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THE EFFECT OF SELECTED CHARACTERISTICS OF VOCATIONAL STUDENT TEACHERS AND THEIR COOPERATING TEACHERS ON THE FINAL EVALUATION OF THE STUDENT TEACHER

A Dissertation

Presented for the

Doctor of Education

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ABSTRACT

The primary purposes of this study were (1) to describe selected characteristics of vocational student teachers (sex, service area, and measured personality factors) and their cooperating teachers (sex, service area, age, level of educational attainment, years of teaching experience, and measured personality factors), and (2) to determine what effect these selected characteristics might have on the performance of the student teacher as perceived by himself as well as by the cooperating teacher.

This study was a descriptive survey of selected characteristics of all vocational students who were enrolled in student teaching at The University of Tennessee, Knoxville, during the Spring quarter of 1976 and their cooperating teachers. A total of forty-three student teachers were so enrolled: eleven in Agricultural Education, eight in Business Education and Distributive Education, eleven in Home Economics, and thirteen in Industrial Education.

The Guilford-Zimmerman Temperament Survey was administered to all student teachers and their cooperating teachers during the Spring quarter of 1976. In addition the cooperating teachers were asked to complete a researcher-developed information sheet indicating date of birth, years of teaching experience, and level of educational attainment. Student teachers were asked to complete an evaluation form on their teaching ability three weeks before the end of the quarter. The cooperating teachers were asked to evaluate the student teachers'

teaching ability using the same form, which was developed at The University of Tennessee, Knoxville, in 1970.

Eight separate analyses were computed to compare the independent variables--raw scores from each factor of the Survey, sex, and service area of both student teachers and cooperating teachers; and age, years of teaching experience, and educational attainment level of the cooperating teachers--with the dependent variables of self-evaluation score of the student teacher and the teacher-assigned evaluation score. The one-way classification analysis of variance, two-way classification analysis of variance, and Pearson product-moment correlation were used to test the hypotheses at the .05 level of significance.

The following conclusions were derived from the findings of this study:

1. Student teachers are more likely to think of themselves as competent teachers when they have high scores for the personality factors, Sociability and Personal Relations, or when their scores on the Masculinity factor are similar to those of their cooperating teachers.

2. Cooperating teachers are more likely to assign higher evaluation scores to student teachers who have scores similar to their own for the personality factor, Ascendance.

3. Student teachers and cooperating teachers tend to agree with each other concerning the student teachers' performance if their scores on the personality factors, Sociability and Personal Relations, are significantly different.

4. Evaluation scores are not influenced by the independent variables of sex, service area, age of the cooperating teacher, teaching

experience of the cooperating teacher, or educational attainment level of the cooperating teacher.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	The Problem	2
	Statement of the purpose	3
	Objectives of the study	3
	Hypotheses	4
	Assumptions	5
	Scope and Limitations of the Problem	5
	Definition of Terms	6
	Organization of the Study	7
II.	REVIEW OF RELATED RESEARCH AND LITERATURE	8
	Introduction	8
	The Contribution of Student Teaching to Teacher Education	8
	The Cooperating Teacher	9
	Student Teacher Placement	11
	The Evaluation of Student Teaching	14
	Techniques Used in Evaluating Student Teachers	17
	Summary	21
III.	PROCEDURES	22
	Introduction	22
	Instruments Used for Obtaining Data	22
	The Guilford-Zimmerman Temperment Survey (G-ZTS)	22

CHAPTER PAGE

The evaluation of student teaching 23
Cooperating teacher information sheet 28
Authorization for use of data 28
Collection of Data 29
Follow-up techniques 31
Coding and Analysis of Data 31
Summary 32
IV. FINDINGS 33
Introduction 33
Selected Characteristics of Student Teachers and Cooperating Teachers 34
Sex and vocational service area 34
Personality factors 36
Age of cooperating teachers 36
Educational attainment of cooperating teachers . . . 41
Teaching experience of cooperating teachers 42
Final Evaluation Scores of Student Teachers 42
Statistical Analysis 46
Summary 57
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 58
Summary 58
The purpose 58
Methods and procedures 58
Findings 60
Conclusions 62

CHAPTER PAGE

Recommendations 63
Recommendations based on the findings from this study 63
Recommendations for further research 64
REFERENCES 66
APPENDICES 71
Appendix A 72
Appendix B 74
Appendix C 79
Appendix D 81
Appendix E 83
Appendix F 85
VITA 87

LIST OF TABLES

TABLE		PAGE
1.	An Interpretation of the Traits	24
2.	Service Area of Student Teachers by Sex (N = 43)	35
3.	Service Area of Cooperating Teachers by Sex (N = 45)	35
4.	Personality Factor Scores for Student Teachers and Cooperating Teachers	37
5.	Age of Cooperating Teachers (N = 45)	41
6.	Educational Attainment of Cooperating Teachers (N = 45) . .	42
7.	Teaching Experience of Cooperating Teachers (N = 45)	43
8.	Final Evaluation Scores of Student Teachers	44
9.	Self-Evaluation Scores and Service Area Analysis of Variance	47
10.	Teacher-Assigned Evaluation Scores and Service Area Taught Analysis of Variance	48
11.	Self-Evaluation Scores and Sex Combinations of the Student Teacher-Cooperating Teacher Dyads Analysis of Variance . .	49
12.	Teacher-Assigned Evaluation Scores and Sex Combinations of the Student Teacher-Cooperating Teacher Dyads Analysis of Variance	49
13.	Student Teacher Self-Evaluation Scores and Educational Attainment Level of the Cooperating Teacher Analysis of Variance	51

TABLE PAGE

14. Teacher-Assigned Evaluation Scores and Educational Attainment Level of the Cooperating Teacher Analysis of Variance 51

15. Product-Moment Correlations Between Evaluation Scores and Measured Personality Factors of the Student Teacher . . . 52

16. Product-Moment Correlations Between Evaluation Scores and Measured Personality Factors of the Student Teacher-Cooperating Teacher Dyad 54

17. Product-Moment Correlations Between Personality Difference Scores and Evaluation Difference Scores 56

CHAPTER I

INTRODUCTION

Student teaching is an inherent part of any reputable teacher education program. Conant (1963) identified this experience as "the one indisputably essential element in professional education" (p. 142). Student teaching has become the typical culminating experience prior to the granting of teaching credentials and few challenge the validity of this requirement.

In describing what takes place during the student teaching experience Yee (1967) states,

> The candidate's personality and behavior become significant factors relative to the personalities and behaviors around him. It is unlike other course work where the students are mostly passive and absorbing whatever the instructor says and does. In other words, student teaching is conducted in an interaction setting that has no equivalent in most teacher-training programs. It is a time for candidates to perform, evaluate, act, react, and adapt in relationship with and in response to others also involved in the setting. Unfortunately, we know little about the relationships of personality and behavior in student teaching (p. 4).

After surveying the research of the human components of the student teaching experience Leslie (1971) identified the cooperating teacher as the "single most potent figure in affecting the practical experience of the prospective teacher" (p. 303). Essentially, student teachers believe that their professional future is dependent upon the cooperating teacher's evaluation of their performance, and that their evaluation is in turn dependent upon how successfully they conform to the cooperating teacher's expectations and demands.

Evaluation is usually not a totally objective process. The possibility of bias, especially of the unconscious sort, exists. This is how the interaction of the personalities of the two individuals may become extremely important. If a student teacher has personality characteristics dissimilar to her own or too much like her own, the cooperating teacher may react to the student teacher in such a way that it influences the evaluation of her performance.

Nelson and Hutcherson (1970) indicate that strong consideration should be given to placing student teachers with cooperating teachers who will be compatible and work well with them. "There is an implication, if not an expressed belief, that facilitating compatibility will result in a better field experience" (p. 44).

Had a student teacher assigned to a cooperating teacher with particular personality characteristics been assigned to a teacher with very different personality characteristics, would his assessment have been fundamentally or consequentially different? Granting the fact that subjectivity may play a part in any assessment, is there validity in the notion that selective placement (using selected personality characteristics or other variables as criteria) may positively effect a student teacher's chance of success?

I. THE PROBLEM

The cooperating teacher with whom a student teacher is placed is probably the most influential factor in determining whether or not the student teaching experience will be a successful one. Subjective judgments of college coordinators and limitations of distance and

qualified teachers now determine where student teachers are placed. If the optimum situation is to exist, one must be able to place student teachers according to variables which research has shown to produce a good teaching and learning situation.

Statement of the Purpose

The purpose of this study was to describe selected characteristics of vocational student teachers and their cooperating teachers and determine what effect these characteristics might have on (1) the evaluation score the student teacher receives from his cooperating teacher, and (2) the self-evaluation of the student teacher regarding his own performance.

Objectives of the Study

This study was designed to assess the potential importance of selective placement of vocational student teachers. The two measurements used in this study to indicate the quality of placement were (1) the evaluation score assigned to the student teacher by the cooperating teachers, and (2) the self-evaluation score of the student teacher regarding his own performance. Interrelationships between these measurements and the following were sought:

1. Personality factors of the student teacher and his cooperating teacher.
2. Sex of the cooperating teacher and the student teacher.
3. Age of the cooperating teacher.
4. Professional preparation of the cooperating teacher.
5. Amount of teaching experience of the cooperating teacher.

6. Service area taught.

II. HYPOTHESES

The following hypotheses were tested at the .05 level of significance. It was hypothesized that among vocational student teachers and their cooperating teachers at The University of Tennessee, Knoxville:

1. There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the vocational service area taught.

2. There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the sex combinations in the student teacher-cooperating teacher dyads.

3. There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the educational attainment level of the cooperating teacher.

4. There is no statistically significant correlation between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the measured personality factors of the student teacher.

5. There is no statistically significant correlation between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and differences in the measured personality factors of the student teacher and his cooperating teacher.

6. There is no statistically significant correlation between the personality difference scores and the difference in evaluation scores in the student teacher-cooperating teacher dyad.

7. There is no statistically significant correlation between the teacher-assigned evaluation score and the age of the cooperating teacher.

8. There is no statistically significant correlation between the evaluation score assigned by the cooperating teacher and the amount of teaching experience of the cooperating teacher.

III. ASSUMPTIONS

The following assumptions were made for this study:

1. Success of the student teaching experience could be measured by self-evaluation of the student teacher and the evaluation score he received from the cooperating teacher.

2. The Evaluation of Student Teaching form was valid.

3. The fact that a research study was being conducted had no significant influence on the evaluation given by the cooperating teacher.

4. Scores obtained on a standardized personality test were representative of the individual's personality.

IV. SCOPE AND LIMITATIONS OF THE PROBLEM

This study was confined to vocational students who participated in the student teaching program of The University of Tennessee, Knoxville, during the Spring quarter of 1976 and their cooperating teachers. Although there are many measures which indicate success in

the student teaching experience, evaluation scores were the only such measure used in this study.

V. DEFINITION OF TERMS

The following terms are used in this study and are defined here for clarification:

Student teaching. "The period of guided teaching during which the student takes increasing responsibility for the work with a given group of learners over a period of consecutive weeks" (Association for Student Teaching, 1959, p. x).

Student teacher. "A student enrolled in a professional education sequence who has been assigned a specified teaching experience under the guidance of a fully-certificated cooperating teacher" (Monahan, 1967, p. 4).

Cooperating teacher. "The classroom teacher in the public schools who is given the responsibility of working directly with the student teacher" (Bennie, 1966, p. 17).

College coordinator. A regular college staff member who has, as all or part of his assigned work load, the supervision of activities of student teachers and the relationships and conditions under which they carry on their work.

Vocational service areas. The vocational subject matter areas of Agricultural Education, Business Education, Distributive Education, Home Economics, and Industrial Education.

VI. ORGANIZATION OF THE STUDY

Chapter I introduces the problem, defines the terms used, and states the hypotheses tested in the study. Chapter II contains a review of literature and related research. Chapter III describes the procedures used in collecting the data. Chapter IV includes a presentation and analysis of the data collected in the study. Chapter V contains the findings of the study and the conclusions and recommendations made as a result of the study.

CHAPTER II

REVIEW OF RELATED RESEARCH AND LITERATURE

I. INTRODUCTION

The focus of this study was to determine if selected characteristics of vocational student teachers and their cooperating teachers were related to the final evaluation of the student teacher. A search of the literature was conducted to determine if there was a basis for the idea that certain cooperating teacher-student teacher combinations might produce a more successful student teaching experience.

The following topics considered to be important to the conceptual framework for this study were reviewed: (1) the contribution of student teaching to teacher education, (2) the cooperating teacher, (3) student teacher placement, (4) the evaluation of student teaching, and (5) techniques used in evaluating student teachers.

II. THE CONTRIBUTION OF STUDENT TEACHING TO TEACHER EDUCATION

Student teaching in some form has been a part of teacher education since before 1830 (Iannaccone and Button, 1964, p. 4). For any practice to survive over such a period of time it must have proved itself worthy. From the study of professional laboratory experiences, carried on in 1946-1947 by the subcommittee of the Committee on

Standards and Surveys of the American Association of Teachers Colleges, Flowers (1948) reported:

> The particular contribution of professional laboratory experiences (including student teaching) to the education of teachers is three-fold: (1) an opportunity to implement theory--both to study the pragmatic value of the theory and to check with the student his understanding of the theory in application; (2) a field of activity which, through raising questions and problems, helps the student to see his needs for further study; and (3) an opportunity to study with the student his ability to function effectively when guiding actual teaching-learning situations (p. 16).

This same principle of student teaching is accepted today.

Three hundred and twelve beginning teachers were interviewed in a study conducted by Hermanowicz (1966). These teachers unanimously approved student teaching, some acclaiming the experience as the "high point of their total undergraduate preparation" (Hermanowicz, 1966, p. 18). Iannaccone and Button (1964) stated that "everyone agrees as to the necessity of student teaching; everyone disagrees as to why" (p. 11). The continuation of student teaching has not been in jeopardy, but Sarason, Davidson, and Blatt (1962) have not been alone in their search for relevancy of content to make the experience a more meaningful one.

III. THE COOPERATING TEACHER

During the past three decades the major responsibility for the student teaching experience has been moved from the laboratory schools to the public schools. Three major reasons seemed to be responsible for this movement: (1) increased student teacher enrollment, (2) inability of the college to afford the building and maintenance of a

campus school, and (3) the desire for the student teacher to gain experience in a realistic setting. In 1959, The Association for Student Teaching conducted a survey of 282 institutions, seeking to identify problems encountered by colleges in establishing off-campus student teaching programs. Clarke (1961) reported that the three most frequently-mentioned problems were concerned with the identification and preparation of classroom teachers to serve as cooperating teachers. According to Nash (1965),

> The classroom teacher who supervises the student teaching experiences of those preparing to teach plays a very significant role. She is the key person in the teacher education program and determines to a great extent the success or failure of the young teacher (p. 59).

The cooperating teacher is usually selected by a process involving his willingness to serve in that capacity, approval by the principal or supervisor, approval by the college coordinator, and eligibility regarding campus requirements for certification or experience. Ludeman (1973) found little or no relationship to exist between the personality characteristics from Cattell's Sixteen Personality Factor Questionnaire and the willingness of elementary teachers to supervise student teachers. In his Doctoral research, Johnson (1968) investigated existing criteria to discover what agreement, if any, existed among administrators of secondary student teaching programs regarding the values of these criteria as fundamental in the selection of cooperating teachers. Five criteria received total agreement from the ten administrators represented in the study:

1. Possesses the level of academic preparation required by state certification laws.

2. Demonstrates competence in his area of teaching.

3. Possesses physical and mental health, vitality, and self-confidence sufficient to enable him to assume this added responsibility.

4. Demonstrates and understands the basic principles of effective teaching and learning.

5. Respects and recognizes the worth and dignity of each individual (pp. 498A-499A).

The list of criteria continued, but as Johnson stated, "there is an insufficient number of supervising teachers for rigorous application of any but the most basic selection criteria" (p. 499A).

Nash (1965) described the cooperating teacher as having six basic responsibilities:

> (1) Being a friend, advisor, and counselor of student teachers. (2) Being an outstanding teacher of boys and girls. (3) Being an expert director of observation. (4) Being a professional person and a good example for the student teacher. (5) Being a precise evaluator of teaching proficiency and an accurate estimator of teaching potential. (6) Being a pioneer, innovator, and experimenter (p. 83).

The job of the cooperating teacher has always been an extremely important one. The best way of improving the education and performance of teachers has been to improve the performance of their cooperating teachers (Nash, 1965, p. 88).

IV. STUDENT TEACHER PLACEMENT

According to Bennie (1966),

> . . . the most critical aspect of the student teaching experience and the most important element in the success or failure of any student teacher is the specific assignment provided him. The assignment includes many factors. The best student teaching experiences occur when the assignment has been very carefully made--where the abilities of the cooperating teacher have been carefully matched with the unique talents of the student

> teacher. Many things need to be considered--the teaching fields, the personality of each party, the student teacher's academic ability, the socio-economic level of the pupils, the attitude of the student teacher and the cooperating teacher, the competency of the cooperating teacher, and the willingness of the school administration to accept and work with the student teacher to be assigned (p. 8).

Procedures for placing student teachers vary widely from college to college; however, most placements result from the joint efforts of the building principal and the college coordinator. One of the biggest problems in student teacher placement is the lack of sufficient knowledge about the student teacher to enable those making the placement to use their best judgment.

Campbell and Williamson (1973) conducted a study to determine the major areas of difficulties as perceived by student teachers. The results of the study indicated that the relationship between the student teacher and the cooperating teacher to whom he was assigned was more important to the student teacher and his success in teaching than the school to which the student teacher was assigned or the subject which he was assigned to teach (Campbell and Williamson, 1973, p. 168).

The selective placement of a student teacher with a cooperating teacher according to personality characteristics or other variables has received little attention in operational practice, but considerable attention in research studies. There are conflicting answers to the question of whether or not one should strive for compatibility in this dyadic relationship. Miller's (1960) research supported his hypotheses that the rating given a student teacher was related to personality characteristics that he possessed; and that ratings given by a cooperating teacher were effected by his own personality characteristics.

Several studies indicated that a more successful student teaching experience resulted from placing student teachers with cooperating teachers whose personality scores were similar to their own (Byrne, Griffitt and Stefaniak, 1967; McLaughlin, 1970; Hill, 1970). Increasing similarity facilitated communication, made the student teacher believe he was functioning in a more logical and meaningful manner, made the interpersonal environment more predictable and understandable, and resulted in a higher evaluation of the student teacher.

Studies were also found that supported an opposing viewpoint. Start (1968) studied the ratings given to teachers by the head teacher in an English school and concluded that teachers with sixteen PF profiles very similar to, or very different from that of the head teacher, usually had higher ratings for teaching ability and for social competence (p. 14). Hohman (1972) found that when the student teacher's performance evaluation was high, there was a significant difference in personality need characteristics between cooperating and student teachers.

After investigating the change in anxiety levels of elementary education student teachers from pre- to post-experience, Buckley and Dickmann (1969) stated that although the results of their study were inconclusive, research must be continued to find more appropriate ways to pair student teachers and cooperating teachers than now exist. Such pairing now depends too much upon random assignment or intuition. The key to the success or failure of the student teacher may lie within the personality of the cooperating teacher to whom he has been assigned.

Leslie (1971) stated that,

> . . . the effect of a single individual upon the student teacher appears to be too mild to compete with the overall trauma of the student teaching experience. . . . that the student teacher who is mismatched reacts positively by attempting to compensate students for an ineffectual cooperating teacher (p. 308).

Others (Burnett, 1969; Ditosto, 1968; Hoffman, 1974; and Monahan, 1967) tend to agree with him.

V. THE EVALUATION OF STUDENT TEACHING

It has always been difficult to evaluate public school teachers. It has been even more difficult to evaluate student teachers. Two reasons for this were identified by Herold (1975).

> In the first place, classroom control and climate are often reflections of the cooperating teacher, and secondly, the student teacher is typically constrained to teach content that has been chosen for her and even then at a prescribed rate (p. 1009).

Difficult or not, judgments must be made concerning the performance of the student teacher. Combs (1964) argued,

> The fact that good teaching cannot be tied down to specific, objective criteria does not remove the necessity for making judgments concerning the quality of teaching. The evaluation of performance is a responsibility no profession can escape, particularly one that is dependent upon public funds and charged with so vital a function as the guidance of youth. . . . Can we judge ourselves? Of course we can. Almost all of us can and do make judgments about our colleagues, often with a high degree of accuracy. We <u>know</u> who the good teachers are. . . . Are professional judgments fair? That depends upon how professional are the professional workers who make them. This much is certain. They are more likely to be fair than the objective criteria some have sought as substitutes. Human beings are fallible to be sure. While professional judgment lacks the precision we might like, it is still far more accurate than objective measures of the wrong things (p. 73).

The public has a right to expect only competent teachers to be certified, yet the question remains as to how "competent" teachers are to be identified. Ryans (1960) conducted an investigation into characteristics of teachers that has become a classic study in the field of teacher education. Participation in the study involved over six thousand teachers from more than seventeen hundred schools and extended from 1948 to 1954. No precise identification of a competent teacher resulted from this study. Ryans explained that

> . . . one very important reason why effective or ineffective teachers cannot be described with any assurance is the wide variation that exists in tasks performed by teachers and in value concepts of what constitutes desirable teaching objectives (p. 4).

The teachers assessed as more competent teachers by this study did exhibit the following common characteristics: (1) understanding, friendly classroom behavior; (2) responsible, businesslike classroom behavior; and (3) stimulating, imaginative classroom behavior.

One need not search diligently to find conflicting characteristics of effective teachers, each being identified as most desirable. A partial list of these characteristics would include: Happy-go-lucky, conscientious, practical and conventional, imaginative, shrewd, warm-hearted (Cattell, 1962; Brickson, 1954; Heddendorf, 1971; Lamke, 1951; Montross, 1954). Hamachek (1968) comforted the diligent seeker of the effective teacher as he explained that teaching is an art, not a science, and therefore cannot be pinned down (p. 204).

Using the Guilford-Zimmerman Temperament Survey and Flander's Interaction Analysis, Morgan and Woerdehoff (1969) found that three personality factors --Ascendance, Sociability, and Masculinity--were

found to be the best predictors of student teachers' classroom behaviors. Positive relationships suggested that student teachers scoring high on Ascendance and low on Masculinity tended to devote a relatively larger proportion of class time to praise and encouragement of students. Lucio and Wenger (1969) found that scores on the Guilford-Zimmerman Scale for Sociability were positively related to teaching performance (pp. 3-4).

Leading teacher education institutions have been giving increasing attention to the importance of personality factors and have been shifting their emphasis from intellectual courses to developmental experiences. In a study of teaching as a function of the teacher's personality, Symonds (1954) concluded

> . . . that teaching is essentially an expression of personality. The teacher adapts himself to teaching in a manner that is harmonious with his expressions toward life situations in general. Methods and procedures learned during college preparations may influence teaching superficially but they do not determine the nature of the relation of a teacher to his pupils or the teacher's basic attitude toward teaching (p. 83).

Henjum (1969) agreed with Symonds that the personality of the teacher determined the nature of this teacher-pupil interaction. Teacher-pupil interaction is one of the most crucial aspects of teaching.

McClain (1968) based his study of success in student teaching on the assumption that

> . . . teaching effectiveness is the product of many components of personality operating at the same time in teacher-pupil interactions, that no single characteristic can adequately differentiate good and poor teachers, and that there may be several measurable significant characteristics, each one present in varying degrees in different teachers. A teacher may be high on certain of the relevant measures but not on all and still be a good teacher because particular strengths may compensate for particular weaknesses (pp. 25-26).

Desirable teacher personality may also differ according to sex, grade level taught, and other independent variables (Califf, 1964; Henjum, 1969; McClain, 1968; McFadden, 1968). However, Morris (1975) found personality factors which aided in student teaching success to be the same at all levels. In concluding his study, Morris stated,

> The lack of significant interaction between level taught, teacher sex, and grade made in student teaching suggests that the difference between good and poor teacher personalities is the same regardless of sex or grade level taught (p. 20).

Hamachek (1971) stated that "what we see in our outer worlds is related to how we feel about our inner selves" (p. 76). Each person's perceptual style is uniquely his own and whom one may perceive as an effective teacher another may not. This point illustrates the subjectivity involved in the evaluation of a student teacher's competence.

VI. TECHNIQUES USED IN EVALUATING STUDENT TEACHERS

A variety of techniques have been used in the evaluation of student teaching. Bennie (1966) advocated that the "best approach is through direct communication in carefully planned conferences directly related to the area of teaching under consideration" (p. 92).

Checklists or rating scales have probably had the most common use in evaluating student teachers because they (1) identify specific areas, (2) present common elements for evaluation regardless of who is evaluating the student teacher, (3) present the student teacher with specific criteria upon which he knows he will be evaluated, and (4) provide a permanent record of the student teacher's competency for

future recommendations (Bennie, 1966, pp. 92-93). These forms usually provide a continuum of behavioral traits ranging from least desirable to most desirable. The traits usually fall into three categories: individual characteristics of the student teacher, professional preparation and knowledge, and actual teaching performance.

Andrews (1964) stated that "evaluating the performance of student teachers through classroom observations has long been a controversial and difficult area of activity" (p. 102). The amount of subjectivity involved in classroom observation has been refined and made more objective by the use of observation guides. One such guide, the Classroom Observation Record (COR), was developed by Ryans (1960) during his study of characteristics of teachers. The COR was designed for the use of trained observers in identifying effective and ineffective teachers. Eighteen teacher behavior dimensions (e.g., aloof vs. responsive) and four pupil behavior dimensions (e.g., apathetic vs. alert) were identified by observed degree on a continuum.

A system of recording the presence or absence of particular behavior patterns in a classroom was developed by Flanders (1970) at The University of Minnesota between 1955 and 1960. Using the accompanying Glossary, the observer recorded the type of behavior occurring in the classroom at three-second intervals. Of the ten categories of behavior, seven were used when the teacher was talking, two were used when any pupil was talking, and one was used to indicate silence or confusion (Flanders, 1970, p. 33). Analysis of classroom interaction can help an individual to develop and control his teaching behavior.

A warning concerning the use of classroom observation was presented by Berliner (1976). Concerned about the stability of teacher behavior, Berliner stated that

> . . . before observers enter a classroom to code teacher behavior in any sensible way, they have to be sure of two things. First, the event must occur frequently enough to observe during the observation period. Second, the behavior should be representative of the teacher's usual and customary way of behaving. Only if these conditions are met can a teacher's behavior be sensibly characterized by the frequency count of rating scale description obtained in observation of classroom activities (p. 7).

Evaluation of teaching using audio-visual machinery has become fairly common in recent years. Weiss (1962) conducted a workshop for teachers during which classroom observation was necessary. The number of workshop participants made it easier for these observations to take place via closed circuit television. Weiss noted that there was less emotional involvement of the observer in the television situation than in live observations, resulting in a more profitable discussion about the observation. Use of a closed circuit television did not distract the students and filtered out distractions for the observers who were able to obtain better insight into the structure and development of the lesson. Observation via camera did not allow the personality of the teacher or the social aspects of the lesson to overshadow the actual teaching process. Actual classroom observation produced more comments on rapport and social interaction of the student and teacher.

Salomon and MacDonald (1970) explored teachers' reactions to video feedback and concluded that self-viewing informed a teacher of how much he or she differed from self expectations. Desirable changes could be expected to take place after self-viewing only if the received

message told the viewer the amount of his departure from a desired standard which the viewer himself had accepted as a standard (Salomon and MacDonald, 1970, p. 285).

Dawson, Dawson and Forness (1975) employed student teachers as their own models in video sequences of classroom performance. They concluded that

> . . . video feedback, focused or unfocused, is a relatively expensive method of changing teacher behavior but appears to have utility and might be particularly recommended for changing behaviors after standard supervisory methods have failed (p. 200).

Leonard, Geiss and Paden (1971) conducted an experimental study using student teachers matched by grade point averages. They determined that videotape had greater impact on classroom behavior of student teachers as measured by classroom interaction scales than did audiotape or regular supervisory feedback.

As an outgrowth of the Competency Based Teacher Education movement, The University of Texas added a teaching performance test to the traditional ratings and observations used in the evaluation of student teachers. According to Herold (1975),

> . . . an identical instructional objective is given to all the teachers, and then the achievement of this identical objective is measured by post-instructional tests administered to all the learners. Mechanistic as the process is, its objectivity is intended to balance to a certain degree the subjectivity of most standard evaluations (p. 1009).

The use of student achievement as an indicator of teaching success is also advocated by Berliner (1976).

It was not the intent of the researcher to advocate one evaluative technique over another in this review. Individual situations demand their own prescriptions for techniques of evaluation.

In actual practice evaluators of student teachers usually combine a variety of evaluative techniques.

VII. SUMMARY

In this chapter the writer has presented a review of the literature and selected research studies which related to the contribution of student teaching to teacher education, the cooperating teacher, student teacher placement, the evaluation of student teaching, and techniques used in evaluating student teachers. None of the literature or research studies which were reviewed dealt exclusively with vocational education because the writer was unable to locate such material. This fact alone pointed to the need for a study of student teaching in the vocational service areas. Although much has been written about the importance of the student teacher-cooperating teacher relationships, results of studies have been conflicting. The use of personality factors as variables which <u>might</u> effect the evaluation of the student teacher is supported in the literature.

CHAPTER III

PROCEDURES

I. INTRODUCTION

The purpose of this chapter is to explain the procedures used in completing the descriptive survey of vocational student teachers and their cooperating teachers. The chapter is divided into three major sections: instruments used to obtain data, the procedures used in the actual collection of data, and the coding and analysis of data.

II. INSTRUMENTS USED FOR OBTAINING DATA

The following instruments were selected by the researcher to obtain the data needed for testing the hypotheses.

The Guilford-Zimmerman Temperament Survey (G-ZTS)

This Survey was completed in 1949 and is appropriate for use with grades nine through twelve, college, and adults. It is a revision and condensation of several earlier tests. The Survey consists of 300 items, 30 for each of the 10 traits, each responded to with a yes, ?, or no. Testing time is approximately 45 minutes, but it is not timed.

The 10 traits identified in the Survey are (G) General Activity, (R) Restraint, (A) Ascendance, (S) Sociability, (E) Emotional Stability, (O) Objectivity, (F) Friendliness, (T) Thoughtfulness, (P) Personal Relations, and (M) Masculinity. An interpretation of these 10 traits

is shown in Table 1, which is taken from the Manual of Instructions and Interpretations by Guilford and Zimmerman (1949). This material is reproduced by permission of Sheridan Psychological Services, Inc. (see Appendix A).

According to Guilford and Zimmerman (1949),

> Estimates of the total-score reliabilities were made in various ways, based upon samples of 523 male college students and 389 female students. Kuder-Richardson formulas were applied to the data for men and women separately and combined. Odd-even and first-half-second-half correlations were obtained for a random sample of 100 men (p. 5).

The reliability coefficients for the ten traits ranged from .75 to .87. The validity of the scores is principally based on the factor analytic studies in which the traits were isolated. The intercorrelations of scores on the Survey ranged from -25 to +69 for the various factors and were, according to the authors, "gratifyingly low" (Guilford and Zimmerman, 1949, p. 6). In a review of the Survey by Stephenson (1970) one finds the following attestation to the value of this instrument:

> As one would expect from Professor Guilford's laboratory, the Survey, its data and supporting norms are all adequate, thorough, and factually oriented. For the purposes for which these inventories are used it is probably better than most. . . . The Survey gives a very favorable impression of a well rounded, carefully worked out method of evaluating an important portion of the total personality (pp. 508, 510).

The Evaluation of Student Teaching

This instrument is currently being used by college coordinators at The University of Tennessee, Knoxville, to assess the performance of student teachers. The researcher asked the cooperating teachers and the student teachers to use this evaluation form for the purposes of this study.

TABLE 1

AN INTERPRETATION OF THE TRAITS*

Positive Qualities		Negative Qualities	Number of Items
G--General activity			
Rapid pace of activities	vs	Slow and deliberate pace	6
Energy; vitality	vs	Fatigability	6
Keeping in motion	vs	Pausing for rest	4
Production; efficiency	vs	Low production; inefficiency	4
Liking for speed	vs	Liking for slow pace	3
Hurrying	vs	Taking time	2
Quickness of action	vs	Slowness of action	2
Enthusiasm; liveliness			2
R--Restraint			
Serious-mindedness			8
		Happy-go-lucky; carefree	5
Deliberate	vs	Impulsive	5
		Excitement-loving	5
Persistent effort			3
Self-control			3
A--Ascendance			
Self defense	vs	Submissiveness	9
Leadership habits	vs	Habits of following	7
Speaking with individuals	vs	Hesitation to speaking	5
Speaking in public	vs	Hesitation to speaking	2
Persuading others			2
Being conspicuous	vs	Avoiding conspicuousness	2
Bluffing			2
S--Sociability			
Having many friends and acquaintances	vs	Few friends and acquaintances	9
Entering into conversations	vs	Refraining from conversations	6
Liking social activities	vs	Disliking social activities	5
Seeking social contacts	vs	Avoiding social contacts	5
		Shyness	3
Seeking limelight	vs	Avoiding limelight	2

TABLE 1 (continued)

Positive Qualities		Negative Qualities	Number of Items
E--Emotional stability			
Evenness of moods, interests, energy, etc.	vs	Fluctuation of moods, interests, energy, etc.	7
Optimism; cheerfulness	vs	Pessimism; gloominess	7
		Perseveration of ideas and moods	6
		Daydreaming	3
Composure	vs	Excitability	2
Feeling in good health	vs	Feeling in ill health	2
		Feelings of guilt, loneliness or worry	3
O--Objectivity			
Being "thickskinned"	vs	Hypersensitiveness	10
		Egoism; self-centeredness	8
		Suspiciousness; fancying of hostility	6
		Having ideas of reference	4
		Getting into trouble	2
F--Friendliness			
Toleration of hostile action	vs	Belligerence; readiness to fight	9
		Hostility, resentment	7
		Desire to dominate	5
Acceptance of domination	vs	Resistance to domination	5
Respect for others	vs	Contempt for others	2
T--Thoughtfulness			
Reflectiveness; meditativeness			8
Observing of behavior in others			6
Interested in thinking	vs	Interested in overt activity.	5
Philosophically inclined			4
Observing of self			4
Mental poise	vs	Mental disconcertedness	3

TABLE 1 (continued)

Positive Qualities		Negative Qualities	Number of Items
P--Personal relations			
Tolerance of people	vs	Hypercriticalness of people; faultfinding habits	13
Faith in social institutions	vs	Criticalness of institutions.	8
. . . . .		Suspiciousness of others . .	6
. . . . .		Self pity	3
M--Masculinity			
Interest in masculine activities and vocations . . .	vs	Interest in feminine activities and vocations	7
Not easily disgusted	vs	Easily disgusted	5
Hardboiled	vs	Sympathetic	4
Resistant to fear	vs	Fearful	3
. . . . .		Romantic interests	3
Inhibition of emotional expressions . .	vs	Emotional expressiveness . .	3
Little interest in clothes and styles .	vs	Much interest in clothes and styles . .	2
. . . . .		Dislike of vermin	2

*The items scored for each temperament variable have been categorized in the groups as described. The number of items will give some idea of the relative importance of each quality in the total score. The titles of the categories should be suggestive of the kind of adjustment or behavior to be expected in those with high or low scores. A high score indicates the "positive" qualities and a low score the "negative" qualities. Extreme positive qualities do not always indicate the best adjustment, but extreme negative ones are likely to indicate trouble.

SOURCE: Guilford and Zimmerman (1949), pp. 2-3.

The evaluation form was compiled at The University of Tennessee, Knoxville, in 1970, resulting from a joint effort of college coordinators and cooperating teachers. A selected group of cooperating teachers were asked to identify important criteria in the evaluation of a student teacher's performance. Information from research studies of teacher competencies considered important by hiring agents was also taken into account. The college coordinators then selected the teacher competency factors which were considered to be the most important and compiled the instrument which is included as Appendix B.

The fourteen rather distinct competency factors on which the student teacher was to be rated on the Evaluation of Student Teaching form were: (1) Description of student teacher's teaching personality, (2) Apparent health and vitality, (3) Voice and language usage, (4) Ability to work cooperatively with other staff members, (5) Ability to profit from feedback supplied by observational techniques, (6) Ability to make realistic decisions; has maturity of judgment, (7) Working knowledge of content in teaching areas, (8) Competence in effectively preparing for lessons, (9) Classroom management, (10) Ability to perform a variety of critical teaching tasks as identified by analysis of teaching techniques, (11) Competency in evaluating students, (12) Ability to motivate learners, (13) Description of student teacher's attitudes toward students, and (14) Commitment to student teaching. Items numbered (2) and (3) were judged to be unrelated to the central purpose of this study; therefore, scores obtained on those two scales were not used.

The form is set up on a Likert-type scale from one to ten, with one being a rating of excellent for each item and ten being a rating of unacceptable. The scores from each of the twelve factors used for the purpose of this study were summed, resulting in one numerical grade for each completed form. The researcher was unable to obtain information regarding the statistical validity and reliability of the Evaluation of Student Teaching; however, its continued use since 1970 indicates that it is considered to be a useful and acceptable evaluative instrument.

Cooperating Teacher Information Sheet

Designed by the researcher, the Cooperating Teacher Information Sheet solicited personal information about the cooperating teacher (date of birth, years and months of teaching experience, and level of educational attainment). This information was needed in order to test some of the hypotheses. The form is included as Appendix C.

Authorization for Use of Data

To insure the protection of personal rights it was necessary to obtain permission from the subjects to use G-ZTS scores, evaluation scores, and personal information concerning the cooperating teachers. Student teachers granted this permission by signing a release statement, a copy of which is included as Appendix D. Cooperating teachers granted this permission by signing a similar statement on the Cooperating Teacher Information Sheet (see Appendix C).

III. COLLECTION OF DATA

This study included all of the vocational students enrolled in student teaching at The University of Tennessee, Knoxville, during the Spring quarter of 1976 and their cooperating teachers. Forty-three student teachers were so enrolled: eleven in Agricultural Education; eight in Business Education and Distributive Education; eleven in Home Economics; and thirteen in Industrial Education. Forty-one of the student teachers had one cooperating teacher each. Two of the student teachers had two cooperating teachers each. The two additional cooperating teachers made the student teacher-cooperating teacher pairs number forty-five.

In the proposal stage of this study the researcher talked with the college coordinators in each vocational service area to explain the study, receive suggestions, insure cooperation, and obtain a list of the names and locations of the student teachers and the cooperating teachers. The researcher had planned to collect all data personally, working with service area group meetings when possible or accompanying the college coordinators to the various schools. In some cases this plan did not prove feasible; therefore, a variety of methods for collecting data were utilized.

The home economics student teachers returned to campus at the middle of the Spring quarter for a seminar. Time was alloted during the seminar for the researcher to explain the study, to administer the G-ZTS, and to obtain permission for use of data. Each student teacher was given an Evaluation of Student Teaching form in a pre-addressed,

stamped envelope to complete and return to the researcher no earlier than three weeks before the end of the quarter. A week later the home economics cooperating teachers met on campus. The researcher was given the opportunity to explain the major purposes of the study, to answer questions, to obtain permission for use of data, and to administer the Cooperating Teacher Information Sheet. Each cooperating teacher was given the G-ZTS and an Evaluation of Student Teaching form in a pre-addressed, stamped envelope. The evaluation was to be completed no earlier than three weeks before the end of the quarter and returned with the G-ZTS to the researcher.

Just after the middle of the quarter the researcher met with the business education and distributive education student teachers in two groups in order to explain the study and to obtain permission signatures. A G-ZTS and an Evaluation of Student Teaching form were given to each student teacher in a pre-addressed, stamped envelope to be returned to the researcher during the third week before the end of the quarter. All of the forms needed to collect data from the business education and distributive cooperating teachers were placed in a pre-addressed, stamped envelope with a cover letter giving directions for completing the forms (see Appendix E). Those forms were delivered to the cooperating teachers by their student teachers. The researcher telephoned each teacher in order to explain the study and to answer any questions. Those forms were to be completed and returned to the researcher during the third week before the end of the quarter.

The agriculture and industrial education college coordinators preferred to deliver all forms to the student teachers and cooperating

teachers themselves. A copy of the cover letter that accompanied the forms delivered to the student teachers is included as Appendix F. A cover letter also accompanied the forms delivered to the cooperating teachers (see Appendix E). Pre-addressed, stamped envelopes were provided for the return of the completed forms to the researcher during the third week before the end of the quarter. Two of these student teachers were not visited by a college coordinator; therefore, the researcher delivered the materials to them and their cooperating teachers.

Follow-up Techniques

Two weeks before the end of the quarter all subjects who had not returned forms were contacted by telephone. The same procedure was repeated a week later. During the last week of the quarter appointments were made with each person who had not returned any of the information and the researcher visited with them individually to collect the forms.

The researcher collected data from all of the individuals involved in the study; however, one cooperating teacher failed to complete the G-ZTS. After four personal visits to that teacher the researcher decided not to pursue the matter further.

IV. CODING AND ANALYSIS OF DATA

A consultant at The University of Tennessee Computing Center assisted the researcher in programming the data. The Statistical Package for the Social Studies (SPSS) was used to obtain Pearson

product-moment correlations. The Statistical Analysis System (SAS) was used for testing hypotheses requiring an Analysis of Variance. All hypotheses were tested at the .05 level of significance.

The Student Teacher Evaluation measured the competency of the student teacher as viewed by the cooperating teacher and by the student teacher himself. Total scores (based on a summing of each of the student teacher competency factors) for the evaluations were recorded as the dependent variables. Separate statistical analyses were completed for each of the following independent variables: raw scores from each factor of the G-ZTS for both student teachers and cooperating teachers; age, years of teaching experience, and educational attainment level of the cooperating teachers; sex and service area of both student teachers and cooperating teachers. The computer calculated cooperating teacher-student teacher difference scores for evaluation scores and scores on individual personality factors. ANOVA tables and correlation coefficients are reported in Chapter IV of this study. A student's t test was used in calculating the significance of the correlations.

V. SUMMARY

This chapter has described the research procedures which were followed in carrying out the purposes of this study. Emphasis has been given to providing information regarding the instruments used in obtaining data, the research procedures used in collecting data, and the nature, sources, and analysis of data.

CHAPTER IV

FINDINGS

I. INTRODUCTION

The primary purpose of this study was to describe selected characteristics of vocational student teachers and their cooperating teachers and to determine what affect these characteristics might have on (1) the final evaluation score the student teacher received from his cooperating teacher and (2) the final self-evaluation score of the student teacher. In conducting this study the researcher was trying to determine the importance of selective placement of student teachers for their optimum development. To achieve the purposes of the study, eight null hypotheses were tested.

An instrument used by student teaching personnel at The University of Tennessee, Knoxville, was employed to obtain the dependent variables of evaluation scores and self-evaluation scores of the student teachers. Separate statistical analyses were completed for the following eight independent variables: (1) vocational service area taught, (2) sex combinations in the student teacher-cooperating teacher dyads, (3) educational attainment level of the cooperating teacher, (4) measured personality factors of the student teacher, (5) differences in the measured personality factors of the student teacher and his cooperating teacher, (6) differences in the student teacher's self-evaluation score and the evaluation score assigned by the cooperating

teacher, (7) age of the cooperating teacher, and (8) the amount of teaching experience of the cooperating teacher.

II. SELECTED CHARACTERISTICS OF STUDENT TEACHERS AND COOPERATING TEACHERS

This study included all of the forty-three vocational students enrolled in student teaching at The University of Tennessee, Knoxville, during the Spring quarter of 1976 and their cooperating teachers. Forty-one of the student teachers had one cooperating teacher each. Two of the student teachers had two cooperating teachers each. The two additional cooperating teachers made the student teacher-cooperating teacher pairs number forty-five.

Sex and Vocational Service Area

The vocational service areas taught by the student teachers are reported for each sex in Table 2. Cole (1976) reports that vocational education is "almost entirely sex-segregated in this country" (p. 577). This was true in this study in the service areas of Agriculture (100 percent male) and Home Economics (100 percent female). Such a strict sex-segregated pattern was not upheld in the service areas of Business Education and Distributive Education, or Industrial Education.

Table 3 presents the cooperating teachers by sex and service area. The same degree of sex-segregation found for the student teachers was found for the cooperating teachers.

TABLE 2

SERVICE AREA OF STUDENT TEACHERS BY SEX
(N = 43)

Service Area	Male		Female		Total	
	N	Percent	N	Percent	N	Percent
Agriculture	11	100.0	0	0.0	11	25.6
Business Education and Distributive Education	3	37.5	5	62.5	8	18.6
Home Economics	0	0.0	11	100.0	11	25.6
Industrial Education	10	76.9	3	23.1	13	30.2
TOTAL	24		19		43	100.0

TABLE 3

SERVICE AREA OF COOPERATING TEACHERS BY SEX
(N = 45)

Service Area	Male		Female		Total	
	N	Percent	N	Percent	N	Percent
Agriculture	11	100.0	0	0.0	11	24.4
Business Education and Distributive Education	3	30.0	7	70.0	10	22.2
Home Economics	0	0.0	11	100.0	11	24.4
Industrial Education	9	69.2	4	30.8	13	28.9
TOTAL	23		22		45	99.9

Personality Factors

The ten personality factors measured for each student teacher include (G) General Activity, (R) Restraint, (A) Ascendance, (S) Sociability, (E) Emotional Stability, (O) Objectivity, (F) Friendliness, (T) Thoughtfulness, (P) Personal Relations, and (M) Masculinity. A score was recorded for each factor, but these scores are not additive; therefore, no total personality score could be derived. The differences in scores on personality factors for the individuals involved in each student teacher-cooperating teacher pair was used in testing one of the hypotheses and is therefore included in Table 4. The total scores, representing the numerical differences between the personality factors of each student teacher and his cooperating teacher, ranged from 35 to 99. The mean difference was 59.7.

Student teachers 24 and 25 are actually the same person. This student had two cooperating teachers, so the situation was treated as two student teacher-cooperating teacher pairs. The same situation is true for student teachers 26 and 27. Cooperating teacher 43 failed to complete the personality Survey; therefore, there were no data available for computing differences.

Age of Cooperating Teachers

All computations were completed using individual ages of the cooperating teachers; however, the ages are grouped in Table 5 for clearer presentation. The youngest teacher was twenty-four and the oldest teacher was sixty-one. The mean age of the cooperating teachers was 37.1 and the median age was thirty-five.

TABLE 4

PERSONALITY FACTOR SCORES FOR STUDENT TEACHERS
AND COOPERATING TEACHERS

	G	R	A	S	E	O	F	T	P	M	Total
ST 1	21	15	8	19	15	17	20	14	7	10	
CT 1	14	21	15	24	14	16	10	22	18	7	
Diff	7	6	7	5	1	1	10	8	11	3	59
ST 2	8	16	10	16	6	12	17	23	9	5	
CT 2	9	27	11	7	23	13	16	18	9	6	
Diff	1	11	1	9	17	1	1	5	0	1	47
ST 3	17	16	14	23	7	10	13	14	14	2	
CT 3	13	21	21	24	21	21	22	20	13	10	
Diff	4	5	7	1	14	11	9	6	1	8	66
ST 4	8	28	11	16	12	12	18	24	10	10	
CT 4	14	21	15	24	14	16	10	22	18	7	
Diff	6	7	4	8	2	4	8	2	8	3	52
ST 5	20	9	19	27	13	14	9	19	10	10	
CT 5	6	19	10	23	22	25	22	19	21	14	
Diff	14	10	9	4	9	11	13	0	11	4	85
ST 6	21	17	3	18	18	20	18	21	8	11	
CT 6	13	23	10	19	28	27	30	19	28	16	
Diff	8	6	7	1	10	7	12	2	20	5	78
ST 7	6	20	6	21	12	13	12	16	10	4	
CT 7	19	20	15	22	21	28	25	21	22	13	
Diff	13	0	9	1	9	15	13	5	12	9	86
ST 8	19	14	16	15	18	22	15	15	13	11	
CT 8	17	20	14	27	15	15	18	19	11	9	
Diff	2	6	2	12	3	7	3	4	2	2	43
ST 9	27	15	19	25	9	16	12	21	14	14	
CT 9	25	18	20	26	25	21	13	22	17	10	
Diff	2	3	1	1	16	5	1	1	3	4	37
ST 10	9	17	7	20	21	20	17	20	16	15	
CT 10	17	20	10	23	18	13	8	12	8	4	
Diff	8	3	3	3	3	7	9	8	8	11	63
ST 11	14	13	9	15	12	18	16	12	11	8	
CT 11	19	19	19	23	22	21	21	10	18	15	
Diff	5	6	10	8	10	3	5	2	7	7	63
ST 12	13	18	13	19	17	20	20	18	22	23	
CT 12	21	23	9	9	15	6	12	19	5	17	
Diff	8	5	4	10	2	14	8	1	17	6	75

TABLE 4 (continued)

	G	R	A	S	E	O	F	T	P	M	Total
ST 13	12	18	8	4	7	8	2	22	6	18	
CT 13	25	22	19	21	12	13	10	22	11	19	
Diff	13	4	11	17	5	5	8	0	5	1	69
ST 14	14	16	16	20	14	13	10	12	13	19	
CT 14	18	18	20	20	22	16	12	24	12	27	
Diff	4	2	4	0	8	3	2	12	1	8	44
ST 15	10	12	14	8	17	15	5	22	9	21	
CT 15	24	20	18	23	26	28	19	11	17	24	
Diff	14	8	4	15	9	13	14	11	8	3	99
ST 16	21	16	17	16	20	22	18	18	26	22	
CT 16	8	18	6	3	11	12	11	23	11	20	
Diff	13	2	11	13	9	10	7	5	15	2	87
ST 17	11	20	20	12	24	20	16	27	12	23	
CT 17	21	25	10	19	18	22	28	13	25	22	
Diff	10	5	10	7	6	2	12	14	13	1	80
ST 18	11	22	18	13	4	7	3	26	8	20	
CT 18	8	18	6	3	11	12	11	23	11	20	
Diff	3	4	12	10	7	5	8	3	3	0	55
ST 19	27	12	26	29	26	15	12	17	12	21	
CT 19	12	17	20	23	20	21	11	15	9	19	
Diff	15	5	6	6	6	6	1	2	3	2	52
ST 20	20	11	16	19	12	13	6	20	12	21	
CT 20	18	18	20	20	22	16	12	24	12	27	
Diff	2	7	4	1	10	3	6	4	0	6	43
ST 21	5	20	7	10	13	15	16	21	13	21	
CT 21	18	20	15	16	18	22	21	27	22	24	
Diff	13	0	8	6	5	7	5	6	9	3	62
ST 22	18	18	7	9	21	26	21	8	19	21	
CT 22	11	18	10	17	10	15	20	21	22	20	
Diff	7	0	3	8	11	11	1	13	3	1	58
ST 23	15	11	22	22	19	13	15	22	14	21	
CT 23	17	18	17	22	21	22	14	25	11	14	
Diff	2	7	5	0	2	9	1	3	3	7	39
ST 24	3	18	4	11	16	17	23	17	14	7	
CT 24	26	15	13	16	20	16	10	16	14	9	
Diff	23	3	9	5	4	1	13	1	0	2	61
ST 25	3	18	4	11	16	17	23	17	14	7	
CT 25	14	22	10	19	17	17	23	26	14	7	
Diff	11	4	6	8	1	0	0	9	0	0	39

TABLE 4 (continued)

	G	R	A	S	E	O	F	T	P	M	Total
ST 26	25	19	20	26	8	8	9	25	15	2	
CT 26	15	11	18	24	13	17	14	24	14	5	
Diff	10	8	2	2	5	9	5	1	1	3	46
ST 27	25	19	20	26	8	8	9	25	15	2	
CT 27	6	15	12	22	17	16	13	10	23	2	
Diff	19	4	8	4	9	8	4	15	8	0	79
ST 28	16	11	17	24	16	9	10	16	6	12	
CT 28	14	20	19	19	29	26	21	18	24	17	
Diff	2	9	2	5	13	17	11	2	18	5	84
ST 29	24	9	15	16	11	5	4	18	2	9	
CT 29	19	15	17	29	23	20	6	18	17	5	
Diff	5	6	2	13	12	15	2	0	15	4	74
ST 30	24	19	18	29	21	26	22	22	17	18	
CT 30	19	19	22	24	25	17	14	22	11	20	
Diff	5	0	4	5	4	9	8	0	6	2	43
ST 31	20	21	19	19	24	23	19	19	23	13	
CT 31	26	21	17	12	18	18	25	23	21	12	
Diff	6	0	2	7	6	5	6	4	2	1	39
ST 32	16	23	16	16	21	14	15	23	7	19	
CT 32	23	18	15	25	17	10	16	23	15	23	
Diff	7	5	1	9	4	4	1	0	8	4	43
ST 33	17	17	26	23	22	26	24	21	26	20	
CT 33	23	23	21	23	29	27	18	13	22	18	
Diff	6	6	5	0	7	1	6	8	4	2	45
ST 34	20	21	15	21	24	26	26	14	26	21	
CT 34	23	18	15	25	17	10	16	23	15	23	
Diff	3	3	0	4	7	16	10	9	11	2	65
ST 35	17	20	26	30	25	26	14	22	21	21	
CT 35	29	11	19	27	27	18	12	19	20	20	
Diff	12	9	7	3	2	8	2	3	1	1	48
ST 36	9	23	19	25	26	26	23	23	20	23	
CT 36	21	16	22	26	17	16	14	22	19	16	
Diff	12	7	3	1	9	10	9	1	1	7	60
ST 37	20	6	14	22	23	23	7	7	16	23	
CT 37	22	22	23	22	25	29	22	23	26	21	
Diff	2	16	9	0	2	6	15	16	10	2	78
ST 38	27	17	27	26	20	23	6	22	10	20	
CT 38	20	21	18	19	22	22	22	23	21	20	
Diff	7	4	9	7	2	1	16	1	11	0	58

TABLE 4 (continued)

	G	R	A	S	E	O	F	T	P	M	Total
ST 39	24	20	20	15	20	14	6	24	23	11	
CT 39	19	15	19	22	23	18	15	15	19	12	
Diff	5	5	1	7	3	4	9	9	4	1	48
ST 40	16	26	18	24	27	24	26	13	18	23	
CT 40	17	23	21	16	26	21	25	21	24	24	
Diff	1	3	3	8	1	3	1	8	6	1	35
ST 41	16	14	11	11	2	9	8	21	12	8	
CT 41	23	9	19	22	21	13	15	18	15	8	
Diff	7	5	8	11	19	4	7	3	3	0	67
ST 42	21	14	17	25	21	23	15	19	26	23	
CT 42	23	18	15	25	17	10	16	23	15	23	
Diff	2	4	2	0	4	13	1	4	11	0	41
ST 43	15	19	16	19	19	11	7	20	6	21	
CT 43	—	—	—	—	—	—	—	—	—	—	
Diff											
ST 44	17	7	14	27	13	13	10	21	12	1	
CT 44	22	17	24	26	21	11	11	13	9	11	
Diff	5	10	10	1	8	2	1	8	3	10	58
ST 45	24	20	18	25	13	12	12	24	14	20	
CT 45	13	10	15	18	12	11	5	4	13	9	
Diff	11	10	3	7	1	1	7	20	1	11	72
MEAN DIFFERENCE											59.7

NOTE: ST = student teacher.
CT = cooperating teacher.
Diff = difference in scores.
G = General Activity factor.
R = Restraint factor.
A = Ascendance factor.
S = Sociability factor.
E = Emotional Stability factor.
O = Objectivity factor.
F = Friendliness factor.
T = Thoughtfulness factor.
P = Personal Relations factor.
M = Masculinity factor.

TABLE 5

AGE OF COOPERATING TEACHERS
(N = 45)

Age	Number	Percent
20 - 29	11	24.4
30 - 39	18	20.0
40 - 49	12	26.7
50 - 59	3	6.7
60 - 69	1	2.2
TOTAL	45	100.0

Educational Attainment of Cooperating Teachers

Six levels of educational attainment were specified on the Cooperating Teacher Information Sheet. Each teacher was asked to check the highest level of attainment from the following categories: Bachelor's degree, Bachelor's degree plus additional coursework, Master's degree, Master's degree plus additional coursework, Educational Specialist degree, and Doctoral degree (see Table 6).

A Master's degree is usually a minimum requirement for a cooperating teacher; however, expertise in vocational areas is often determined by other measures, especially occupational experience. Of the cooperating teachers involved in this study, 42.2 percent were without Master's degrees. In this region of Tennessee there is limited availability of student teaching centers; therefore, qualifications for

TABLE 6

EDUCATIONAL ATTAINMENT OF COOPERATING TEACHERS
(N = 45)

Degree	Number	Percent
Bachelor's	2	4.4
Bachelor's +	17	37.8
Master's	9	20.0
Master's +	17	37.8
Ed. Specialist	0	0.0
Doctorate	0	0.0
TOTAL	45	100.0

the supervision of student teaching other than degrees must be considered in the selection of cooperating teachers.

Teaching Experience of Cooperating Teachers

All statistical analyses were conducted using individual years of teaching experience of the cooperating teachers. For ease in communication the years of teaching experience are grouped in Table 7. The majority of the teachers involved in this study had fifteen years of teaching experience or less.

III. FINAL EVALUATION SCORES OF STUDENT TEACHERS

At the end of the student teaching experience two sets of evaluation scores were obtained for each student teacher. One score was assigned by the cooperating teacher and one score was assigned by the

TABLE 7

TEACHING EXPERIENCE OF COOPERATING TEACHERS
(N = 45)

Years	Number	Percent
Less than 1	0	0.0
1 - 5	14	31.1
6 - 10	16	35.6
11 - 15	9	20.0
16 - 20	1	2.2
21 - 25	3	6.7
More than 25	2	4.4
TOTAL	45	100.0

student teacher himself. The possible scores ranged from 12 to 120. The actual scores given by the cooperating teachers ranged from 12.5 to 66.0. The actual self evaluation scores ranged from 12.0 to 79.0.

Each of the twelve items on the evaluation form used in this study had a ten point continuum. Marks were placed either on a number or between numbers, the latter adding 0.5 to the preceding whole number value. Values assigned to each of the twelve evaluative items were added to produce a total evaluation score. The lowest numeric value indicates the highest evaluative rating. Differences in self-evaluation scores were used in computations and are presented in Table 8. Once again student teachers 24 and 25 are the same person with different cooperating teachers. The same situation is true for student teachers

TABLE 8

FINAL EVALUATION SCORES OF STUDENT TEACHERS

Student Teacher	Self-Evaluation Score	Teacher-Assigned Evaluation Score	Difference
1	54.0	12.5	41.5
2	36.0	38.5	2.5
3	41.0	58.0	17.0
4	56.0	24.5	31.5
5	21.0	34.5	13.5
6	41.5	47.0	5.5
7	35.0	23.0	12.0
8	40.0	35.5	4.5
9	43.5	25.0	18.5
10	45.5	35.0	10.5
11	29.5	24.5	5.0
12	27.0	56.0	29.0
13	35.0	29.0	6.0
14	22.0	34.0	12.0
15	37.5	49.5	12.0
16	31.0	43.0	12.0
17	51.0	39.0	12.0
18	79.0	56.0	23.0
19	36.5	41.5	5.0
20	26.0	37.5	11.5
21	40.0	44.0	4.0
22	43.0	42.0	1.0
23	30.0	42.0	12.0
24	39.5	19.5	20.0
25	39.5	39.0	0.5
26	12.0	18.0	6.0
27	12.0	19.0	7.0
28	38.0	40.5	2.5
29	54.0	47.0	7.0
30	18.0	31.0	13.0
31	37.0	50.0	13.0
32	53.0	40.0	13.0
33	49.0	40.0	9.0
34	30.0	42.0	12.0
35	34.0	29.0	5.0

TABLE 8 (continued)

Student Teacher	Self-Evaluation Score	Teacher-Assigned Evaluation Score	Difference
36	13.0	14.5	1.5
37	31.5	13.0	18.5
38	34.0	33.0	1.0
39	20.5	14.0	6.5
40	34.0	31.0	3.0
41	48.0	38.5	9.5
42	42.0	43.0	1.0
43	63.0	66.0	3.0
44	34.0	37.5	3.5
45	35.0	29.0	6.0
RANGE	12.0 - 79.0	12.5 - 66.0	0.5 - 41.5
MEAN	37.2	35.7	10.3

26 and 27. Student teachers and cooperating teachers were asked not to confer with each other regarding the evaluation forms used for this study.

IV. STATISTICAL ANALYSIS

An Analysis of Variance (ANOVA) statistical test was used to analyze data for testing the first three hypotheses. The data were subjected to the Statistical Analysis System (SAS), a system of computer programs with a regression analysis that takes into account unequal cell sizes. A SAS program produced the ANOVA table with F ratio for comparing selected independent variables with the dependent variables of self-evaluation scores and teacher-assigned evaluation scores. None of the ANOVA tests produced significant differences at the .05 level of significance; therefore, no multiple comparison tests were utilized.

The initial analyses included the evaluation scores and the independent variable vocational service area taught. Null hypothesis No. 1 stated:

HO_1 There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the vocational service area taught.

An examination of the data presented in Table 9 revealed that no significant difference existed in the main effect of self-evaluation scores and in the main effect of service area taught. Therefore, the way the student teachers rated their own teaching performance was not related to the service area in which they were teaching. Student

TABLE 9

SELF-EVALUATION SCORES AND SERVICE AREA ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Service Area Taught	3	327.95	109.32	0.61
Residual	41	7390.80	180.26	
TOTAL	44	7718.75		

NOTE: $F_{.95}$ (3,41 df) = 2.83; N.S.D.

teachers in one service area were no more likely to rate their performance higher or lower than student teachers in another service area.

An examination of the data presented in Table 10 revealed that no significant difference existed in the main effect of teacher-assigned evaluation scores and in the main effect of service area taught. On the basis of the calculated F ratios in Tables 9 and 10, null hypothesis No. 1 was not rejected.

The analysis of the second hypothesis included the evaluation scores and the dependent variable of sex. Null hypothesis No. 2 stated:

HO_2 There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the sex combinations in the student teacher-cooperating teacher dyads.

TABLE 10

TEACHER-ASSIGNED EVALUATION SCORES AND SERVICE AREA TAUGHT
ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Service Area Taught	3	527.60	175.86	1.14
Residual	41	6318.60	154.11	
TOTAL	44	6846.20		

NOTE: $F_{.95}$ (3,41 df) = 2.83; N.S.D.

An analysis of the data from a two-way classification analysis of variance revealed that no statistically significant difference existed in the main effects of evaluation scores and in the main effects of sex of the student teacher and sex of the cooperating teacher and interaction effect of the sexes (see Tables 11 and 12). The sex of the student teacher or the sex of the cooperating teacher apparently had no affect on either the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher. On the basis of the calculated F ratios, null hypothesis No. 2 was not rejected.

The third analysis included the evaluation scores and the independent variable educational attainment level of the cooperating teachers. Null hypothesis No. 3 stated:

TABLE 11

SELF-EVALUATION SCORES AND SEX COMBINATIONS OF THE STUDENT TEACHER-COOPERATING TEACHER DYADS ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Sex of the Student Teacher	1	12.24	12.24	0.07
Sex of the Cooperating Teacher	1	4.96	4.96	0.03
Interaction	1	197.29	197.29	1.08
Residual	41	7507.48	183.11	
TOTAL	44	7721.97		

NOTE: $F_{.95}$ (1,41 df) = 4.08; N.S.D.

TABLE 12

TEACHER-ASSIGNED EVALUATION SCORES AND SEX COMBINATIONS OF THE STUDENT TEACHER-COOPERATING TEACHER DYADS ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Sex of the Student Teacher	1	42.68	42.68	0.28
Sex of the Cooperating Teacher	1	26.02	26.02	0.17
Interaction	1	112.37	112.37	0.72
Residual	41	6355.81	155.02	
TOTAL	44	6536.88		

NOTE: $F_{.95}$ (1,41 df) = 4.08; N.S.D.

HO_3 There is no statistically significant difference between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the educational attainment level of the cooperating teacher.

An analysis of the data revealed that no statistically significant difference existed in the main effect of evaluation scores and in the main effect of educational level of the cooperating teacher (see Tables 13 and 14). The cooperating teachers who advanced themselves professionally by taking additional coursework or obtaining an advanced degree did not, as a group, evaluate their student teachers any differently than did those teachers who did not take additional coursework. Neither did the educational level of the cooperating teachers seem to influence the student teachers in their self-evaluations. On the basis of the calculated F ratios, null hypothesis No. 3 was not rejected.

The remaining hypotheses were tested by conducting Pearson product-moment correlations. The data were subjected to the Statistical Package for the Social Sciences (SPSS), a system of computer programs for social science data analysis.

The fourth analysis included evaluation scores and measured personality factors of the student teacher. Null hypothesis No. 4 stated:

TABLE 13

STUDENT TEACHER SELF-EVALUATION SCORES AND EDUCATIONAL ATTAINMENT LEVEL OF THE COOPERATING TEACHER ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Educational Level of Cooperating Teachers	3	793.52	264.51	1.57
Residual	41	6925.22	168.91	
TOTAL	44	7718.74		

NOTE: $F_{.95}$ (3,41 df) = 2.83; N.S.D.

TABLE 14

TEACHER-ASSIGNED EVALUATION SCORES AND EDUCATIONAL ATTAINMENT LEVEL OF THE COOPERATING TEACHER ANALYSIS OF VARIANCE

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F
Educational Level of Cooperating Teacher	3	1041.71	347.24	2.45
Residual	41	5804.49	141.57	
TOTAL	44	6846.20		

NOTE: $F_{.95}$ (3,41 df) = 2.83; N.S.D.

HO_4 There is no statistically significant correlation between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the measured personality factors of the student teacher.

Most of the correlations between evaluation scores and measured personality factors of the student teacher are too low to warrant discussion (see Table 15). When correlated with self-evaluation scores, two factors--Sociability ($r = -.39$) and Personal Relations ($r = -.38$)--produced significant negative correlations. Student teachers who scored high on these two personality factors tended to give themselves lower evaluation scores. Student teachers who scored low on the factors of

TABLE 15

PRODUCT-MOMENT CORRELATIONS BETWEEN EVALUATION SCORES AND MEASURED PERSONALITY FACTORS OF THE STUDENT TEACHER

Personality Factors (Difference Scores)	Evaluation Scores	
	Self-Evaluation	Teacher-Evaluation
General Activity	-.25	-.09
Restraint	.11	-.06
Ascendance	-.18	.01
Sociability	-.39*	-.18
Emotional Stability	-.13	-.02
Objectivity	-.19	-.10
Friendliness	-.07	-.06
Thoughtfulness	.06	.02
Personal Relations	-.38*	-.07
Masculinity	.11	.23

*$r_{.95}(2,43\ df) = .29$.

Sociability and Personal Relations tended to give themselves higher evaluation scores. The rating scale on the evaluative instrument used in this study was arranged in such a way that the lower numbers represented a better performance; therefore, a clearer interpretation of these results would be that student teachers with high scores on the personality factors of Sociability and Personal Relations tended to give themselves high ratings on their teaching performance. Student teachers with low scores on these two personality factors tended to give themselves low ratings on their teaching performance. On the basis of two significant correlation coefficients, null hypothesis No. 4 was not accepted.

The fifth analysis included evaluation scores and the measured personality factors of the student teacher-cooperating teacher dyad. Null hypothesis No. 5 stated:

> HO_5 There is no statistically significant correlation between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and differences in the measured personality factors of the student teacher and his cooperating teacher.

Differences between scores on personality factors for student teachers and their cooperating teachers were computed in Table 4, page 37. These differences were correlated with self-evaluation scores of the student teacher and teacher-assigned evaluation scores (see Table 16).

As shown in Table 16, there are significant direct relationships between difference in Masculinity scores and self-evaluation scores

TABLE 16

PRODUCT-MOMENT CORRELATIONS BETWEEN EVALUATION SCORES AND MEASURED PERSONALITY FACTORS OF THE STUDENT TEACHER-COOPERATING TEACHER DYAD

Personality Factors (Difference Scores)	Evaluation Scores	
	Self-Evaluation	Teacher-Evaluation
General Activity	-.10	.09
Restraint	.09	-.02
Ascendance	.14	.34*
Sociability	-.08	.25
Emotional Stability	.09	.13
Objectivity	-.02	.11
Friendliness	.05	-.05
Thoughtfulness	.12	.09
Personal Relations	-.19	.14
Masculinity	.29*	.21

*$r_{.95}$ (2,43 df) = .29.

(r = .29), and difference in Ascendance scores and teacher-assigned evaluation scores (r = .34). Student teachers whose scores on the Masculinity factor were most like those of their cooperating teachers tended to rate their own teaching performance more highly than did those student teachers whose Masculinity scores varied a great deal from the Masculinity scores of their cooperating teachers. Cooperating teachers judged their student teachers' performance to be better when the student teachers' Ascendance score was similar to their own. On the basis of

these significant correlation coefficients, null hypothesis No. 5 was not accepted.

The sixth analysis included personality difference scores and difference in evaluation scores of the student teachers and their cooperating teachers. Null hypothesis No. 6 stated:

HO_6 There is no statistically significant correlation between the personality difference scores and the difference in evaluation scores in the student teacher-cooperating teacher dyad.

Differences between scores on personality factors for student teachers and their cooperating teachers were computed in Table 4, page 37. Differences between the self-evaluation scores of the student teachers and the teacher-assigned evaluation scores were computed in Table 8, page 44. These two sets of difference scores were correlated and the results are shown in Table 17.

There are significant indirect relationships between the evaluation difference scores and the difference scores of the personality factors Sociability ($r = -.32$) and Personal Relations ($r = -.39$). Student teacher and cooperating teacher dyads who showed the most difference in the personality factors of Sociability and Personal Relations tended to show the least difference in evaluation scores. The student teacher and cooperating teacher dyads who made similar scores on the Sociability and Personal Relations factors tended to differ more in their views of the student teacher's teaching ability. On the basis of these significant correlation coefficients, null hypothesis No. 6 was not accepted.

TABLE 17

PRODUCT-MOMENT CORRELATIONS BETWEEN PERSONALITY DIFFERENCE SCORES AND EVALUATION DIFFERENCE SCORES

Personality Factors (Difference Scores)	Evaluation Difference Scores
General Activity	-.18
Restraint	.11
Ascendance	-.17
Sociability	-.32*
Emotional Stability	-.03
Objectivity	-.13
Friendliness	.10
Thoughtfulness	.03
Personal Relations	-.39*
Masculinity	.16

*$r_{.95}$ (2,43 df) = .29.

The seventh analysis included the teacher-assigned evaluation score and the cooperating teachers' ages. Null hypothesis No. 7 stated:

HO_7 There is no statistically significant correlation between the teacher-assigned evaluation score and the age of the cooperating teacher.

The age groups of the cooperating teachers are presented in Table 5, page 41. Individual ages were used in computing the correlation with teacher-assigned evaluation scores. No systematic relationship was shown to exist between these two variables (r = .004); therefore, null hypothesis No. 7 was not rejected.

The eighth and final analysis included the teacher-assigned evaluation score and the teacher's years of teaching experience. Null hypothesis No. 8 stated:

HO_8 There is no statistically significant correlation between the evaluation score assigned by the cooperating teacher and the amount of teaching experience of the cooperating teacher.

The years of teaching experience of the cooperating teachers are shown by groups in Table 7, page 43. Individual years of teaching experience were used in computing the correlation with teacher-assigned evaluation scores. No systematic relationship was shown to exist ($r = .04$); therefore, null hypothesis No. 8 was not rejected.

V. SUMMARY

This chapter has presented the findings based on the analysis of data collected in this study to determine the effects of certain independent variables on final evaluation scores. Eight null hypotheses were tested. Results of the ANOVA tests and Pearson product-moment correlations have been reported. The F value for each ANOVA test was not statistically significant. Some of the correlations produced significant differences. Three of the eight null hypotheses were not accepted.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes a brief review of the study, the major findings which resulted from the analyzed data, and the conclusions which seemed warranted based on the findings. In addition, recommendations for further research and for student teaching programs are presented.

I. SUMMARY

The Purpose

The primary purposes of this study were (1) to describe selected characteristics of vocational student teachers (sex, service area, and measured personality factors) and their cooperating teachers (sex, service area, age, level of educational attainment, years of teaching experience, and measured personality factors), and (2) to determine what effect these selected characteristics might have on the performance of the student teacher as perceived by himself as well as by the cooperating teacher.

Methods and Procedures

This study was a descriptive survey of selected characteristics of all vocational students who were enrolled in student teaching at The University of Tennessee, Knoxville, during the Spring quarter of 1976 and their cooperating teachers. A total of forty-three student

teachers were so enrolled: eleven in Agricultural Education, eight in Business Education and Distributive Education, eleven in Home Economics, and thirteen in Industrial Education.

The Guilford-Zimmerman Temperament Survey was administered to all student teachers and their cooperating teachers during the Spring quarter of 1976. Scores were recorded for each of the ten personality factors in the Survey. In addition the cooperating teachers were asked to complete a researcher-developed information sheet indicating date of birth, years of teaching experience, and level of educational attainment.

Student teachers were asked to complete an evaluation form on their teaching ability three weeks before the end of the quarter. The cooperating teachers were asked to evaluate the student teachers' teaching ability using the same form. The evaluation form had been developed at The University of Tennessee, Knoxville, and was normally used by the college coordinators. It was divided into fourteen rather distinct competencies, twelve of which were used in this study. The scores for each competency were summed to give one total evaluation score on each completed evaluation form.

Eight separate analyses were computed to compare the independent variables--raw scores from each factor of the Survey, sex, and service area of both student teachers and cooperating teachers; and age, years of teaching experience, and educational attainment level of the cooperating teachers--with the dependent variables of self-evaluation score of the student teacher and the teacher-assigned evaluation score. The one-way classification analysis of variance, two-way classification

analysis of variance, and Pearson product-moment correlation were used to test each hypothesis at the .05 level of significance. Two computer systems were utilized: the Statistical Package for the Social Sciences (SPSS) and the Statistical Analysis System (SAS).

Findings

The major findings of this study were:

1. No statistically significant differences were found between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the vocational service area taught.

2. No statistically significant differences were found between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the sex combinations of the student teacher-cooperating teacher dyads.

3. No statistically significant differences were found between the self-evaluation score of the student teacher or the evaluation score assigned by the cooperating teacher and the educational attainment level of the cooperating teacher.

4. Statistically significant correlations were found ($P < .05$) between the self-evaluation score of the student teacher and two of the measured personality factors of the student teacher. Sociability and Personal Relations each produced statistically significant negative correlations. No statistically significant correlations were found between the evaluation score assigned by the cooperating teacher and the measured personality factors of the student teacher.

5. A statistically significant correlation was found ($P < .05$) between the self-evaluation scores of the student teachers and the differences in the measured personality factors of the student teacher and his cooperating teacher. The difference score on the Masculinity factor produced a significant positive correlation. A statistically significant correlation was found ($P < .05$) between the evaluation scores assigned by the cooperating teacher and differences in the measured personality factors of the student teacher and his cooperating teacher. There was a significant direct relationship between teacher-assigned evaluation scores and difference scores for the Ascendance personality factor.

6. Statistically significant correlations were found ($P < .05$) between the personality difference scores of all factors and the difference in evaluation scores in the student teacher-cooperating teacher dyad. Difference scores for the personality factors Sociability and Personal Relations produced significant negative correlations with evaluation difference scores.

7. There was no statistically significant correlation between the teacher-assigned evaluation score and the age of the cooperating teacher.

8. There was no statistically significant correlation between the evaluation score assigned by the cooperating teacher and the amount of teaching experience of the cooperating teacher.

II. CONCLUSIONS

The following conclusions were derived from the findings of this study:

1. Student teachers are more likely to think of themselves as competent teachers when they have high scores for the personality factors, Sociability and Personal Relations, or when their scores on the Masculinity factor are similar to those of their cooperating teachers. This appears to be substantially in agreement with the findings of Morgan and Woerdehoff (1969) and Lucio and Wenger (1961). Their findings indicated that a better teaching performance could be expected when the student teacher obtained a high score on the personality factor of Sociability.

2. Cooperating teachers are more likely to assign higher evaluation scores to student teachers who have scores similar to their own for the personality factor Ascendance. Hill (1970) and McLaughlin (1970) found that a higher evaluation score was likely to be assigned to the person being evaluated if his personality was similar to that of the evaluator. Their personality matching was done using general classifications of personality types. Since personality similarities in this study were noted by individual personality factors, this study only partially supports the findings of Hill and McLaughlin. Similarity in eight of the personality factors failed to produce a significant correlation with evaluation scores; therefore, the studies of Start (1968) and Hohman (1972) could also gain partial support by the findings of this study. Start concluded that either very similar or very

different personality scores could produce higher ratings. Hohman found that those student teachers with personalities very different from their cooperating teachers received higher ratings.

3. Student teachers and cooperating teachers tend to agree with each other concerning the student teachers' performance if their scores on the personality factors, Sociability and Personal Relations, are significantly different. Byrne et al. (1967) found that individuals with similar personalities were able to establish better communication. Their findings were not supported by this study. The findings of this study tend more to support the research of Leslie (1971) which indicated that personality differences do not effect the outcome of the student teaching experience.

4. Evaluation scores are not influenced by the independent variables of sex, service area, age of the cooperating teacher, teaching experience of the cooperating teacher, or educational attainment level of the cooperating teacher.

III. RECOMMENDATIONS

Recommendations Based on the Findings from This Study

To the extent that the subjects in this study are representative of vocational student teachers in other colleges or universities, the following recommendations seem warranted:

1. Personality tests should be given to all prospective student teachers and cooperating teachers.

2. When placing student teachers, college coordinators should particularly consider the personality factors, Ascendance, Sociability, Personal Relations, and Masculinity.

2a. Student teachers who have a low confidence level in their own abilities should be placed with cooperating teachers whose Masculinity scores are similar to their own.

2b. Student teachers should be placed with cooperating teachers whose Ascendance scores are similar to their own.

2c. Student teachers and cooperating teachers with high difference scores on the personality factors, Sociability and Personal Relations, should be encouraged to communicate with each other more effectively concerning the evaluation of the student teachers' performance.

Recommendations for Further Research

1. The present study should be refined and replicated over the course of several quarters. This approach would provide a larger number of student teachers from whom to obtain data.

2. The present study should be refined and replicated with all student teachers. This procedure would allow comparisons to be made between vocational and non-vocational student teachers.

3. Additional predictor variables should be explored that might account for more of the total variance in the evaluation scores than do the predictor variables employed in this study.

4. Further attention should be given to the development and refinement of measuring instruments which are appropriate for measuring success in the student teaching experience.

5. Further study should be made of the influence of the personality factor, Sociability.

6. It is recommended that the campus student teaching office maintain a data bank on all cooperating teachers and student teachers including follow-up data for the student teachers. A common body of raw data collected over an extended period of time would facilitate more comprehensive research and make possible more longitudinal studies of such persistent problems as the measurement of teacher effectiveness.

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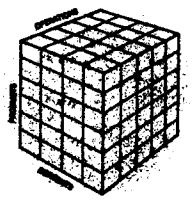
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APPENDICES

APPENDIX A



SHERIDAN PSYCHOLOGICAL SERVICES, INC.

P. O. Box 6101 • Orange, California 92667 • (714) 639-2595

August 6, 1976

Ms. Jane Lewis
Barclay House, Apt. 302
1631 W. Laurel Avenue
Knoxville, TN 37916

Dear Ms. Lewis:

With regard to your request for permission to use portions of Table 1 from the Manual for the Guilford-Zimmerman Temperament Survey in your dissertation, we are pleased to grant you permission provided you include a phrase similar to the following in conjunction with this copyrighted material:

> "Reproduced by permission of Sheridan Psychological Services, Inc."

It is also permissible to remove item counts from the table since, as you say, they do not add up to 30 in each instance. The reason for this, in case you are interested, is that in some cases a single item loaded significantly on the factor but defied description within the subcategory to which it belonged. In the forthcoming new manual there will be some revision. In the meantime, feel free to procede according to your request of July 26.

Sincerely,

Joan S. Guilford, Ph.D.

Joan S. Guilford, Ph.D. by SS
Executive Director

JSG:ss

APPENDIX B

The University of Tennessee
College of Education

EVALUATION OF STUDENT TEACHING

Name of student teacher_____
LAST FIRST MIDDLE

_____ S - with recommendation for certification

_____ N/C

Coordinator_____

Student Teaching Center_____

Subject area or grade level in which student teaching was completed_____

Quarter_____ **Year**_____

I request that this evaluation become a part of my placement record.

Signature _____

I hereby grant permission to the College of Education, University of Tennessee to extend to prospective employers the contents of this evaluation.

Signature _____

Directions for evaluation: Following are student-teacher characteristics believed to have an influence on teaching effectiveness. For each characteristic place an X on the line at a point on the continuum which best represents the student teacher for that particular characteristic. A rating of "adequate" on this scale indicates that the characteristic being considered is acceptable and that the student teacher will probably be able to operate effectively in a normal classroom situation. Deviations on either side of "adequate" reflect the coordinator's judgment that the student teacher will be either more or less effective than "adequate" for that particular characteristic in a normal classroom situation. Judgments are made on the basis of the traits of student teaching performance, not on the basis of comparison with teachers who have experience.

Please note that there are blank spaces following each characteristic. The spaces make it possible for the coordinator to supplement the rating scale with pertinent observations which will result in a more accurate description of the student teacher. The coordinator may offer additional comments in the space provided for additional comments on the final page.

Excellent:	**Good:**	**Adequate:**	**Less-than-adequate:**	**Unacceptable:**
Reveals qualities found in only the most effective and creative student teachers.	Somewhat superior to adequate. Goes beyond doing only what needs to be done.	Acceptable or "average." Rarely goes beyond doing only what needs to be done.	Acceptability only marginal. The quality of the characteristic needs improvement.	Quality of the characteristic is below minimum standards for certification.

1 2 3 4 5 6 7 8 9 10

1. Description of student teacher's teaching personality. Proper perspective of teaching-learning situations is maintained by the student teacher; student teacher remains "open" and flexible.

1 2 3 4 5 6 7 8 9 10

Comment:_____

Excellent: **Good:** **Adequate:** **Less-than-adequate:** **Unacceptable:**

1 2 3 4 5 6 7 8 9 10

2. Apparent health and vitality:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

3. Voice and language usage:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

4. Ability to work cooperatively with other staff members:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

5. Ability to profit from feedback supplied by observational techniques:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

6. Ability to make realistic decisions; has maturity of judgment:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

_____

Excellent: **Good:** **Adequate:** **Less-than-adequate:** **Unacceptable:**

1 2 3 4 5 6 7 8 9 10

7. Has an understanding and a working knowledge of content in teaching areas; understands underlying principles:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

8. Competence in effectively preparing for lessons:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

9. Classroom management:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

10. Ability to perform a variety of critical teaching tasks as identified by analysis of teaching techniques (leading discussions, giving directions, etc.):

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

11. Competency in evaluating students (use of teacher-made tests, reasonable proportion of failures, etc.):

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

_____

Excellent: **Good:** **Adequate:** **Less-than-adequate:** **Unacceptable:**

1 2 3 4 5 6 7 8 9 10

12. Ability to motivate learners:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

13. Description of student teacher's attitudes toward children. Student teacher is fair and just in dealing with pupils; is responsive to pupils and takes a "clinical" approach to misbehavior:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

14. Commitment to student teaching:

1 2 3 4 5 6 7 8 9 10

Comment: _____

_____

_____

Additional Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX C

COOPERATING TEACHER INFORMATION SHEET

Name: _____

Date of Birth: _____

Teaching Experience: _____ years and _____ months

Highest Educational Attainment (check one):

_____ Bachelor's degree

_____ Bachelor's degree + additional coursework

_____ Master's degree

_____ Master's degree + additional coursework

_____ Educational Specialist degree

_____ Doctorate

I give my permission for this information and my scores on the Guilford-Zimmerman Temperament Survey to be used by this researcher, understanding that none of the scores will be identified with my name in publication.

_____
(Signature)

APPENDIX D

STUDENT TEACHER PERMISSION SLIP

I give permission for my scores on the Guilford-Zimmerman Temperament Survey and my evaluation scores to be used by this researcher, understanding that none of the scores will be identified with my name in publication.

_____
(Signature)

APPENDIX E

To: All Vocational Cooperating Teachers

From: Jane Lewis, Vocational-Technical Education

A study is being conducted in the Vocational-Technical Education Department at The University of Tennessee on the placement of student teachers. We need your help! Please complete the enclosed information sheet and sign your name at the bottom.

After carefully reading the instructions on the Guilford-Zimmerman Temperament Survey Booklet, place your name on the enclosed answer sheet and mark each item. There are no right or wrong answers and the test is not timed, but you should be able to complete it in about forty-five minutes.

An evaluation sheet should be completed for each student teacher with whom you are working this quarter. Please do not confer with your student teacher regarding this evaluation form. Record the name of your student teacher on the evaluation form and place your name in the space labeled "coordinator." Mark the evaluation sheet according to the directions. No signatures or comments are necessary.

Before sealing the envelope be sure you have enclosed:

1. Cooperating Teacher Information Sheet
2. Guilford-Zimmerman Test Booklet
3. Guilford-Zimmerman Answer Sheet
4. Evaluation Form(s)

Thank you for helping with this study!

APPENDIX F

To: All Vocational Student Teachers

From: Jane Lewis, Vocational-Technical Education

A study is being conducted in the Vocational-Technical Education Department at The University of Tennessee on the placement of student teachers. We need your help! Please sign the statement giving permission for your scores to be used in this study.

After carefully reading the instructions on the Guilford-Zimmerman Temperament Survey Booklet place your name on the enclosed answer sheet and mark each item. There are no right or wrong answers and the test is not timed, but you should be able to complete it in about forty-five minutes.

Please evaluate your own performance as a student teacher on the enclosed evaluation form. Do not confer with your cooperating teacher regarding this evaluation form. Record your name and mark the form according to the directions. No signatures or comments are necessary. This form is to be used for the purpose of this study only.

Before sealing the envelope be sure you have enclosed:

1. Student Teacher Permission Slip
2. Guilford-Zimmerman Test Booklet
3. Guilford-Zimmerman Answer Sheet
4. Evaluation Form

Thank you for helping with this study!

VITA

Alice Jane Lewis, the daughter of Fred Lewis and the late Cleo Lewis, was born in Rutherford County, North Carolina. She attended public schools in Rutherford County, North Carolina, and was graduated from Rutherfordton-Spindale Central High School. She received the Bachelor of Arts degree from Meredith College in 1963 with a major in Home Economics. She received a Master of Science degree, with a major in Home Economics Education, from The University of North Carolina at Greensboro, in 1968.

She taught Home Economics at Lexington Senior High School, Lexington, North Carolina; Kindergarten at Cecil Elementary School, Lexington, North Carolina; and Home Economics Education at Appalachian State University, Boone, North Carolina. She entered the Graduate School at The University of Tennessee, Knoxville, in September, 1974, as an EPDA Fellowship recipient and received the Doctor of Education degree with a major in Vocational-Technical Education in December, 1976. In the summer of 1976, she accepted an assistant professorship in Home Economics Education at Iowa State University.

She is a member of the American Home Economics Association, American Vocational Association, and the Association of Teacher Educators. Honorary memberships include Omicron Nu, Phi Delta Kappa, Pi Lambda Theta, and Omicron Tau Theta.