Rinehart & Winston.

Pigge, F. L., & Lovett, M. T. (1985). Job performance and job satisfaction of beginning teachers. Bowling Green State University. (ERIC Document Reproduction Service No. ED 265 149).

Price, L. W. (1971). Organizational stress and job satisfaction in public high school teachers. Unpublished doctoral dissertation, Stanford

University. Dissertation Abstracts International, 1971, 31 (11-A), 5727-8.

Roper, S., Hitz, R., & Brim, B. (1985). Developing induction programs. 1985 regional study awards final product. Final report of the regional study award project. Northwest Regional Educational Laboratory, Portland, OR.

Schlechty, P. C., & Vance, S. V. (1981). Do academically able teachers leave education? The North Carolina case. Phi Delta Kappan, 63(2), 106-112.

Schofield, H. L. & Start, K. B. (1979-80). Product variables as criteria of teacher effectiveness. Journal of Experimental Education. 48, 130-6.

Sergiovanni, T. (1966). Satisfaction and dissatisfaction of teachers (Final Report No. BR-5-8394). Urbana, IL: University of Illinois. (ERIC Document Reproduction Service No. ED 011 089).

Sergiovanni, T. (1980). The new school executive: A theory of administration. New York: Harper & Row.

Sheppard, H., & Herrick, N. Q. (1972). where have all the robots gone? Worker dissatisfaction in the 70s. New York: The Free Press.

Start, K. B., & Laundy, S. (1973). successful teachers in the secondary school. Research in Education, 9, 1-15.

Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16, 282-298.

Super, D. E., & Hall, D. T. (1978). Career development: Exploration and Planning. Annual Review of Psychology, 29, 333-372.

Sweeney, J. C. (1987). Development and testing of a longitudinal model designed to examine the factors that influence the career paths of Iowa State University teacher education graduates. Unpublished doctoral dissertation, Iowa State University, Ames, IA.

Sweeney, J. E. (1981). Professional discretion and teacher satisfaction. The High School Journal, 65(1), 1-6.

Tabachnick, B. R. (1980). Intern-teacher roles: Illusion, disillusion, and reality. Journal of Education, 162(1), 122-137.

Veenman, S. (1984). Perceived problems of beginning teachers. Review of Educational Research, 54(2), 143-178.

Weaver, W. T. (1984). Solving the problem of teacher quality, part 1. Phi Delta Kappan, 66(2), 108-115.

Williams, M. A. (1985). A prediction of student teaching satisfaction of the Iowa State teacher education graduates using a combination of selected variables. Unpublished doctoral dissertation, Iowa State University, Ames, IA.

Wolf, W., & Wolf, W. C. (1964). Teacher dropouts: Still a dilemma. School and Society, 92, 193-194.

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APPENDIX A. COVER LETTERS

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

September 15, 1986

Dear Iowa Superintendent:

Iowa State University is conducting a study which is of value to Iowa Teachers and administrators, as well as to teacher education faculties. This study will examine the experiences and opinions of Iowa first-year teachers in an effort to assess teacher education programs and to determine improved methods of assisting beginning teachers. To gather that information, we are surveying all Iowa teachers who taught for the first time during the 1985/86 school year.

In this mailing, you have received envelopes addressed to all persons who were beginning teachers in your district last year. These envelopes contain a cover letter (with assurance of confidentiality), the questionnaire, and a postage-paid return envelope. Copies of those materials are attached to your letter as well. We would appreciate your taking a few minutes to help us with the following:

1. Please distribute the enclosed envelopes to all first year 1985/86 teachers who are employed in your district during the current year;
2. For those teachers no longer employed in your district:
   a. please forward the packets to them; and
   b. help us update our follow-up mailing list by entering correct forwarding addresses on the enclosed address labels. Then return that form to us in the accompanying postage-paid envelope. Please return the labels even if all the teachers are currently employed in your district.

This last step is important for two reasons: (1) it is vital to include both former teachers as well as current teachers in this study; and (2) it will enable us to mail follow-up communications directly to former teachers rather than contacting your office a second time for forwarding. Results of this study will be reported only in terms of group results, never in terms of individual or district results. A summary of the findings will be mailed to you on completion of the study.

We appreciate your assistance in conducting this survey. If you have any questions, please call us at 515-294-7009.

Sincerely,

Virgil S. Lagomarcino

Virgil S. Lagomarcino, Dean
College of Education

Richard D. Warren

Richard D. Warren, Director
Research Institute for Studies in Education

P.S. If we have omitted any of your 1985/86 teachers with no previous teaching experience (in your district or elsewhere), please add the name(s) and address(es) to the form being returned to us. Also, please note on the form any name(s) we included that do not match this definition of first-year teacher.

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

September 15, 1986

Dear Iowa Teachers:

The decade of the 1980s has seen increased attention focused on education, particularly on first-year teachers. Because we are interested in assessing the preparation and needs of first-year teachers, we ask for your participation in this study. Through examining the reported experiences and attitudes of first-year teachers, we will be able to address better methods of assisting beginning teachers.

We are surveying all persons who were first-year teachers during the 1985/86 school year. Enclosed is the questionnaire which we would like you to complete and return to us in the postage paid envelope. For our results to be representative of first-year teachers of Iowa, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The questionnaire has an identification number to be used only for record-keeping purposes. It enables us to check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire. The information provided will be analyzed and reported in terms of group summarizations, not individual or district responses. If you have any questions, please write or call us collect at 515-294-7009.

We thank you in advance for your voluntary cooperation in completing the questionnaire and for your continuing role in helping to shape and improve the quality of education in Iowa.

Sincerely,

Virgil S. Lagomarcino

Virgil S. Lagomarcino, Dean

Richard D. Warren

Richard D. Warren, Director
Research Institute for Studies in Education

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

October 9, 1986

Dear 1985-86 First-Year Teacher:

We know that various commitments compete for your attention, but we do need your help!

By now you should have received a questionnaire from us asking you to assess your first-year teaching experiences and attitudes. To date, we have not received your completed questionnaire. If you have returned it recently, please know that we appreciate your participation.

If you have not yet returned your questionnaire, please complete the enclosed copy (or the first questionnaire), place it in the enclosed postage-paid envelope, and drop it in a mailbox.

While we have received completed questionnaires from a number of last year's beginning Iowa teachers, it is very important that we have your responses to include in the tabulations.

Thank you for participating in this study. We appreciate the time, effort, and thought which go into completing a questionnaire. We believe your responses will be valuable in shaping and improving the quality of education offered to Iowa students.

Sincerely,

Virgil S. Lagomarcino, Dean
College of Education

Richard D. Warren, Director
Research Institute for Studies in Education

VSL/RDW/pjd

Enclosures

APPENDIX B. SURVEY QUESTIONNAIRE

IOWA BEGINNING TEACHER SURVEY

First, we would like to ask you some general questions about your employment and teacher preparation.

1. What is your current employment status?

   _____ Teaching

   _____ Nonteaching

2. At what level did you teach during the 1985/86 academic year? (Check all that apply.)

   _____ Kindergarten

   _____ Elementary

   _____ Junior High/Middle School

   _____ Secondary

   _____ K-12

3. The institution I attended was...

   _____ public

   _____ private

4. The institution I attended was...

   _____ in Iowa

   _____ not in Iowa

5. The institution I attended had approximately _____ students.

6. How much academic preparation did you have prior to your first teaching position?

   _____ Four-year baccalaureate degree

   _____ Five-year non-master's degree

   _____ Five-year master's degree

   _____ Other (please specify _____)

7. We would like some personal information:

   _____ Age

   _____ Female _____ Male

   _____ Year received teaching certificate

8. We would like you to rate your teacher preparation program in specific areas. First, rate the adequacy of preparation; second, indicate how important the area was to your first-year teaching position.

		Very Adequate . . 5 Adequate . . . . 4 Neutral. . . . . 3 Inadequate . . . 2 Very Inadequate. 1 Not Applicable . N						Very Important . 5 Important. . . . 4 Neutral. . . . . 3 Unimportant. . . 2 Very Unimportant 1 Not Applicable . N					
1)	Planning units of instruction and individual lessons	5	4	3	2	1	N	5	4	3	2	1	N
2)	Preparing and using media.	5	4	3	2	1	N	5	4	3	2	1	N
3)	Maintaining student interest . . .	5	4	3	2	1	N	5	4	3	2	1	N
4)	Understanding and managing behavior problems in the classroom .	5	4	3	2	1	N	5	4	3	2	1	N
5)	Teaching basic skills.	5	4	3	2	1	N	5	4	3	2	1	N
6)	Consultation skills in interacting with other professionals. .	5	4	3	2	1	N	5	4	3	2	1	N
7)	Developing student-student relationships.	5	4	3	2	1	N	5	4	3	2	1	N
8)	Referring students for special assistance	5	4	3	2	1	N	5	4	3	2	1	N
9)	Skills for mainstreaming handicapped students.	5	4	3	2	1	N	5	4	3	2	1	N
10)	Methods of working with children with learning problems	5	4	3	2	1	N	5	4	3	2	1	N
11)	Assessing learning problems. . . .	5	4	3	2	1	N	5	4	3	2	1	N
12)	Developing tests	5	4	3	2	1	N	5	4	3	2	1	N
13)	Interpreting and using standardized tests	5	4	3	2	1	N	5	4	3	2	1	N
14)	Content preparation in your area of specialization	5	4	3	2	1	N	5	4	3	2	1	N
15)	Professional ethics and legal obligations.	5	4	3	2	1	N	5	4	3	2	1	N
16)	Psychology of learning and its application to teaching. . . .	5	4	3	2	1	N	5	4	3	2	1	N
17)	Evaluating and reporting student work and achievement	5	4	3	2	1	N	5	4	3	2	1	N
18)	Relating activities to interests and abilities of students.	5	4	3	2	1	N	5	4	3	2	1	N
19)	Using written communication effectively.	5	4	3	2	1	N	5	4	3	2	1	N
20)	Locating and using materials and resources in your specialty area .	5	4	3	2	1	N	5	4	3	2	1	N
21)	Evaluating your own instruction. .	5	4	3	2	1	N	5	4	3	2	1	N
22)	Individualizing instruction. . . .	5	4	3	2	1	N	5	4	3	2	1	N
23)	Selecting and organizing materials.	5	4	3	2	1	N	5	4	3	2	1	N

		ADEQUACY						IMPORTANCE					
24)	Using a variety of instructional techniques	5	4	3	2	1	N	5	4	3	2	1	N
25)	Understanding teachers' roles in relation to administrators, supervisors, and counselors. . . .	5	4	3	2	1	N	5	4	3	2	1	N
26)	Working with parents	5	4	3	2	1	N	5	4	3	2	1	N
27)	Working with other teachers. . . .	5	4	3	2	1	N	5	4	3	2	1	N
28)	Assessing and implementing innovations.	5	4	3	2	1	N	5	4	3	2	1	N
29)	Appreciating and understanding individual and intergroup differences in values and lifestyles	5	4	3	2	1	N	5	4	3	2	1	N
30)	Using community resources.	5	4	3	2	1	N	5	4	3	2	1	N
31)	Techniques of curriculum construction	5	4	3	2	1	N	5	4	3	2	1	N
32)	Influence of laws and policies related to schools	5	4	3	2	1	N	5	4	3	2	1	N
33)	Techniques for infusing multicultural learning	5	4	3	2	1	N	5	4	3	2	1	N

8b. From the above items, please list the corresponding numbers for the three areas in which additional inservice or other educational activities would be most helpful for first year of teaching.

	Most helpful	Second most helpful	Third most helpful
Adequacy of Preparation	_____	_____	_____

8c. Please list any other inservice topics (not included among the 33 listed above) which would be of value to first-year teachers.

_____

_____

_____

Now, we would like to ask you some questions about your student teaching experience.

9. I student taught:

_____ full day

_____ half day

10. How long did you student teach?

_____ 8 weeks _____ 14 weeks

_____ 10 weeks _____ 16 weeks

_____ 12 weeks _____ Other (please specify _____)

11. On a scale of 0-10, how would you rate your overall satisfaction with your student teaching experience?

Very Low Very High

0 1 2 3 4 5 6 7 8 9 10

12. In what ways did your student teaching experience prepare you well for your first year of teaching?

_____

_____

_____

13. What specific recommendations would you make to teacher preparation institutions for improving the student teaching experience?

_____

_____

_____

14. Did you have any other types of clinical experiences or internships during your teacher preparation program? (Do not include student teaching.)

_____ Yes

_____ No

15. If yes, what was the length of the clinical experience?

_____ Half semester

_____ One semester

_____ Two semesters

_____ Other (please specify _____)

16. On a scale of 0-10, how would you rate your overall satisfaction with your other clinical experiences?

Very Low Very High

0 1 2 3 4 5 6 7 8 9 10

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

_____ Yes

_____ Undecided

_____ No

18. On a scale of 0 to 10, how would you rate your satisfaction with teaching as a career?

Very Low Very High

0 1 2 3 4 5 6 7 8 9 10

19. Now, we would like some information about your first year of teaching. Please indicate how satisfied you were with specific aspects of your first-year teaching position. Use the following response categories.

Very Satisfied . . . 5
Satisfied 4
Neutral. 3
Dissatisfied 2
Very Dissatisfied. . 1
Not Applicable . . .NA

Salary	5	4	3	2	1	NA
General working conditions	5	4	3	2	1	NA
Extent of involvement in decision making	5	4	3	2	1	NA
Job responsibilities	5	4	3	2	1	NA
Job fringe benefits	5	4	3	2	1	NA
Control over what you did in job	5	4	3	2	1	NA
Extent to which job challenged and provided for professional growth	5	4	3	2	1	NA
Level of job performance	5	4	3	2	1	NA
Opportunities for advancement	5	4	3	2	1	NA
Method with which job performance evaluated . . .	5	4	3	2	1	NA
Frequency with which job performance evaluated . .	5	4	3	2	1	NA
Size of community in which employed during first year of teaching	5	4	3	2	1	NA
Support given by family and friends for career choice	5	4	3	2	1	NA
Amount of time spent working at job	5	4	3	2	1	NA
Relationship with students	5	4	3	2	1	NA
Level of parental involvement	5	4	3	2	1	NA
Role played in professional associations	5	4	3	2	1	NA
Community support for education	5	4	3	2	1	NA

20. On a scale of 0 to 10, how would you rate your overall job satisfaction during your first year of teaching?

Very Low Very High

0 1 2 3 4 5 6 7 8 9 10

21. In self-appraisal and teacher evaluation, certain teaching behaviors are often identified. We would like you to rate your perception of your teaching behavior in your first year of teaching in each of the following areas. Using the scale below, circle a number for each area.

Very Low — Very High

0 1 2 3 4 5 6 7 8 9 10

Providing a setting conducive to learning. . .	0	1	2	3	4	5	6	7	8	9	10
Motivating students.	0	1	2	3	4	5	6	7	8	9	10
Demonstrating knowledge of subject matter. . .	0	1	2	3	4	5	6	7	8	9	10
Providing opportunities for student participation	0	1	2	3	4	5	6	7	8	9	10
Providing clear, concise explanations and examples	0	1	2	3	4	5	6	7	8	9	10
Managing instructional activities efficiently and ensuring student time on task	0	1	2	3	4	5	6	7	8	9	10
Communicating effectively with students. . . .	0	1	2	3	4	5	6	7	8	9	10
Demonstrating sensitivity toward students. . .	0	1	2	3	4	5	6	7	8	9	10
Demonstrating effective planning and organization skills	0	1	2	3	4	5	6	7	8	9	10
Using a variety of instructional resources . .	0	1	2	3	4	5	6	7	8	9	10
Exhibiting a positive self-concept	0	1	2	3	4	5	6	7	8	9	10
Using evaluation activities appropriately. . .	0	1	2	3	4	5	6	7	8	9	10
Implementing the lesson plan effectively . . .	0	1	2	3	4	5	6	7	8	9	10
Maintaining high expectations for student achievement	0	1	2	3	4	5	6	7	8	9	10
Incorporating effective questioning techniques	0	1	2	3	4	5	6	7	8	9	10
Providing opportunities for guided practice. .	0	1	2	3	4	5	6	7	8	9	10
Maintaining high standards for student behavior	0	1	2	3	4	5	6	7	8	9	10
Monitoring and evaluating student progress and understanding	0	1	2	3	4	5	6	7	8	9	10
Participating in opportunities for professional growth and development	0	1	2	3	4	5	6	7	8	9	10
Maintaining effective working relationships with peers and administrators	0	1	2	3	4	5	6	7	8	9	10
Accommodating a variety of ability levels . .	0	1	2	3	4	5	6	7	8	9	10

22. Here are some general statements about teaching and teachers. Please indicate your agreement or disagreement with each of these statements. Use the following response categories. Please circle your response.

Strongly Agree . . . 5
Agree 4
Neither Agree nor Disagree . . . 3
Disagree 2
Strongly Disagree. . 1

THE QUALITY OF TEACHERS AND EDUCATION WOULD BE IMPROVED IF:

...competency testing were required for certification.	5	4	3	2	1
...competency testing were required for recertification.	5	4	3	2	1
...the state established minimum enrollment levels in school districts.	5	4	3	2	1
...salaries were increased.	5	4	3	2	1
...if higher grade point averages were required for graduation and certification.	5	4	3	2	1
...teachers were paid in part according to their performance on evaluation or test (merit pay).	5	4	3	2	1
...teachers in certain shortage areas such as math and science were paid more.	5	4	3	2	1
...teachers were offered a 12-month contract with pay and duties for the full year.	5	4	3	2	1
...the amount of time teachers spend on non-teaching duties were reduced.	5	4	3	2	1
...first-year teachers had reduced teaching loads.	5	4	3	2	1
...induction programs were available to provide assistance and support to first-year teachers.	5	4	3	2	1
...new teachers were required to serve a supervised apprenticeship or internship before being certified.	5	4	3	2	1
...a five-year teacher preparation program, leading to a master's degree, were required.	5	4	3	2	1
...teachers were required to have master's degrees in an academic subject.	5	4	3	2	1
...more pre-student teaching field experiences were required.	5	4	3	2	1
...more student teaching experiences were required.	5	4	3	2	1
...a bachelor's degree in an academic subject, plus a master's degree in education were required.	5	4	3	2	1
...five-year teacher preparation programs were required.	5	4	3	2	1
...admission standards at teacher preparation programs were raised.	5	4	3	2	1

23. Below are some possible sources of assistance and support for first-year teachers. Using the 0-10 scale below, assign a number in the first column to indicate how helpful you think each source would be to first-year teachers. In the second column, choose the three (3) sources you think would be most helpful and rank them from 1 to 3, with 1 being the highest rank.

Not helpful at all — Very helpful

0 1 2 3 4 5 6 7 8 9 10

Helpfulness Rating (0-10)	Ranking (1-3)	
____	____	Tollfree telephone hotline for obtaining assistance with classroom-related problems
____	____	Resource persons available at scheduled times for telephone question and answer sessions
____	____	Call-in television question/answer open forum program
____	____	Call-in radio question/answer open forum program
____	____	Television program focusing on selected topics, possibly with guest expert panel
____	____	Radio program focusing on selected topics, possibly with guest expert panel
____	____	Idea-sharing meetings with other first-year teachers
____	____	Idea-sharing sessions with other first-year teachers via teleconferencing
____	____	Workshops for first-year teachers on selected topics via teleconferencing
____	____	Workshops for first-year teachers on selected topics, scheduled at central locations
____	____	Viewing videotapes of experienced teachers demonstrating effective teaching techniques/strategies
____	____	Viewing videotapes of own teaching
____	____	Information/materials on selected topics available from teacher preparation institutions
____	____	Clinical supervision by building principal
____	____	Mentor relationships with experienced teacher in building/district

24. Finally, we would like information about the assistance you received during your first year of teaching. Using the scales below, indicate in Column 1 the amount of assistance you received from each of the following during your first year of teaching and in Column 2 how helpful the assistance was to you.

A great deal of assistance. . . 5	Extremely helpful 5
Much assistance 4	Quite helpful 4
Some assistance 3	Undecided 3
Little assistance 2	Not very helpful. 2
No assistance 1	Not helpful 1

	Column 1	Column 2
Building principal(s)	5 4 3 2 1	5 4 3 2 1
Experienced teacher(s) in building or district	5 4 3 2 1	5 4 3 2 1
Teacher preparation program faculty	5 4 3 2 1	5 4 3 2 1
AEA consultant(s)	5 4 3 2 1	5 4 3 2 1
In-school program consultant(s)	5 4 3 2 1	5 4 3 2 1
Other (specify _____)	5 4 3 2 1	5 4 3 2 1

25. If you have any additional comments about the issues addressed in this questionnaire, teacher preparation, or teaching in general, please use the space below.

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 enclosed return envelope is prepaid, so all you need to do is put your completed questionnaire in the envelope and drop it in a mailbox.