The relationship between cooperating teachers' feedback styles and the intrinsic motivation of student teachers

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The relationship between cooperating teachers' feedback styles and the intrinsic motivation of student teachers

Weber, Richard Newton, Ed.D.
The College of William and Mary, 1991

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THE RELATIONSHIP BETWEEN COOPERATING TEACHERS' FEEDBACK STYLES AND THE INTRINSIC MOTIVATION OF STUDENT TEACHERS

A Dissertation
Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Richard N. Weber
May 1991
THE RELATIONSHIP BETWEEN COOPERATING TEACHERS' FEEDBACK STYLES AND THE INTRINSIC MOTIVATION OF STUDENT TEACHERS

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DEDICATION

This dissertation is dedicated to my parents, Willard and Rita, and to my wife Ann. These three people have taught me most of what I know, especially the value of wisdom and kindness.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS...........................................vi
LIST OF TABLES..............................................vii
ABSTRACT..................................................viii
CHAPTER

I. THE PROBLEM.............................................2
   Introduction.......................................2
   Theoretical Rationale.............................4
   Statement of the Problem..........................8
   Research Hypotheses...............................8
   Operational Definitions...........................9
   Significance of the Study.......................12
   Limitations of the Study.......................14
   Major Assumptions...............................15

II. REVIEW OF LITERATURE..............................17
   Introduction.......................................17
   Supervision and Motivation.....................18
   Development of Cognitive Evaluation
       Theory.....................................33
   Student Teaching and Student
       Teachers' Attitudes.......................43
   Summary...........................................51

III. PROCEDURES...........................................54
   Introduction.......................................54
   Sample and Accessible Population..............55
   Instrumentation..................................56
   Data Collection Procedures....................60
   Data Analysis.....................................62
CHAPTER

IV. ANALYSIS OF RESULTS ..........................65
   Demographics of the Sample ..................66
   Piloting of Cooperating Teacher
   Questionnaire ..............................69
   Tests for Changes in Intrinsic
   Motivation .................................71
   Using CTQ to Predict Mean Differences.....75
   Correlations of Cooperating Teacher
   Questionnaire with Interest-Enjoyment,
   Effort-Involvement, Pressure-Tension,
   Competence, and Total Intrinsic
   Motivation .................................77
   Summary .....................................79

V. CONCLUSIONS, DISCUSSION, IMPLICATIONS,
   AND SUGGESTIONS FOR FURTHER RESEARCH...81
   Conclusions ................................84
   Discussion ..................................86
   Implications ...............................91
   Suggestions for Further Research ..........93

REFERENCES .....................................97
APPENDICES .....................................112
VITA .............................................133
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LIST OF TABLES

1. Pretest to Posttest Homogeneity of Responses by Sex ..................................67
2. Pretest to Posttest Homogeneity of Responses by Age ..................................68
3. Pretest to Posttest Homogeneity of Responses by Placement Level ....................68
4. Cooperating Teacher Questionnaire Scores .............................................70
5. Changes on Intrinsic Motivation Inventory ..............................................73
6. Differences in Means by Sex ..........................................................75
7. Differences in Means by Placement Level .............................................75
8. T-Tests of Intrinsic Motivation Inventory Scores of Student Teachers Grouped by Their Cooperating Teachers' Scores on the CTQ .............................77
9. Correlation of Cooperating Teacher Questionnaire Scores with Intrinsic Motivation Inventory Subscales and Total Scores ..................................78

vii
THE RELATIONSHIP BETWEEN COOPERATING TEACHERS' FEEDBACK STYLES AND THE INTRINSIC MOTIVATION OF STUDENT TEACHERS

ABSTRACT

This research sought to answer the question: Does the relationship between supervisors' feedback styles and supervisees' levels of intrinsic motivation and the subscales of intrinsic motivation, found in other settings, exist in student teaching? The sample consisted of 252 student teachers from Old Dominion University and their cooperating teachers. This group included all of the spring, 1991, semester student teachers who chose to participate (30 chose not to) and represented a wide variety of cultural and economic backgrounds.

A correlational methodology was used, employing Pearson's r values for the relationships between cooperating teachers' feedback styles as measured on the Cooperating Teacher Questionnaire and total intrinsic motivation and each of four subscales (Interest-Enjoyment, Effort-Involvement, Pressure-Tension, and Competence) of the Intrinsic Motivation
Inventory. Significant changes were recorded in intrinsic motivation and each subscale of the inventory from pretest to posttest in the seven week student teaching placement; however, only Effort-Involvement was found to correlate at a significant level ($p < .05$) with feedback style. The study provided data on the entry motivation and changes in the motivation of student teachers, and piloted the Cooperating Teacher Questionnaire for measuring cooperating teachers' feedback styles.
THE RELATIONSHIP BETWEEN COOPERATING TEACHERS' FEEDBACK STYLES AND THE INTRINSIC MOTIVATION OF STUDENT TEACHERS
Chapter 1
The Problem

Introduction

Research on the effects of supervisory feedback style on the motivation of those who are supervised has shown a relationship between the supervisor's feedback style and level of intrinsic motivation of the supervisee. This relationship has been shown both with teachers and their students (Deci, Schwartz, Scheinman & Ryan, 1981) and with supervisors and workers (Deci, Connell & Ryan, 1985). These findings suggest a need to examine the effects of cooperating teacher feedback style on student teachers, especially in light of research indicating that student teaching experiences promote attitudes in the student teachers that are less-than-favorable toward children, teaching, and schools (Alper & Retish, 1972; Disposto, 1980). Thus, an important issue in teacher training is the delivery of performance feedback to student teachers (Cronim, 1983; Sykes, 1983; Waxman & Walberg, 1986).
Cooperating teachers appear to be influential actors in the student teaching process (Yee, 1969; Seperson & Joyce, 1973; Friebus, 1977), primarily because they have the daily opportunity to provide performance feedback to their student teachers. University supervisors also provide feedback, direction, and encouragement to student teachers. However, university supervisors battle against the significant constraints of large student teacher loads and a number of other university responsibilities. Moreover, travel to and from the various sites is a further drain on the supervisor's time (Freiberg & Waxman, 1988). The emphasis on cooperating teachers in the current study does not suggest the unimportance of university supervisors in the training of student teachers; rather, it is an attempt to isolate for precise study one factor in their training.

Significant variety exists in the ways that cooperating teachers enact their roles. Their behavior ranges from very close supervision to letting the student teacher "sink or swim." The amount and kind of performance feedback which the student teacher receives depends on the orientation of the cooperating teacher in that regard. Based on the perceived importance of
cooperating teachers' feedback styles for their student teachers, this research systematically investigated cooperating teachers' feedback styles and their influence on student teachers' intrinsic motivation.

Theoretical Rationale

Relationship between feedback style and motivation. This investigation is a continuation of the work of several researchers regarding the importance of supervisors' feedback styles on supervisees' motivation. Deci, Schwartz, Scheinman, and Ryan (1981) categorized feedback styles and researched the relationship of feedback style orientations with student motivation. They found a relationship between the disposition of teachers toward control versus autonomy and the intrinsic motivation for student learning—a disposition toward autonomy on the part of the teacher was related to high intrinsic motivation to learn on the part of the students. Green (1983) also found this relationship in a South African primary school. Deci et al. (1985) found the same relationship between supervisors and their supervisees in business settings. The current investigation
attempted to determine whether this relationship exists in the student teaching process.

**Intrinsic motivation.** Motivation consists of the factors which energize and direct behavior. Much human behavior is energized and directed by physiological needs. However, human beings display a substantial number of behaviors that do not appear to be related to the reduction of bodily needs but that seem instead to be motivating in themselves. For example, some people climb mountains as recreation. Such behaviors, when they are performed without expectation of some external reward, are intrinsically motivated. Drawing on incongruity theories and theories that focus on the needs for competence and self-determination (Festinger, 1957; Kagan, 1972; Lanzetta, 1971; McClelland, Atkinson, & Clark, 1953; Harter, 1978; White, 1959)—Deci and Ryan (1985) offered this conceptualization of intrinsic motivation:

**Intrinsic motivation is based in the innate, organismic needs for competence and self-determination.** It energizes a wide variety of behaviors and psychological processes for which the primary rewards are the experiences
of effectance and autonomy....The intrinsic needs for competence and self-determination motivate an ongoing process of seeking and attempting to conquer optimal challenges. When people are free from the intrusion of drives and emotions, they seek situations that interest them and require the use of their creativity and resourcefulness. They seek challenges that are suited to their competencies, that are neither too easy nor too difficult. When they find optimal challenges, people work to conquer them and they do so persistently. In short, the needs for competence and self-determination keep people involved in ongoing cycles of seeking and conquering optimal challenges. (pp. 32-33)

As conceptualized by Deci, intrinsic motivation is integrally related to emotions. Some of the emotions most closely related to intrinsic motivation are interest, enjoyment, and excitement. People tend to perform behaviors if they experience these emotions in the process. Interest derives, to a large extent, from optimal challenge, though other factors influence the development of interests. The emotions of enjoyment and excitement are connected with experiences of
competence and autonomy. Intrinsic motivation, then, is associated with interest and enjoyment, feelings of being competent and self-determining, and a perception of internal locus of causality for the person's behavior.

**Orientation toward control versus autonomy.** External events have both a controlling aspect and an informational aspect (Deci & Ryan, 1980). The function of the controlling aspect is to bring about a certain behavioral outcome in the recipient, and the function of the informational aspect is to convey relevant information—such as how well the recipient is doing at performing a task. When the informational aspect is more salient to the recipient, the external event tends to increase the recipient's intrinsic motivation. When the controlling aspect of the external event is more salient to the recipient, the external event will tend to decrease intrinsic motivation (See, for example, Enzle & Ross, 1978; Pittman, Davey, Alafat, Wetherill, & Kramer, 1980; Rosenfield, Folger, & Adelman, 1980).

If rewarders or communicators are oriented toward being controlling, it is likely that the controlling aspect of their communications or rewards is likely to be more salient. On the other hand, if rewarders or
communicators are oriented more toward supporting autonomy than toward controlling the recipient's behavior, the controlling aspect of the rewards or communications are less likely to be salient.

Statement of the Problem

This research sought to answer the question: Does the relationship between supervisor's feedback style and supervisee's level of intrinsic motivation and the subscales of intrinsic motivation, found in other settings, exist in student teaching?

Research Hypotheses

1. There is a significant (p < .05) relationship between the supervisory feedback style of cooperating teachers and the intrinsic motivation to teach of the cooperating teachers' student teachers at the conclusion of the student teaching experience.

2. There is a significant (p < .05) relationship between the supervisory feedback style of cooperating teachers and the subscales of the Intrinsic Motivation Inventory (IMI) for the cooperating teachers' student teachers. These subscales are Interest-Enjoyment, Effort-Involvement, Pressure-Tension, and Competence.
Operational Definitions

For the purposes of this study, the following definitions applied:

Cognitive Evaluation Theory. Cognitive Evaluation Theory is an organismic theory of motivation; that is, it is a theory which treats stimuli as affordances or opportunities which the organism can use in satisfying needs. Cognitive Evaluation Theory was developed to deal with the effects of external events on intrinsic motivation and motivationally relevant processes, and it analyzes the effects of events relevant to the initiation and regulation of behavior in terms of their meaning for the person's self-determination and competence (Deci & Ryan, 1985).

Student teachers. Student teachers were defined as college students enrolled in the prescribed field teaching experience to satisfy state certification requirements for teaching credentials. For this study, the population of student teachers enrolled in the spring, 1991, semester at Old Dominion University, was used. Data were collected on them in the first of their two placements only.
Cooperating teachers. Cooperating teachers are certificated public school teachers who have been chosen to provide classroom teaching experience and on-site supervision for student teachers. For this study, the teachers who were matched with the above-named student teachers were used.

Feedback. Feedback is information provided by the cooperating teacher to the student teacher on the appropriateness and effectiveness of the teaching demonstrated by the student teacher and on other behaviors relevant to the student teacher's preparation for the job of teacher.

Feedback style. Feedback style is the disposition of the cooperating teacher toward control versus autonomy in the administration of performance feedback to the student teacher. Feedback style was measured by the Cooperating Teacher Questionnaire.

Intrinsic motivation. Intrinsic motivation energizes behaviors that are performed without expectation of some external reward. It is based in the innate, organismic needs for competence and self-determination. For the purposes of this study, intrinsic motivation is defined as the student teachers' scores on the Intrinsic Motivation Inventory
(IMI) with regard to their student teaching experiences.

**Perceived competence.** Perceived competence is the feeling on the part of the student teachers of being prepared and able to perform the tasks required of them. For the purposes of this study, it is reflected as a subscale of the IMI.

**Interest-enjoyment.** This is a construct representing the student teachers' levels of pleasurable involvement in student teaching. For the purposes of this study, it is reflected as a subscale of the IMI.

**Effort.** Effort is a measure of how hard the student teachers felt that they worked at the tasks of student teaching. For the purposes of this study, it is reflected as a subscale of the IMI.

**Pressure-tension.** This is a construct representing the extent to which the student teachers felt compelled or forced to perform tasks in specified ways. For the purposes of this study, it is reflected as a subscale on the IMI.
Significance of the Study

The significance of this research comes from the importance attached to intrinsic motivation in both learning and working effectively over time. Bruner (1962) argued that helping children to think required freeing them from rewards and punishments. Neill (1960), founder of Summerhill School, advised against the use of rewards and punishments with children. Holt (1964) and Montessori (1967) have also cautioned against the use of rewards and punishments because of their impact on intrinsic motivation.

As conceptualized and operationalized for this research, the level of intrinsic motivation of the student teacher has implications for the effectiveness of the training and performance of the student teacher and the potential performance of that person as a teacher. Much of the research available on student teaching focuses on aspects of the experiences perceived by the student teacher as negative. Less is available on the factors experienced as motivating and positive. Efforts to reduce dissatisfying influences in student teaching without considering what makes field experience positive and satisfying may be
inadequate (a consideration suggested by Herzberg, 1959). For these reasons, it was important to consider the cooperating teacher's ability to provide autonomy promoting feedback as a motivationally relevant variable.

One further reason for the importance of this study was the fact that the amount and type of training the cooperating teacher receives has been shown to affect the quality of the student teacher's experience (Applegate & Lasley, 1984; Killian & McIntyre, 1986) so that examination of the effects of autonomy promoting feedback on student teachers has implications for the training and/or selection of cooperating teachers.

In summary, significant effects of student teaching on the motivation of the student teachers have been demonstrated (Karmos & Jacko 1977; Manning 1977). On this point Hughes and Hukill (1982) observed: "Little has been written on the selection of cooperating teachers. Most of this work has been based primarily on craft knowledge regarding the kinds of persons who will be good at supervising student teachers" (p. 62). Noting the same lack of information that stimulated Hughes and Hukill, Killian and McIntyre (1986) observed that despite the importance of the
cooperating teacher, few studies had examined the role or performance of the cooperating teacher. The goals of this research were thus threefold:

1. Data were collected that filled gaps in the literature on student teaching and that had implications for the evaluation and improvement of student teaching programs, particularly the inservice training of cooperating teachers;

2. Data were gathered on the validity of a new instrument for research on student teaching: the Cooperating Teacher Questionnaire; and

3. Deci and Ryan's Cognitive Evaluation Theory was tested in the student teaching setting.

Limitations of the Study

The population of cooperating teachers and student teachers was limited to a sample from public schools in Virginia. Furthermore, the duration of student teaching as practiced at Old Dominion University, seven weeks in each placement, differed from the length of the student teaching experience at some other colleges and universities. Therefore, the generalizability of this study may be restricted.
Major Assumptions

A major assumption in the study was that cooperating teachers served as the primary sources of supervision feedback for student teachers on a daily basis. While university supervisors provide periodic observation and conferencing of student teachers and bring support and expertise to the student teachers, cooperating teachers are the primary reference group for student teachers. The emphasis on cooperating teachers in this study is justified by the intensity of the relationship between cooperating teachers and student teachers, the amount of time they spend together, and the common challenges they face in working with their classes. This study sought to clarify the relationship between cooperating teachers' feedback styles and the intrinsic motivation of their student teachers and to facilitate further examination of the role of university supervisors and the interaction of supervisors, cooperating teachers, and student teachers in later research.

A further assumption of the study was that the impact of feedback style of the cooperating teacher was significant within the student teaching timeframe.
Studies of students and their teachers (Deci et al., 1981) and workers and their supervisors (Deci et al., 1985) both showed significant effects within a few weeks of interaction. Thus, the assumption seems justified. A large body of research indicates that changes in administration of feedback affect levels of intrinsic motivation for a given purpose; however, it is difficult to judge how long lasting the changes are.
Chapter 2
Review of the Related Literature

Introduction

To establish the place of the current study in the research literature it is necessary to review three categories of research. Each of these categories is relevant to the relationship of cooperating teachers' feedback style to student teachers' intrinsic motivation. The first category is that of research on supervision in work and school settings, focusing on the impact of supervision on motivation. The second is the category of research which differentiates Deci and Ryan's cognitive evaluation theory from other major theories of motivation and which supports the use of cognitive evaluation theory as the theoretical rationale for the current study. The third category is that of research on the feelings, attitudes, and behavior of student teachers.
Supervision and Motivation

**Early studies.** That the motivation of workers could be manipulated was made clear in the famous Hawthorne Studies (Roethlisberger & Dickson, 1939). These studies pointed the direction for further research with the finding that under certain conditions of leadership (particularly worker recognition and worker participation in decision making) the workers reached high levels of cohesiveness and morale and increased productivity.

Following the Hawthorne Studies, the behavioral sciences were gradually incorporated into management thinking. Innovative managers, notably Henry Dennison (1931) and William B. Given (1949) both practiced and described management systems which attempted to capitalize on the findings of the Hawthorne Studies by using cooperative methods of supervision with the workers. These early efforts to understand the effects of supervisory practices were hampered by lack of clearly defined theoretical constructs and effective research methods. However, the attempts to implement the findings of the Hawthorne Studies refined what was
known regarding the impact of supervision in the workplace.

Efforts toward a theoretical foundation. One influential attempt to provide the theoretical foundation for the study of motivation was the work of Abraham Maslow (1943). Maslow wrote that at the center of human motivation was a need hierarchy—from physiological needs to safety needs to love to esteem to self-actualization. According to Maslow, the lowest level of unmet needs dominated the person's motivation. Physiological needs included food, water, air, and sex. Safety consisted of needs for security, stability, avoiding injury, and others. Love, affection, and belongingness needs were grouped together at the next level. Satisfaction of needs at these levels brought forward needs for achievement, adequacy, and self-confidence. Maslow argued that motivation, rather than being an escape from aversions, was natural growth toward realization of potential. Most important to the understanding of supervision (and to the current study) was Maslow's emphasis on achievement, adequacy, and self-confidence as the needs which most workers seek to satisfy in the work itself.
Despite its widespread acceptance, Maslow's need hierarchy theory remains vulnerable to criticism that little research exists to support it. In his introduction to Maslow's *The Farther Reaches of Human Nature*, Henry Geiger expressed the problem this way: "One may encounter certain difficulties in Maslow, especially if the reader comes to him fresh from studies that are purely analytical and descriptive. Things that are quite clear to Maslow—or have become quite clear to him—may not seem so to the reader" (Maslow, 1971, p. xvii). In the same work Maslow contrasted his method of research with the scientific method:

> It is my personally chosen task to 'speculate freely,' to play hunches, intuitions, and in general to try to extrapolate into the future. This is a kind of deliberate preoccupation with pioneering, scouting, originating, rather than applying, validating, checking, verifying. Of course it is the latter that is the backbone of science. (p. 4)

James V. McConnell criticized Maslow's work as "unproven" and raised the additional concern that his
conclusions were culture bound to the predominantly white middle class work setting (McConnell, 1986, p. 267). McConnell attributed Maslow's wide acceptance among American scholars to the correspondence of his views with some of the scholars' experiences.

Despite these criticisms, and to some extent because of the correspondence of Maslow's need-hierarchy with commonly held views and common experiences in the workplace, Maslow's theory has retained cogency. His theory continues to be a fertile ground for research in motivation.

Building largely upon Maslow's work, Douglas McGregor (1960) presented his views of motivation in two theories about people. By proposing Theory X and Theory Y, McGregor took an important step in clarifying the complex relationships only hinted at in Hawthorne. These theories describe the assumptions which guide supervisors in their behavior toward subordinates. If you treat people with controlling procedures, as if they were lazy and irresponsible (Theory X), they will tend to behave that way, argued McGregor. On the other hand, if you give people a high level of responsibility and supervise less controllingly, the workers should, according to McGregor, perform more responsibly (Theory
Y). These theories refer back to the need hierarchy of Maslow and represent two views of where on the hierarchy most workers are.

Experience in organizations has shown McGregor's view to be too simplistic to explain worker motivation. McGregor himself, in his farewell address after six years as President of Antioch College, recognized the limitations of his philosophy:

I thought I could avoid being a "boss."

Unconsciously, I suspect, I hoped to duck the unpleasant necessity of making difficult decisions, of taking the responsibility for one course of action, among many alternatives, of making mistakes and taking the consequences. I thought that I could operate so that everyone would like me--that "good human relations" would eliminate all discord and disagreement. I couldn't have been more wrong. (McGregor, 1954, pp. 2-3)

Experience has further shown that the maintenance of positive human relations in the workplace is inadequate in itself to facilitate high levels of worker motivation. Nonetheless, the vitality of supervisor/subordinate relationships in the workplace
(as suggested by McGregor) remains an area of interest and continues to stimulate research. Much subsequent research has attempted to specify the construct of "leadership behavior," in recognition that there is an important relationship between supervisor attitude/behavior and supervisee attitude/behavior.

Frederick Herzberg's motivation-hygiene theory (1959) was based on interviews with approximately 200 engineers and accountants from 11 industries. These respondents called attention to achievement, recognition, the work itself, responsibility, and advancement as the motivating factors. Herzberg argued that managers should see that job security, working conditions, salaries, and status issues were handled in a satisfactory way for the workers. He called these "hygiene" factors, and wrote that attention to these factors was a necessary but not sufficient condition for motivation. Although Herzberg's work has been highly influential, testing of his theory in varied work settings has produced much confounding evidence (See, for example, Dunnette, 1965). Still, the motivational factors identified by Herzberg, particularly achievement, have received considerable
attention from researchers in supervision and motivation.

David C. McClelland (1953) described persons with a high need for achievement as preferring moderate risk taking based on skill rather than chance, enjoying novel activity, taking individual responsibility for behavior, desiring knowledge of results, and anticipating future possibilities. McClelland, Atkinson, Clark, and Lowell (1953) demonstrated experimentally that the content of imaginative behavior is sensitive to the motivational state of an individual and that symptoms of different kinds of motivation (e.g., hunger, needs for achievement, affiliation, power) can be used as a basis for diagnosing individual differences in strength of particular motives.

Atkinson (1957) proposed a theory of motivation based on McClelland's findings. It identified the difficulty of a task as the major situational determinant of whether or not a person would be challenged to achieve. The theory further identified the strengths of motives to achieve or to avoid failure as the major personality determinants in whether or not a person would experience challenge and strive to achieve in a given situation. The work of McClelland
and Atkinson has focused supervisors' attention on building moderate challenge and specific knowledge of results into their supervisory roles. Their work also supports the view that accurate performance feedback contributes to high levels of motivation—an essential principle of cognitive evaluation theory and an important assumption of the current study.

Supervisory power. Since cooperating teachers' supervision of student teachers requires the exercise of some form of power over them, it is important to review research on the use of supervisory power. Control in organizations is exercised through some form of bureaucracy (Weber, 1964), and for student teachers adjusting to the bureaucratic structure of schools (reporting to cooperating teachers, who report to department chairpersons or assistant principals, who report to the principal) is one aspect of their training. While in teacher training courses students accept recommendations regarding teaching practice, student teaching requires accommodation to a range of requirements from absolute rules regarding student safety to "should's" and "ought's" of daily life in the school. The primary instrument of this socialization is the cooperating teacher.
French and Raven (1968) identified five bases of power relationships. The first, reward power, means the ability to produce a desired outcome for the supervisee. The second, coercive power, is the ability to punish. The third, legitimate power, results from the bureaucratic structure or the norms of the organization. The fourth, referent power, means identification with the supervisor, a feeling of sharing with or being united with the supervisor in some important way. Lastly, expert power comes from special knowledge and experience with the required tasks.

These bases of power are the independent variables in several investigations of compliance with superiors' instructions and the relationship of kinds of power used with supervisee satisfaction (Bachman, Bowers, & Marcus, 1968). Legitimate and expert power bases showed the highest potential for producing compliance, with referent and reward showing less, and coercive showing still less. Satisfaction with the supervisor was correlated with the choice of power base. The most positive correlations with satisfaction occurred with referent and expert power. The researchers concluded:

People say that they comply with the
requests of organizational superiors primarily because of legitimate and expert power and least of all because of coercive power. Criteria of organizational effectiveness, including the satisfaction of organization members with these organizations, seems related positively to expert power and to referent power and negatively to coercive power. The total amount of control seems also to be related positively to expert and referent bases, and negatively to coercive bases in at least a couple of the organizations studied.

(p. 237)

The conclusions above suggest that positive student teacher attitudes toward teaching would be associated with expert and referent power and that negative attitudes might be associated with reliance by the cooperating teacher on coercive power. Further, the researchers' conclusions are supportive of the view that control versus autonomy in supervision is a relevant issue with regard to student teachers' motivation.
**Leadership style.** Supervisory feedback style as used in the current research is related to the broader category of leadership style; therefore, relevant research in leadership style is reviewed. There is considerable support for the idea that leadership style is a combination of task-oriented behavior and people-oriented behavior (Cartwright & Zander, 1960; Halpin, 1955; Katz, Maccoby, & Morse, 1950; Likert, 1961).

Halpin (1955) operationalized leadership behavior as Initiating Structure and Consideration. To measure leadership behavior and ideology he used the Leadership Behavior Description Questionnaire. In a study of aircraft commanders and their subordinates and educational administrators and their subordinates Halpin established that leadership behavior and ideology could be measured and that there were individual and group differences on these measures.

One way of presenting the two dimensions of leadership style is with the Managerial Grid (Blake & Mouton, 1964). The grid has two axes: one shows concern for people and the other concern for production. For the supervisor, these two concerns interact with one another as he or she works with supervisees. Blake and Mouton concluded that managers
who score high on both axes tend to achieve optimum results in most organizations.

Likert's (1961) research, involving more than 220,000 supervisors and supervisees in industrial organizations, supports the view that leadership that is task oriented and participative can facilitate high levels of employee performance. Likert identified causal variables (organizational climate, supervisory leadership, and structure of the organization) which determine the quality of a range of intervening variables (including effective interaction, lateral communication, sharing of influence, and others) which in turn determine the levels of output variables for the organization. For schools, the output variables are such measures as dropout rate, educational achievement levels, teacher satisfaction, and student and teacher absence rates.

Leadership in schools. In the past three decades, research on participative management in industry has included laboratory simulations, observational studies, and evaluations of experimental changes in working companies. Marrow, Bowers, and Seashore (1967) reported marked improvements in organizational effectiveness in the clothing industry following
participative changes. Likert (1967) described several organizational-change studies showing the advantages of participative management. More recently, several researchers have studied the role of administrators in creating a more participative school climate (Keefe, Kelley, & Miller, 1985). The connection between more participative methods and higher employee motivation in industry and in education has been further stressed by popular writers Tom Peters and Nancy Austin (Peters & Austin, 1985; Peters, 1988).

To assess the extent to which principals' established motivating conditions in schools, Fox (1986), cited Marrow et al. (1967) as background and extracted items from an extensive literature search to create an instrument to study principals' capacity for providing the conditions for teacher motivation. In his study, 100 randomly selected school principals were assessed by 10 teachers working for each principal, by the superintendent of the principal, and by self reports by each principal. This massive effort enabled the researcher to draw conclusions about the place of each of the items in teacher motivation. Predictably, the roles in teacher motivation of feedback, security, growth opportunities, intrinsic and extrinsic rewards,
success, recognition, and confidence in the principal were confirmed. These conditions, which were motivating to teachers, were all to some extent under the control of the principals in the schools which were studied.

In an attempt to identify specific behavioral characteristics of effective principal leadership, Lucietto (1970) studied the relationship between the language usage of school administrators and subordinates' perceptions of their leadership behavior and ideology. Administrators showing preferences for assertive language outlining what the administrator would do and how problems would be solved were associated with high teacher ratings of their leadership behavior.

Richardson and Sistrunk (1988) studied secondary teachers to determine if there were significant differences between teachers' perceptions of high, moderate, or low levels of teacher burnout and their perceptions of their principals' supervisory behaviors. They found that collaborative leadership behaviors on the part of the principal were related to high levels of teacher burnout and emotional exhaustion, while non-directive principal leadership was related to low
levels of burnout and emotional exhaustion. Thus, the findings challenged some of the research on collaborative supervision and supported the Deci et al. (1985) research on autonomy related to motivational variables in the workplace.

In summary, research on supervision and motivation in school and work settings has focused attention on the role of supervisory personnel in achieving compliance from supervisees and providing leadership. Leadership has been described as concern for completing tasks and for the needs and well-being of the supervisees. The amount and kind of performance feedback supervisees receive depends upon the bases of power utilized by the supervisor, as well as upon the supervisor's leadership style. Supervisory feedback has been shown to be influential in the motivation of supervisees through its effects on motive for achievement (McClelland, 1953), through its role in defining a supervisor's power base (French & Raven, 1968), through its action on the higher level needs of supervisees (Maslow 1943), through its part in participative management (Likert, 1961), as well as in other research.
Development of Cognitive Evaluation Theory

Introduction. Theories of motivation differ according to their basic assumptions about the factors which energize and drive behavior. The theories can be placed on a continuum from mechanistic to organismic, with mechanistic theories tending to view human beings as passive, that is, primarily affected by physiological drives and environmental stimuli, and organismic theories tending to view human beings as active initiators of behaviors. Organismic theories treat stimuli as affordances or opportunities that the person can use in satisfying needs, and they emphasize the psychological meaning of stimuli as opposed to the objective characteristics of the stimuli.

Drive theories. Drive theories have had a central place in both the psychoanalytical and empirical traditions in psychology. The first major psychoanalytical theory of motivation was Freud's (1914, 1915) drive theory. Freud asserted that there were two major drives--sex and aggression. In
empirical psychology, Hull (1943) argued that there were four drives—hunger, thirst, sex, and the avoidance of pain.

Supporters of both the psychoanalytical and empirical approaches have recognized significant limitations. Psychoanalytic theorists attempted to explain behavior, particularly pathological behavior, in terms of Freud's two drives, but found it increasingly difficult to explain normal developmental patterns by using drive theory. Empirical psychologists have had difficulty explaining phenomena related to animals' avid exploration and manipulation (e.g., Berlyn, 1950; Harlow, 1950).

**Intrinsic motivation.** White (1959) presented a new motivational construct, one which could account for play, exploration, and other behaviors that do not require external reinforcements for their maintenance. In psychoanalytic theory, this construct is called independent ego energy, while empirical psychologists generally called it intrinsic motivation. The current study relies heavily on the view that intrinsic motivation is based in the needs to be competent and self-determining (Angyal, 1941; deCharms, 1968; Deci & Ryan, 1985; Harter 1978).
Nonmotivational approaches. Empirical psychologists (Thorndike, 1913; Skinner, 1938, 1953, 1971) have provided explanations for many of the same problems that motivation studies have targeted. This nonmotivational (not postulating about organisms' needs) approach is called operant theory. An extension of operant theory, referred to as social learning theory (e.g., Rotter, 1954; Bandura, 1977) has also had some prominence. These two approaches have limited applicability to the current research because they preclude the study of spontaneous, intrinsically motivated behaviors (Schwartz, Schuldenfrei, & Lacey, 1978).

Cognitive evaluation theory. The current study is based on an organismic view of motivation, stressing that human beings act on their internal and external environments to be effective and to satisfy their needs. The emphasis on "proactive engagement with one's environment" and "internal [personal psychological] structure with inherent principles of coherence or unity" constitute an organismic approach to motivation (Blasi, 1976). Specifically, the current study is based on a branch of organismic theory called
cognitive evaluation theory. Deci described it this way:

The theory, which was developed to deal with the effects of external events on intrinsic motivation and motivationally relevant processes, has recently been extended to include the effects of intrapersonal, as well as interpersonal, events [Ryan, 1982]. The theory analyzes the effects of events relevant to the initiation and regulation of behavior in terms of their meaning for the person's self-determination and competence. (Deci & Ryan, 1985, p. 9)

Tests of cognitive evaluation theory in educational settings. Several psychologists have tested the effects of various factors on the intrinsic motivation of students. DeCharms (1976) described a measure of classroom climate and teacher's behavior as supportive of self-determination. Deci and Ryan referred to this as informational rather than controlling behavior. Deci, Nezlek, and Sheinman (1981) used the DeCharms questionnaire with 610 children. The children also completed a questionnaire
designed by Harter (1981) to assess children's intrinsic motivation in the classroom.

Children's descriptions of their classrooms were correlated with the children's intrinsic motivation, their perceived competence, and their self-esteem. Deci summarized: "Results indicated significant correlations between the degree to which the classroom was perceived by the children as supportive of self-determination and the children's intrinsic motivation. Further, the classroom climate was found to be related to perceived competence and self-esteem, thereby confirming our assertion that informational environments are important for children's sense of self and well-being as well as for their intrinsic motivation" (Deci & Ryan, 1985, p. 249).

Additional research that focused on the classroom structure in relation to student intrinsic motivation included: a) Harter's (1981) measurement of the intrinsic motivation of children in the open classrooms contrasted with children from the traditional classes; b) Solomon and Kendall's (1976) comparison of school children from open versus the traditional school classrooms; and c) Ramey and Piper's (1974) study of
creativity in open versus traditional classrooms. These studies all supported the view that student intrinsic motivation was enhanced by open structure.

Role of the teacher in student motivation. By the late 1970's, research had focused on the role of the teacher in student motivation. As Deci explained: "In schools, the climate of the classrooms is determined to a large extent by the teachers' behavior. Whether they let children work autonomously, how they handle problems, what they do about grading, are all elements that contribute to the climate of the classroom. Teachers' use of rewards and communications can be primarily informational or primarily controlling, and the classroom climate is largely a derivative of these teacher behaviors" (1985, p. 252).

Deci, Schwartz, Scheinman, and Ryan (1981) developed a scale to assess teachers' orientations toward controlling children versus supporting their autonomy. Respondents read short vignettes describing common classroom problems, then chose one of four ways of dealing with the problems. One way is highly controlling; it involves the teacher's deciding what the child or children must do and using sanctions to be sure that solution is carried out. A second way is
moderately controlling. A third is more autonomy oriented. A fourth choice is highly autonomous—the teacher supports the child to consider the problem and to arrive at a solution that seems right for him or her. The scale was given to 35 teachers in the 4th through 6th grade of a suburban, middle-class school system (Deci et al., 1981). All of the children in those classes completed Harter's (1981) measure of intrinsic versus extrinsic motivation in the classroom and Harter's (1982) perceived competence scale.

Children in the 35 classrooms completed the scale twice, once in late October and once the following May. The data for all of the children within a classroom were averaged. They were then correlated with the teacher's orientation scores. The results showed a significant correlation between the teacher's orientation and all three of the children's intrinsic motivation subscales (curiosity, preference for challenge, and independent mastery attempts). The teachers who were oriented toward supporting autonomy had children who were more intrinsically motivated. Teachers' orientations toward controlling versus supporting autonomy were also significantly related to children's feelings of self-worth and perceived
cognitive competence. The pattern of relationships was the same in October and May.

In a follow-up study to explore the nature of this relationship, Deci, Schwartz, Sheinman, and Ryan (1981) preselected three teachers who were oriented more toward supporting autonomy and three who were oriented more toward controlling behavior. They also assessed the children's intrinsic motivation and perceived competence on the second day of the school year. Then, in late October, the children completed the questionnaire again. Change scores were computed. The results were in agreement with the earlier results.

Further strength to these findings was added by the use of the teacher orientation scale with teachers and students in South Africa. Green (1983) used a behavioral measure of intrinsic motivation and found the same results as in the earlier studies in the United States.

Tests of cognitive evaluation theory in office settings. As described earlier, Herzberg differentiated between maintenance factors that reduce worker dissatisfaction and true motivating factors (1966). His research with workers in a wide range of settings put the emphasis on feelings the workers had
of achievement, recognition, challenge of the work, responsibility, personal and professional growth, and advancement. Sergiovanni and Carver (1973) replicated this work with teachers. Through this research the motivational arena was defined as those factors which brought about changes in the way in which workers viewed their work and themselves.

Deci et al. (1985) used the Problems at Work Questionnaire, patterned after the teachers' orientation scale used in the school research, to assess managers' orientations toward supporting autonomy versus controlling behavior in five branch centers in the service division of an office machines corporation. In this research the managers' orientations were one variable in a set of variables the researchers called "interpersonal context." Motivationally relevant variables of the subordinates were assessed with a work climate survey. Data from 176 subordinates revealed a strong correlation, r=.53, between managers' styles (in favor of autonomy-promoting styles) and subordinates' trust in the corporation's top management. Other variables showed the same relationship. When managers were more controlling, subordinates were more fearful about their
jobs, less satisfied with their pay, and had less trust in the organization.

The researchers followed with an intervention to answer two questions:

1. Is it possible to train managers to be more supportive of autonomy?
2. If so, would the change have effects at the level of the subordinates?

In the intervention, a change agent worked in each branch office for a total of 13 days. One of the themes of the intervention was the use of informational feedback. The effects of the intervention on the managers was assessed by administering the Problems at Work Questionnaire. The effects of the intervention on the subordinates were assessed by their completion of the work climate survey five months after the intervention and by a comprehensive work-attitude survey by the personnel department in two of the branches three months before the intervention and five months after the intervention. Both evaluations indicated that the intervention was effective in improvements of motivational variables of the subordinates. This study is important in demonstrating a relationship between supervisors' feedback style and
supervisees' intrinsic motivation in a work setting because the student teaching setting targeted by the current study has workplace characteristics (including rigid time schedules, performance goals, and responsibility for the welfare of others) which are more compelling than in other student experiences.

A significant body of research supports the validity of cognitive evaluation theory in laboratory and experimental settings, and it has emerged as a useful organismic theory of motivation. The studies cited above demonstrate its relevance to supervisees' motivation in school and work settings.

Student Teaching and Student Teachers' Attitudes

Throughout the 1980's newspaper features, magazine articles, and political debates demonstrated concern with the process of student teaching. Educational researchers examined important relationships, operationalized new variables, refined their instruments, and examined new relationships. In short, researchers made progress in understanding how preservice teachers experience their training and identified directions for further research.
The most comprehensive examination of the motivational factors in student teaching was conducted by Hughes and Hukill (1982). They carried out a descriptive study involving 88 cooperating teachers, 93 student teachers, and 17 university supervisors to provide data on the attitudes, personality, and cognitive characteristics of all participants in the student teaching triad. The study was conducted in two sites. One site was State University (SU), a large public university whose student teachers were assigned to schools in a mid-sized urban school district. The second site was a large, private university (MU) located in a large urban center whose student teachers were assigned to schools within that urban center.

The sample included a "general" and an "intensive" group of participants. At each site university supervisors, principals, and others were asked to identify 10 effective cooperating teachers. These cooperating teachers and the student teachers and university supervisors with whom they worked were the intensive sample. In addition to the instruments administered to the general sample these participants also completed journals, interviews, and tape recordings of their conferences. Participants
completed performance ratings of each other, plus the Quick Word Test, the Educational Preference Scale, the Self-Perception Inventory, and other measures of personality constructs. Importantly, the researchers closely analyzed the data on the cooperating teachers. They wrote: "Little has been written on the selection of cooperating teachers. Most of this work has been based primarily on craft knowledge regarding the kinds of persons who will be good at supervising student teachers" (p. 62).

Also important to the current research was the attempt in Hughes and Hukill (1982) to relate the supervision style of the cooperating teachers to the attitudes and evaluations of the student teachers. They expressed surprise with their findings: "One would expect student teachers to appreciate flexibility and a progressive educational philosophy on the part of their cooperating teachers; however, this was not the case." (p. 64) Hughes and Hukill speculated that the low ratings given by student teachers to cooperating teachers who rated high on flexibility and progressivism were reactions to those cooperating teachers' unstructured supervision style. Important questions arise here about the relationships of
flexibility and autonomy promoting behavior and structure of the student teaching experience and autonomy; for example, how structured should the student teaching experience be in order to maintain high levels of student teacher motivation?

Whereas Hughes and Hukill examined the attitudes of the participants in student teaching, Tabachnick, Popewitz, and Zeichner (1979-80) examined what cooperating teachers directed student teachers to do and found that the student teachers were involved in a narrow range of classroom activities over which they had little control. The researchers described student teacher tasks as "routine and mechanical" (Killian and McIntyre, 1985, p. 2).

Killian and McIntyre (1985) used the Tabachnick et al., (1979-80) study as a starting point and further examined how the training status of cooperating teachers influenced the tasks they assigned to student teachers and the patterns of communication among cooperating teachers, student teachers, and students. They found that where cooperating teachers had undergone inservice training, student teachers engaged in more interaction with students. They concluded that training of cooperating teachers could raise
motivationally relevant variables of the student teachers. Thus, this study further demonstrates a relationship between cooperating teachers' attitudes and student teachers' motivation. It also suggests that changes in the training of cooperating teachers might have a causal effect on some student teacher behaviors.

To examine the relationship between cooperating teachers' personality characteristics and their behavior toward student teachers, O'Neal (1983) audiotaped all supervisory conferences between cooperating and student teachers and administered five instruments at the beginning, middle, and end of the student teaching experience: the Educational Preference Scale, Teacher Concerns Questionnaire, Rigidity-Flexibility Index, Internal-External Locus of Control, and the Self-Perception Inventory. More specific comments in conferences were made by those cooperating teachers who scored high on the personality measures.

Personality characteristics of the student teachers are also part of the complex interaction of influences in student teaching. Determining the impact of environmental stimuli (for example, feedback from
cooperating teachers) on student teachers is complicated by differences in the ways student teachers perceive these stimuli. Deci and Ryan described factors in the feedback recipient which play an important role in the way in which the feedback information is received and interpreted (1985). Herbster, Abel, and Prince (1988) approached the motivation of student teachers by focusing on characteristics of the student teachers. They looked for a relationship between student teacher stress and learning style. The researchers believed that high levels of stress were responsible for large numbers of teachers quitting the profession. Their study focused on high school student teachers and employed the Wilson Stress Profile for Teachers and the Gregorc Transaction Ability Inventory. However, they found little relationship between learning style and the amount of stress exhibited by student teachers.

Examining the overall impact of these influences on student teachers' attitudes, Marso and Pigge (1986) investigated relationships between student characteristics and changes during student teaching in anxieties, attitudes, and concerns about teaching. They explained the need for the research:
The research literature now available on the impact of student teaching has been described as ambiguous, contradictory, and falling within four areas of generalizations (Zeichner, 1980): a) Student teachers report being strongly influenced by their cooperating teachers and tend to conform to the behaviors and attitudes of the cooperating teachers. b) Student teachers move from a child-centered, humanistic to a more custodial and utilitarian approach to classroom management. c) Student teachers move from the liberalized influence of higher education to the bureaucratic norms and traditional values of the public schools....And, d) the classroom and school ecological environment influences the student teacher. (p. 2)

Marso and Pigge studied three groups of prospective teachers: one just before student teaching (N=151), one at the end of student teaching (N=162), and a subsample of these two groups for whom both pre- and post-student teaching measurements were available. All subjects were administered the Teacher Concerns Questionnaire, the Attitude Toward Teaching as a Career
Scale, the Teaching Anxiety Scale, and a questionnaire requesting various types of demographic information. Three null hypotheses were tested: 1) none of the prospective teachers' attitudes, anxieties, and concerns about teaching will change during the student teaching experience, 2) none of the student characteristics of gender, teaching field, when the person decided to teach, anticipated teaching grade level, assurance of the decision to teach, and expected effectiveness as a teacher will be related to their measurements of attitude, anxiety, and concerns about teaching, and 3) for none of the analyses will there be an interaction effect. The researchers found that all three hypotheses could be rejected. Following student teaching the prospective teachers reported less anxiety about teaching and less concern about self survival. Student characteristics of gender, teaching field, when the decision was made to teach, anticipated grade level, and perceived effectiveness as a future teacher were related to two or more of the dependent measures. There were three significant interactions: teaching field interacted with pre-post attitude measures, gender interacted with pre-post anxiety measures, and gender interacted with pre-post attitude measures.
The researchers concluded that student teaching has an impact upon the attitudes, anxiety, and concerns of the student teachers and that there are initial differences between elementary and secondary majors, some of which become more pronounced during student teaching. The researchers also emphasized the importance of the positive trend during student teaching of decline in self-survival concerns, lessening of anxiety, and increase in task concern.

**Summary**

The relationship between the way in which cooperating teachers give feedback to student teachers (autonomy promoting or controlling) and the intrinsic motivation to teach of the student teachers was examined in this study. Cooperating teachers are the primary source of information for student teachers about their teaching performance on a daily basis, yet little data exists to guide the selection of cooperating teachers, the matching of cooperating teachers to particular student teachers, the training of teachers for the role of cooperating teacher, or the coaching of cooperating teachers as student teaching progresses.
There is, however, research showing the importance of student teaching in the formation of student teachers' attitudes. Marso and Pigge (1986) demonstrated that student teachers' feelings and attitudes can change during student teaching. Killian and McIntyre (1986) showed that training of cooperating teachers affected the attitudes and behavior of student teachers. Research also indicates that personality characteristics of cooperating teachers can influence their management of student teachers (O'Neal, 1983).

Synthesizing the research, it is clear that many factors influence student teachers' attitudes during and after student teaching. Some of these factors are personality characteristics or attitudes of the cooperating teachers. Other influences result from the training of the cooperating teachers. Personality characteristics of the student teachers may influence how they experience student teaching. Characteristics of the university supervisor may also affect student teachers' attitudes. This web of influences on student teachers is complex, and only a small number of relationships have been systematically examined.

A relationship between the disposition toward control versus autonomy-promotion of teachers and the
intrinsic motivation of students has been clearly established (Deci et al., 1981). The same relationship has been demonstrated with supervisors and those supervised in business (Deci et al., 1985). This study sought to determine if this relationship existed in the student teaching process.
Chapter 3
Procedures

Introduction

This investigation was a correlational study of one factor in the training of student teachers (cooperating teachers' feedback style) and its effect on their intrinsic motivation to teach. Manipulation of cooperating teachers' feedback style would be extremely impractical; therefore, in this study, the feedback orientations of practicing cooperating teachers were measured and then correlated with the posttest scores of their student teachers on the Intrinsic Motivation Inventory (IMI).

Independent variable. The independent variable was the orientation of the cooperating teacher toward control versus autonomy in supervision of the student teacher, on a continuum from highly controlling to highly autonomous.

Dependent variables. The dependent variables were the subscales of the Intrinsic Motivation Inventory:
interest-enjoyment, perceived competence, pressure-tension, and effort-involvement; and the overall scale, intrinsic motivation.

Statistical hypotheses. Stated in the null form, the following hypotheses were tested:

1. There is no significant relationship (p < .05) between the supervisory feedback style of cooperating teachers and the intrinsic motivation to teach of the cooperating teachers' student teachers at the end of the first student teaching placement.

2. There is no significant (p < .05) relationship between the supervisory feedback style of cooperating teachers and the subscales of the Intrinsic Motivation Inventory (IMI) for the cooperating teachers' student teachers at the end of the first student teaching placement.

Sample and Accessible Population

Data were collected from the student teachers of Old Dominion University for the first student teaching placement of spring semester, 1991. Because of the large size of the sample of student teachers (252) and because it included all but 30 of the student teaching
population of a multicultural university (Old Dominion University), the sample of student teachers was assumed to be representative of the population of student teachers across the commonwealth of Virginia. The sample included students from rural and urban addresses across the Tidewater Region and the Peninsula Region of Virginia, with large numbers residing in Norfolk, Suffolk, Portsmouth, and Virginia Beach, Virginia.

**Instrumentation**

Cooperating Teacher Questionnaire. To develop the instrument for measuring the cooperating teachers' orientations toward control versus autonomy, the researcher generated a pool of 12 vignettes and 48 items that reflected the construct of interest. These items followed closely the criteria and format used to develop the Problems in Schools Questionnaire (Deci, Schwartz, Sheinman, and Ryan, 1981). The problem vignettes were created with the assistance of student teachers from The College of William and Mary during the spring semester, 1988, and their cooperating teachers. Deci and Ryan's criteria for each feedback style were followed precisely in the creation of four
responses to each vignette. These responses were reviewed three times for validity to student teaching: once in 1988 by graduate assistants in educational administration, a second time in 1990 by a middle school guidance counselor familiar with both student teaching and instrument construction, and a third time in 1990 by a team of four middle school teachers and a student teacher from Hampton University training with that team. In each review, the reviewers provided feedback on whether the vignettes represented the most common and important problems in supervising student teachers and whether the choices of possible responses offered to each problem were the realistic choices present in these situations. Following the third review, the final form of the questionnaire was constructed of nine vignettes with four responses for each vignette, for a total of 36 items.

In this form, the instrument provides four possible responses— one highly controlling (HC), one moderately controlling (MC), one moderately autonomy-promoting (MA), and one highly autonomy-promoting (HA)— to each of eight problem vignettes commonly encountered in the supervision of student teachers. The vignettes cover the following problems: trouble
with classroom discipline, teaching incorrect content, teaching a poor lesson, loss of temper with students, sudden decline in teaching performance, doing just enough to "get by" in student teaching, poor communication between student teacher and other teachers in the school, and social life interfering with student teaching performance. One further question asks the cooperating teacher to rate the appropriateness of four statements describing the training of student teachers. The four statements represent the four styles of supervision (HC, MC, MA, and HA). All responses are marked on a Likert scale from 1 (very inappropriate) to 7 (very appropriate).

**Intrinsic Motivation Inventory.** The Intrinsic Motivation Inventory (IMI) was developed by Ryan and his colleagues from the Rochester Motivation Research Group (Plant & Ryan, 1985; Ryan, 1982; Ryan et al., 1983). The IMI is a multidimensional measure of subjects' experience with regard to tasks. The measure is a flexible assessment tool which can be used to measure a subject's intrinsic motivation with regard to a wide variety of tasks by substituting one task for another in the items. The IMI determines subjects' levels of interest-enjoyment, perceived competence,
effort-involvement, and pressure-tension (subscales) and provides a total score for overall intrinsic motivation.

In his Instructions for Using the Post-Experimental Intrinsic Motivation Inventory, Ryan described its reliability and validity characteristics as follows: "The IMI consists of 27 items from five subscales, all of which have shown themselves to be factor analytically coherent and stable across a variety of tasks, conditions, and settings. These items need to be randomized before presentation. Order effects are quite minimal, and it also appears that inclusion or exclusion of specific factors has little impact on those which remain" (1982, p. 1).

A clear picture of the factor analytic results from various forms and subsets of these questions has emerged through various studies accomplished by members of the Rochester Motivation Research Group (e.g. Ryan, 1982; Ryan, Mims & Koestner, 1983; Ryan, Connell, Plant, Robinson & Evans, 1985; Driver, Deci & Ryan, 1985 and others). The factor analytic numbers are generally high (a .6 or higher loading on the appropriate subscale). The IMI items have been used successfully in a variety of settings and with a wide
variety of tasks. The instrument's greatest strengths are its flexibility and its strong factor analytic foundation. Thus, the instrument (subscales and the total score) appears to be a valid measure of intrinsic motivation as used in the current research.

**Data Collection Procedures**

**Pretest IMI and Cooperating Teacher Questionnaire.**

Two hundred and fifty-two student teachers from Old Dominion University were given the Intrinsic Motivation Inventory (pretest) during the mandatory seminar held the evening before their first student teaching placement in the spring of 1991. Each student teacher was given a Cooperating Teacher Questionnaire, numbered to match his or her IMI, a letter of explanation, and an addressed, stamped envelope to take to the cooperating teacher for the placement to begin the next day. The student teachers were instructed to ask the cooperating teachers to complete the Cooperating Teacher Questionnaires (CTQ's) and mail them to the researcher as soon as possible.

Demographic data were provided through two questions. Student teachers were asked on the pre- and
posttests to indicate whether they were male or female and whether they were ages 22 or under or over 22. In addition, color-coding was used to indicate the level of placement for each student teacher—blue paper for elementary, yellow paper for middle school, and white paper for high school.

Posttest IMI and student teacher version of the Cooperating Teacher Questionnaire. The student teachers were post-tested at their seminars at the end of the first seven week placement. Student teachers who did not attend their seminars were contacted by mail and asked to complete the posttests and mail them to the researcher. This group included 12 student teachers who quit or were pulled from the program by their college supervisors after serving four or more weeks of their placements. Three of these students sent back posttests and were treated as part of the sample.

Cooperating teachers who did not send in Cooperating Teacher Questionnaires (CTQ's) by the end of the sixth week were contacted through their student teachers and given a second CTQ, numbered with the original identification number. Cooperating teachers who still had not responded by the end of the seventh
week were contacted by mail at their schools and asked to complete the CTQ.

Matching of the instruments was achieved through two methods. Cooperating Teacher Questionnaires (CTQ's) were matched with the pretest Intrinsic Motivation Inventories (IMI's) by a number in the upper right hand corner of the instruments. The pretest IMI's had name cards stapled to the upper left corner. The student teachers wrote their names on these cards so that the pretests could be matched with the posttests, which had similar name cards. A fourth instrument, a CTQ with instructions to the student teacher to complete it as he or she believed his or her cooperating teacher would respond to the situations, was matched by number to the IMI posttest.

Data Analysis

As the instruments were completed by the student teachers and the cooperating teachers, they were scored by the researcher, and the scores were put into a spreadsheet format for use with NCSS, the Number Cruncher Statistical System, version 5.03 (Hintze,
1990). NCSS was chosen for its proven accuracy and convenience of use.

**Stage one—pilot of Cooperating Teacher Questionnaire.** In order to answer questions regarding the construct validity of the Cooperating Teacher Questionnaire, cooperating teacher scores on the CTQ were correlated with the scores obtained when those cooperating teachers' student teachers completed the CTQ as they felt their cooperating teachers would respond to the vignettes. The correlation and regression panel of the NCSS was used to generate the probability coefficient for the two sets of scores. A level of significance of $p < .05$ was chosen to protect against a Type I error.

**Stage two—analysis of the hypotheses.** The first step in testing the hypotheses was to determine the extent of change in intrinsic motivation over the course of the student teaching placement, as measured by the IMI pretests and posttests. Paired t-tests were run using NCSS in which pre- and posttests were tested against each other for total IMI score and for each of the subscale scores. This step was necessary in order to establish that the seven-week student teaching
experience affected student teachers' intrinsic motivation and subscale scores.

Then, for each of the paired cooperating and student teachers, cooperating teacher orientation, as measured by the Cooperating Teacher Questionnaire, was correlated with the intrinsic motivation and subscale scores (interest-enjoyment, perceived competence, pressure-tension, and effort-involvement) of the student teacher on the IMI. The correlation and regression panel from NCSS was used to generate the probability level for each pair of variables. The level of significance was set at $p < .05$. 
Chapter 4

Analysis of Results

The intent of this study was to investigate the relationship of cooperating teachers' feedback style and student teachers' intrinsic motivation. The Intrinsic Motivation Inventory (IMI) was administered in pretest and posttest forms to all student teachers at Old Dominion University for spring, 1991, who chose to participate in the project. Two hundred and fifty-two student teachers completed the pretest. Of this group, 211 completed the posttest for a full response rate of 84%. For this group of student teachers, 170 of their cooperating teachers completed the Cooperating Teacher Questionnaire, for a response rate of 67%. For 19 of the returned Cooperating Teacher Questionnaires, no Intrinsic Motivation Inventory (IMI) posttests were collected. Thus, the total number of matched data sets collected was 151.
Demographics of the Sample

Three types of demographic information on the student teachers were collected: a) sex—male or female; b) age—22 years of age or under, or over 22 years of age; and c) placement level—elementary, middle school, or high school. In the pretested sample of 252 student teachers, 52 (21%) were male and 200 (79%) were female. Of that group, 82 (33%) were aged 22 years or younger, and 170 (67%) were over 22 years of age. One hundred and two (40%) of the pretested student teachers were placed in elementary school settings, 42 (17%) were placed in middle school settings, and 108 (43%) were placed in high school settings. With the exception of a small dropoff of high school representation, the posttest group included percentages by sex, age, and placement level that matched the percentages in the pretest group (Tables 1-3). The reasons for the high school dropoff (5%) were not clear, but the posttest sample still included a large number of student teachers in high school placements, and no systematic biasing of the sample was evident.
For homogeneity by sex of the posttest group with the pretest group, the results are shown in Table 1:

**TABLE 1**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Pretested</th>
<th>Posttested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>52 (21%)</td>
<td>38 (18%)</td>
</tr>
<tr>
<td>Female</td>
<td>200 (79%)</td>
<td>173 (82%)</td>
</tr>
<tr>
<td>Total</td>
<td>252 (100%)</td>
<td>211 (100%)</td>
</tr>
</tbody>
</table>

For homogeneity by age of the pretest group with the posttest group, the results are shown in Table 2:
### TABLE 2

**Pretest to Posttest Homogeneity by Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Pretested</th>
<th>Posttested</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 Years or Under</td>
<td>82 (33%)</td>
<td>68 (32%)</td>
</tr>
<tr>
<td>Over 22 Years</td>
<td>170 (67%)</td>
<td>142 (68%)</td>
</tr>
<tr>
<td>Total</td>
<td>252 (100%)</td>
<td>211 (100%)</td>
</tr>
</tbody>
</table>

For homogeneity by placement level of the pretest group with the posttest group, the results are shown in Table 3.

### TABLE 3

**Pretest to Posttest Homogeneity by Placement Level**

<table>
<thead>
<tr>
<th>Placement</th>
<th>Pretested</th>
<th>Posttested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>102 (40%)</td>
<td>95 (45%)</td>
</tr>
<tr>
<td>Middle School</td>
<td>42 (17%)</td>
<td>36 (17%)</td>
</tr>
<tr>
<td>High School</td>
<td>108 (43%)</td>
<td>80 (38%)</td>
</tr>
</tbody>
</table>
Piloting of Cooperating Teacher Questionnaire

For information which might reflect the validity of the Cooperating Teacher Questionnaire, the cooperating teacher scores on the CTQ were correlated with the CTQ scores when completed by student teachers as they felt their cooperating teachers would respond to the vignettes. The mean for the CTQ's was 21.54, and the mean for Student Teacher-Completed Cooperating Teacher Questionnaire's was 20.18. Since the possible range of controlling scores was 0-18, with 0 the most controlling score possible, and the possible range of autonomy-promoting scores was 19-36, with 36 the most autonomy-promoting score possible, the mean scores for both administrations of the instrument can be considered as moderately autonomy-promoting. Thus, the general characteristics of the scores were similar, with student teachers perceiving the cooperating teachers as slightly more controlling than those teachers perceived themselves to be. See Table 4 for additional details.
### TABLE 4

**Cooperating Teacher Questionnaire Scores**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variance</th>
<th>St.Dev.</th>
<th>10%</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperating Teachers</td>
<td>21.54</td>
<td>9.2675</td>
<td>3.0442</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Student Teachers</td>
<td>20.18</td>
<td>7.3729</td>
<td>2.7153</td>
<td>17</td>
<td>24</td>
</tr>
</tbody>
</table>

The results of the comparison of cooperating teacher CTQ scores and the CTQ scores for the student teachers revealed comparable results, thus providing support for validity of the instrument. The two groups of scores showed similar patterns. The 10th percentile (10%) and 90th percentile (90%) figures for the two groups reflect each other closely. The ability of student teacher scores to predict cooperating teacher scores was, however, limited (r=.045).

A number of poorly done student teacher CTQ's may be the cause of this slight correlation, despite the generally similar pattern of scores. With a small number of exceptions, the researcher was present when the student teachers completed the CTQ. In each of
these sessions some student teachers asked questions or made comments which indicated that they were having difficulty completing the instrument to reflect the style of their cooperating teachers. Despite repetitions of the directions, some of the student teachers reacted to the vignettes with what they (the student teachers) thought were appropriate responses. Furthermore, in contrast to the cooperating teachers, who indicated through detailed comments, questions, and analysis (both written on the instruments and in phone conversations with the researcher) that they had put considerable effort into completing the instrument, some of the student teachers rushed through the instrument in a haphazard fashion. The slight correlation of cooperating teacher scores with student teacher scores may be a result of these problems.

Tests for Changes in Intrinsic Motivation

The first step in examining the relationship of feedback style to intrinsic motivation was to determine the extent of change in motivation during the treatment: the first student teaching placement. Although previous research had indicated that student
teachers' attitudes about teaching changed during the experience (Hughes & Hukill, 1982; Marso & Pigge, 1986), it was important to document that any changes in student teachers' intrinsic motivation occurred in a systematic and not in a random fashion as related to the cooperating teachers' autonomy-promoting/controlling behavior. Otherwise, any documented relationship between cooperating teachers' feedback style and student teachers' intrinsic motivation would have to be considered an artifact of the testing and not related to the hypothesized relationship between the independent and dependent variables.

Paired, two-tailed t-tests were performed on the pre- and posttest levels of intrinsic motivation and the four subscales of intrinsic motivation: interest-enjoyment, effort-involvement, pressure-tension, and competence. Change significant at the p < .05 level was found on each of the four subscales and on the total intrinsic motivation score. Specifically, the recorded changes were as follows: a) Interest-Enjoyment decreased during the treatment, b) Effort-Involvement decreased, c) Pressure-Tension decreased, and d) Competence increased. On the Intrinsic Motivation Inventory, the total intrinsic motivation
score is a composite of Interest-Enjoyment, Effort-Involvement, and Competence added, with Pressure-Tension subtracted from that subtotal. The changes for the total intrinsic motivation score and the subscale scores are shown in Table 5.

**TABLE 5**

*Changes on Intrinsic Motivation Inventory*

<table>
<thead>
<tr>
<th>Intrinsic Motivation</th>
<th>Pretest</th>
<th>Posttest</th>
<th>T Value</th>
<th>Prob. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Mean</td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>69.47</td>
<td>71.38</td>
<td>-2.0598</td>
<td>0.0394</td>
</tr>
<tr>
<td>I-E</td>
<td>37.67</td>
<td>36.44</td>
<td>-2.0598</td>
<td>0.0394</td>
</tr>
<tr>
<td>E-I</td>
<td>26.82</td>
<td>25.66</td>
<td>5.0780</td>
<td>0.0000</td>
</tr>
<tr>
<td>P-T</td>
<td>22.67</td>
<td>19.14</td>
<td>7.2008</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>27.59</td>
<td>28.41</td>
<td>-2.8309</td>
<td>0.0046</td>
</tr>
</tbody>
</table>

*N=252 (pretest)*

*N=211 (posttest)*
Differences in intrinsic motivation by sex and placement level. Two-sample t-tests revealed significant sex-related and placement level-related differences. Female student teachers scored higher in intrinsic motivation than males both in the pretests and the posttests. The pretest difference was not significant, but the posttest difference was significant (p < .05). When the scores of student teachers in middle and high school placements were tested against those in elementary school placements, the teachers in elementary school placements were shown to have significantly higher (p < .01) intrinsic motivation in both pretests and posttests. No significant differences were shown between student teachers in middle school and high school placements. Differences by sex are shown in Table 6, and differences by placement level are shown in Table 7.
Table 6

Differences in Means by Sex

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Males</th>
<th>T Value</th>
<th>Prob. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>69.785</td>
<td>66.461</td>
<td>-1.907</td>
<td>.056</td>
</tr>
<tr>
<td>Posttest</td>
<td>72.375</td>
<td>66.868</td>
<td>-2.118</td>
<td>.034</td>
</tr>
</tbody>
</table>

Table 7

Differences in Means by Placement Level

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th>MS/HS</th>
<th>T Value</th>
<th>Prob. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>71.673</td>
<td>67.377</td>
<td>3.192</td>
<td>.0014</td>
</tr>
<tr>
<td>Posttest</td>
<td>74.265</td>
<td>69.068</td>
<td>2.599</td>
<td>.0093</td>
</tr>
</tbody>
</table>

Using CTQ to Predict Mean Differences

A preliminary test of Deci and Ryan's cognitive evaluation theory in the student teaching context was to determine whether the theory could predict differences in mean scores of groups of student
teachers who had autonomy-promoting cooperating teachers versus those who had controlling cooperating teachers. According to cognitive evaluation theory, student teachers with autonomy-promoting cooperating teachers (CTQ scores 19-36) should have higher scores in posttest Interest-Enjoyment, Effort-Involvement, Competence, and total intrinsic motivation, and lower scores in posttest Pressure-Tension, than student teachers who had controlling cooperating teachers (CTQ scores 1-18). When mean scores for these two groups of student teachers were compared using unpaired t-tests, four of the five predictions were correct, though none of the differences were significant (p < .05). As predicted by Cognitive Evaluation Theory, Interest-Enjoyment (I-E), Effort-Involvement (E-I), Competence (C), and total intrinsic motivation mean scores were higher for those student teachers who had autonomy-promoting cooperating teachers. However, contrary to Cognitive Evaluation Theory, those student teachers who had autonomy-promoting cooperating teachers also had a higher mean score for Pressure-Tension (P-T). See Table 8 for details.
Table 8

T-Tests of Intrinsic Motivation Inventory Scores of Student Teachers Grouped by their Cooperating Teachers' Scores on the Cooperating Teacher Questionnaire (CTQ)

<table>
<thead>
<tr>
<th>Mean Scores</th>
<th>High CTQ</th>
<th>Low CTQ</th>
<th>T Value</th>
<th>Prob. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>72.653</td>
<td>69.952</td>
<td>-.7769</td>
<td>0.4384</td>
</tr>
<tr>
<td>I-E</td>
<td>36.769</td>
<td>36.000</td>
<td>-.5583</td>
<td>0.5774</td>
</tr>
<tr>
<td>E-I</td>
<td>26.053</td>
<td>24.904</td>
<td>-1.3170</td>
<td>0.1998</td>
</tr>
<tr>
<td>P-T</td>
<td>18.884</td>
<td>18.761</td>
<td>-.0711</td>
<td>0.9434</td>
</tr>
<tr>
<td>C</td>
<td>28.915</td>
<td>27.136</td>
<td>-1.3998</td>
<td>0.1734</td>
</tr>
</tbody>
</table>

Correlations of Cooperating Teacher Questionnaire (CTQ) with Interest-Enjoyment, Effort-Involvement, Pressure-Tension, Competence, and Total Intrinsic Motivation

CTQ (cooperating teacher feedback style) was correlated with the posttest Intrinsic Motivation
Inventory (IMI) total and subscale scores using the Pearson correlation coefficient of NCSS, version 5.03. (See Table 9.)

Table 9

Correlation of Cooperating Teacher Questionnaire Scores with Intrinsic Motivation Inventory Subscale and Total Scores

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>r Value</th>
<th>Prob. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Motivation</td>
<td>.066</td>
<td>.416</td>
</tr>
<tr>
<td>(Full Scale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest-Enjoyment</td>
<td>.014</td>
<td>.866</td>
</tr>
<tr>
<td>(Subscale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effort-Involvement</td>
<td>.171</td>
<td>.036</td>
</tr>
<tr>
<td>(Subscale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure-Tension</td>
<td>.017</td>
<td>.833</td>
</tr>
<tr>
<td>(Subscale)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>.150</td>
<td>.066</td>
</tr>
<tr>
<td>(Subscale)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cooperating Teacher Questionnaire scores correlated significantly ($p < .05$) with the Effort-Involvement posttest scores. They were not shown to correlate linearly at a significant level ($p < .05$) with Interest-Enjoyment, Pressure-Tension, Competence, or total intrinsic motivation score on the posttest.

**Summary**

The data do not allow rejection of the null hypothesis for Hypothesis 1: There is no significant ($p < .05$) relationship between cooperating teachers' feedback styles and the intrinsic motivation to teach (IMI total score) of the cooperating teachers' student teachers at the end of the first student teaching placement.

The data do allow rejection of one part of Hypothesis 2: There is no significant relationship ($p < .05$) between cooperating teachers' feedback styles and the subscales of the Intrinsic Motivation Inventory for their student teachers. The subscale which was
shown to have a significant \((p < .05)\) relationship with the cooperating teachers' feedback styles was Effort-Involvement. A significant relationship was shown between feedback style and student teachers' Effort-Involvement scores; that is, more autonomy-promoting cooperating teachers (higher CTQ scores) were related to higher student teachers' Effort-Involvement scores.
Chapter 5

Conclusions, Discussion, Implications, and Suggestions for Further Research

This study examined the relationship between the feedback style of cooperating teachers and the intrinsic motivation to teach of their student teachers. Research on feedback styles and intrinsic motivation in elementary classrooms (Deci et al., 1981) and on feedback styles and motivation in office work (Deci et al., 1985) demonstrated a relationship between these elements in those settings. This study was intended as a preliminary examination of intrinsic motivation in the student teaching setting.

The approach used was drawn heavily from the methods used by Deci and Ryan in their work on feedback styles and intrinsic motivation. Feedback style was measured with the Cooperating Teacher Questionnaire, based on Deci's Problems at Work and Problems at School.
Questionnaires, and intrinsic motivation was measured with Ryan's Intrinsic Motivation Inventory. Since changes in student teachers' intrinsic motivation and the subscales Interest-Enjoyment, Effort-Involvement, Pressure-Tension, and Competence were measured, the current study was also related to research on attitude change in student teachers, particularly the work of Hughes and Hukill (1982) and Marso and Pigge (1986).

The design of the study was correlational research. The feedback orientations of practicing cooperating teachers, as measured on the Cooperating Teacher Questionnaire (CTQ), were correlated with the intrinsic motivation and subscale scores of their student teachers. The use of a large sample (252 student teachers and their cooperating teachers, representing the total student teaching program of a mid-sized university with a culturally and economically diverse student body) was an important advantage of this design, since it allowed for collection of a large quantity of data on the intrinsic motivation of student teachers, on the feedback styles of cooperating teachers, and on the Cooperating Teacher Questionnaire (CTQ).
Before the testing of the hypotheses the amount of change in the intrinsic motivation total score and each of the subscale scores for the student teachers was tested. Change in the total score and each subscale score was shown to be significant (p < .05).

Significant sex-related and placement level-related differences in intrinsic motivation of student teachers were also revealed in both pre- and posttest scores. Female student teachers scored higher in intrinsic motivation than males both at the start and finish of the placement. The pretest difference was not significant but the posttest difference was (p < .05). The mean for student teachers aged 22 or younger was higher than that of those over 22. This was true both for the pre- and posttest results, though the differences were not significant (p < .05). Finally, student teachers in elementary school placements scored significantly higher in intrinsic motivation (p < .05) both at the start and finish of the placement than student teachers in middle or high school placements.

The hypotheses investigated in this study, stated in null form, were:

**Hypothesis 1**: There is no significant (p < .05) relationship between the supervisory feedback styles of
cooperating teachers and the intrinsic motivation to teach (IMI total score) of their student teachers at the conclusion of the first student teaching placement.

**Hypothesis 2:** There is no significant relationship ($p < .05$) between the supervisory feedback styles of cooperating teachers and the subscales of the IMI for their student teachers.

The hypotheses were tested using the regression and correlation panel of NCSS, version 5.03, to generate the Pearson correlation coefficients and the probabilities for each relationship. There was insufficient support in the results to reject Hypothesis 1. Hypothesis 2 was rejected for the subscale Effort-Involvement. It was not rejected for the other subscales.

**Conclusions**

The results of this study offer support for the following conclusions:

1. Significant change occurred in the intrinsic motivation to teach of student teachers during their first placement, even when that placement was comparatively short (7 weeks). Intrinsic motivation to teach increased during student teaching, apparently due
to an increase in the feeling of competence and a decrease in feelings of pressure and tension of the student teacher. Two other components of intrinsic motivation—Interest-Enjoyment and Effort-Involvement also decreased. The effect of these changes was to reduce the amount of increase in intrinsic motivation, total score, yet that change was still significant.

2. During the first student teaching placement, significant changes occurred in the student teachers' feelings of Interest-Enjoyment, Effort-Involvement, Pressure-Tension, and Competence. Interest-Enjoyment, Effort-Involvement, and Pressure-Tension decreased, and Competence increased.

3. No impact of cooperating teachers' feedback styles on student teachers' intrinsic motivation was shown. Cognitive evaluation theory, as reflected in the use of the Intrinsic Motivation Inventory, correctly predicted differences for four of the five measures, in mean scores of student teachers who had autonomy-promoting cooperating teachers versus controlling cooperating teachers. However, the correlations of CTQ with Interest-Enjoyment, Pressure-Tension, Competence, and total intrinsic motivation were not significant (p < .05). The correlation of CTQ
with Effort-Involvement was significant (p < .05), but the large sample size may have contributed to this outcome. Thus, cooperating teachers' feedback styles were not shown to have an impact on the student teachers' intrinsic motivation.

Discussion

The findings with regard to the changes in student teachers' perceived competence and feelings of pressure and tension were consistent with previous research, notably Marso and Pigge (1986). They concluded that student teachers underwent important attitude changes during student teaching, particularly an increase in perceived competence and a decrease in anxiety about teaching. Hughes and Hukill (1982) also concluded that perceived competence and self-esteem increased during student teaching. As these authors noted, it is likely that experience in the classroom diminishes some of the anxiety and pressure felt in anticipation of teaching and gives the student teachers a sense of competence and confidence that they lacked at the start of student teaching. This research also suggests that experience as a student teacher diminishes interest and enjoyment and effort and involvement in teaching. Disappointments with
their teaching experience was a theme of many conversations student teachers initiated with the researcher during this project. This finding is consistent with previous research indicating some disillusioning effects of student teaching (Alper & Retish, 1972; Disposto, 1980).

The effect of supervisors' feedback styles on supervisees' intrinsic motivation, which has been demonstrated in research in elementary classrooms (Deci et al., 1981) and in business offices (Deci et al., 1985) was shown not to be significant (p < .05) with regard to cooperating teachers and their student teachers. Cooperating teachers' feedback styles were shown to be significantly related to one subscale of the IMI (Effort-Involvement); however, caution should be shown in interpreting this finding. The practical significance of this finding is limited due to the tendency toward finding statistical significance with samples as large as the one used in this study.

It is worth noting that cognitive evaluation theory was successful in predicting mean score differences in groups of student teachers with controlling as opposed to autonomy promoting cooperating teachers. The predictions were correct on
total intrinsic motivation score and four of the five subscales. In addition, mean intrinsic motivation scores for student teachers grouped by the scores of their cooperating teachers on the Cooperating Teacher Questionnaire (CTQ) showed a pattern consistent with the theory. For analysis of this point, student teachers were grouped according to their cooperating teachers' scores on the CTQ, one group for each CTQ score. Except for two groups (the group with CTQ score 15 and the group with CTQ score 16—4 scores in all), the mean intrinsic motivation scores for student teachers with controlling cooperating teachers were below the mean for all intrinsic motivation scores.

However, since this study did not confirm the relationship between supervisory feedback styles and levels of intrinsic motivation of supervisees shown previously in research with teachers and their fifth grade students (Deci et al., 1981) and supervisors and supervisees in office work (Deci et al., 1985), it is important to consider in what ways student teaching differs from those other settings. Contrasting student teaching to the latter setting, student teaching is of much shorter term than the office work setting studied by Deci et al. (1985). Another contrast to the work
setting is the fact that student teachers are "coached" through their experience by university supervisors. No similar expert instructor and facilitator is available in most work settings.

The most obvious difference between student teaching and the classrooms studied by Deci et al. (1981) is the age of the subjects. The current study suggests that the durability of intrinsic motivation may be related to age. Student teachers may have more enduring intrinsic motivation than younger students. A test which supported the view of intrinsic motivation in student teaching as enduring was the correlation of student teachers' intrinsic motivation total scores at the start of the experience with their intrinsic motivation total scores at the end of the experience (r=.464; prob.=.000). Despite the intensity of the student teachers' experiences and the many factors acting upon them, their pretest intrinsic motivation scores were significant predictors (p < .01) of their posttest scores.

Deci and Ryan (1985) reviewed several factors in the supervisee which could affect how feedback was interpreted and thus its motivational impact. Locus of control has been shown to affect a subject's perception
of whether feedback is controlling or autonomy-promoting (Lonky & Reihman; Earn, 1982). Individual differences in perception and interpretation of feedback were also shown by Boggiano and Barrett (1984). They explored the effects of both positive and negative feedback on the intrinsic motivation and performance of people who were either intrinsically oriented or extrinsically oriented, as assessed by Harter's (1981) scale of intrinsic versus extrinsic orientation. They found that feedback, administered in the same way, was experienced differentially as controlling or autonomy-promoting depending upon the orientations of the recipients. Thus, it seems reasonable that factors within the student teachers affected how the feedback styles of the cooperating teachers were interpreted. As one student teacher told the researcher, "My cooperating teacher tells me to handle problems the way I think is best, but I don't think he really means it."
Implications

The motivation of student teachers differs depending on many factors. By gathering data from a large number of student teachers who had come through the same educational program and who were operating under the same organizational structure the researcher was able avoid problems with differing numbers of practicum experiences prior to student teaching, differing preparation programs, and differing guidelines and expectations for different student teachers. Thus, this study provides some data on a few specific factors out of many that affect student teachers' motivation. One implication of this study is that there is a need for further research to examine factors in the motivation of student teachers which were not considered in this study, notably the role of university supervisors.

Another important implication of this study is that student teachers differ in the kind of motivation they have for teaching depending on whether they are male or female and depending on whether they are placed in elementary or middle and high school settings. Higher intrinsic motivation was shown by females over males and elementary over middle and high school
student teachers. Since rates for completion of student teaching did not differ across the placement levels, this suggests that extrinsic motivation plays a greater part in the completion of student teaching at the middle and high school levels and by males at all levels.

The results also imply that completed student teaching experience is associated with increased intrinsic motivation to teach, though it is also associated with some reduction in both Interest-Enjoyment and Effort-Involvement. Thus, it appears that student teachers as a group complete their first field experience without any reduction in their total intrinsic motivation. This may be related to the predominant supervisory style—moderately autonomy-promoting—as indicated both in the cooperating teachers' CTQ scores and the student teachers' CTQ scores. Another possible explanation is that intrinsic motivation to teach is not readily affected by environmental factors during student teaching due to the maturity levels of the student teachers, and possibly to internal locus of control (Lonky & Reihman, 1980; Earn, 1982) and/or intrinsic motivation
orientation (Boggiano & Barrett, 1984) on the part of the student teachers.

Suggestions for Further Research

1. The intrinsic motivation of the student teachers changed during student teaching. It is suggested that further research be done to examine the effects of cooperating teacher behavior on the intrinsic motivation of student teachers. One possible approach would be the interviewing of two groups of student teachers, those who score extremely high and those who score extremely low on the IMI at the close of student teaching. These interviews could elicit information regarding the role of the cooperating teacher in the student's perception of student teaching.

2. During the research, both student teachers and cooperating teachers expressed a great deal of interest in the Cooperating Teacher Questionnaire (CTQ). Both offered substantial feedback to the effect that the vignettes posed realistic problems in the supervision
of student teachers. The evidence gathered in this research indicated that cooperating teacher feedback style was a meaningful construct. Cooperating teachers scored in a wide range (12-30) and wrote comments on their questionnaires consistent with their scores. For example, one cooperating teacher who scored in the highly controlling range wrote: "I would never let a student teacher do anything detrimental to my students. This is a major concern when I am working with a student teacher." A cooperating teacher who scored in the autonomy-promoting range wrote: "Student teachers have to learn to do things in their own way, not try to be like someone else." It is suggested that the CTQ be further piloted and refined.

3. Cognitive evaluation theory could be further tested in the student teaching context through the identification of groups of cooperating teachers with each of the four basic styles—highly controlling, moderately controlling, moderately autonomy-promoting, and highly autonomy-promoting. It is suggested that researchers examine the effects on student teachers of supervision by teachers in these groups. A possible confounding factor in the present research could have been a relationship between philosophical support for
the autonomy of student teachers and low levels of control and organization of students on the part of the cooperating teachers. It is therefore suggested that researchers test the hypothesis that moderately controlling cooperating teachers have the most positive impact on the intrinsic motivation of student teachers.

4. In this study, intrinsic motivation to teach was assumed, with support in the literature, to be a significant characteristic of teachers. It is suggested that follow-up research be done to determine whether high levels of intrinsic motivation at the completion of student teaching is related to first year teacher attitudes or performance.

5. Since intrinsic motivation and the IMI subscales all were shown to vary by sex, it is suggested that researchers attempt to determine what factors cause sex-related differences in the intrinsic motivation of student teachers.

6. Since intrinsic motivation and the IMI subscales all were shown to vary by level of placement, it is suggested that researchers examine the ways in which middle and high school student teaching placements differ from elementary school placements. Some factors to consider are the attitudes of
cooperating teachers, the kinds of responsibility given, and the amount of feedback provided at each level. It is suggested that student teachers who serve placements at more than one level be tested at the completion of each experience in an attempt to separate personality factors from placement factors in the differences in scores by level.

7. A more thorough exploration of the cooperating teacher-student teacher working relationship could be conducted, using ethnographic methodology.

8. Since motivational orientation and locus of control have both been shown to affect the perception and interpretation of feedback, it is suggested that the effects of these variables on student teachers' intrinsic motivation be studied.

9. Finally, since the subscales of the Intrinsic Motivation Inventory (Interest-Enjoyment, Effort-Involvement, Pressure-Tension, and Competence) are in themselves interesting measures with regard to teaching, it is suggested that further research be done using the subscales as measures of student teachers' feelings before, during, and after their student teaching experiences.
References


APPENDICES
Dear Student Teacher:

I am a doctoral candidate at The College of William and Mary and a school administrator in Newport News. I am currently studying the effects of cooperating teachers' supervision styles on their student teachers. The title of the project is THE IMPACT OF COOPERATING TEACHERS' FEEDBACK STYLE ON THE INTRINSIC MOTIVATION OF STUDENT TEACHERS.

Please help in this research by completing the Student Teacher Questionnaire at the start and at the finish of your first student teaching placement. At the end of the first student teaching placement, you'll also be asked to complete the Cooperating Teacher Questionnaire as you feel that your cooperating teacher would respond to the questions. Your cooperating teacher will be asked to complete only the Cooperating Teacher Questionnaire.

Neither you nor your cooperating teacher will be identified by name. I am only recording you as a numbered matched pair. This way I can see how your responses relate to each other without being able to identify either of you.

Your participation is voluntary, and refusal to participate will involve no penalty to you. You may discontinue participation at any time or refuse to answer any question without penalty. Your participation could produce important benefits, however, since increased understanding of the relationship between the feedback style of cooperating teachers and the motivation of their student teachers is a step toward the strengthening of the training of student teachers. You may also find it interesting to see the instruments I am using to examine one aspect of student teaching and to know the results of the study.

If you would like to have a summary of the results of the study, or if you have questions regarding the study, write to me at the above address or call me at 804-599-8987. The chairman of my dissertation committee is Dr. James Stronge of the College of William and Mary, and he may be reached at 804-221-2339.

Thank you very much for your interest.

Yours sincerely,

Richard N. Weber
Dear Cooperating Teacher:

I am a doctoral candidate at The College of William and Mary and a school administrator in Newport News. I am currently studying the effects of cooperating teachers' styles of supervision on some of the attitudes of their student teachers. Having been a supervisor of student teachers and a trainer of teachers in P.E.T., I am aware of how complex the task of training is, and my research is designed to help us better understand how our efforts at training affect the prospective teacher. The title of the project is THE IMPACT OF COOPERATING TEACHERS' FEEDBACK STYLE ON THE INTRINSIC MOTIVATION OF STUDENT TEACHERS.

Please take a few moments to complete the Cooperating Teacher Questionnaire and mail it to me in the stamped envelope provided. Please don't show your responses to this questionnaire to your student teacher. I'll also be gathering some information from your student teacher. The two of you will be identified only as a numbered pair. No one at O.D.U., William and Mary, or anywhere else will be able to identify you or your student teacher by name.

Your participation is voluntary, and refusal to participate will involve no penalty to you. You may discontinue participation at any time or refuse to answer any question without penalty. Your participation could produce important benefits, however, since increased understanding of the relationship between the feedback style of cooperating teachers and the motivation of their student teachers is a step toward the strengthening of the training of student teachers. You may also find it interesting to see the instruments I am using to examine one aspect of student teaching and to know the results of the study.

If you would like to have a summary of the results of the study, or if you have any questions regarding the study, write to me at the above address or call me at 804-599-8987. The chairman of my dissertation committee is Dr. James Stronge of The College of William and Mary, and he may be reached at 804-221-2339.

Thank you very much for your interest.

Yours sincerely,

Richard N. Weber

Richard N. Weber
ITEMS FOR THE POST-EXPERIMENTAL INTRINSIC MOTIVATION INVENTORY (IMI)

For each of the following statements, please circle the number that best indicates how strongly you agree or disagree with the sentence, using the following scale as a guide:

1  2  3  4  5  6  7
strongly disagree disagree somewhat disagree neutral somewhat agree agree strongly agree

Interest-Enjoyment

I enjoyed doing this activity very much.
This activity was fun to do.
I thought this was a boring activity.  (R)
This activity did not hold my attention at all.  (R)
I would describe this activity as very interesting.
I thought this activity was quite enjoyable.
While I was doing this activity, I was thinking about how much I enjoyed it.

Competence

I think I am pretty good at this activity.
I think I did pretty well at this activity, compared to other students.
After working at this activity for awhile I felt pretty competent.
I am satisfied with my performance at this task.
I was pretty skilled at this activity.
This was an activity that I couldn't do very well.  (R)

Effort-Importance

I put a lot of effort into this.
I didn't try very hard to do well at this activity.  (R)
I tried very hard on this activity.
It was important to me to do well at this task.
I didn't put much energy into this.  (R)

Pressure-Tension

I did not feel nervous at all while doing this.  (R)
I felt very tense while doing this activity.
I was very relaxed in doing these.  (R)
I was anxious while working on this task.
I felt pressured while doing these.

Choice (Experimental Factor)

I felt pretty free while doing this task.
I didn't really have a choice about doing this task.  (R)
I felt like I had to do this.  (R)
I did this activity because I had no choice.  (R)
STUDENT TEACHER QUESTIONNAIRE (PRE)

DIRECTIONS:
The following items concern your perception of your student teaching experience, taken as a whole. For each item, please circle the number that best indicates how strongly you agree or disagree with the statement using the following scale as a guide:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>strongly</td>
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<td>somewhat</td>
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<td>strongly</td>
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<tr>
<td>agree</td>
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</tbody>
</table>

1. I will enjoy student teaching very much.
   1  2  3  4  5  6  7

2. I will put a lot of effort into student teaching.
   1  2  3  4  5  6  7

3. I won't feel nervous at all while student teaching.
   1  2  3  4  5  6  7

4. Student teaching will be fun to do.
   1  2  3  4  5  6  7

5. Student teaching will be boring.
   1  2  3  4  5  6  7

6. I think I will be pretty good at student teaching.
   1  2  3  4  5  6  7

7. I won't try as hard as I can at student teaching.
   1  2  3  4  5  6  7

8. I will feel very tense while student teaching.
   1  2  3  4  5  6  7

9. It is very important to me to do well at student teaching.
   1  2  3  4  5  6  7

10. Student teaching will not keep my interest very well.
    1  2  3  4  5  6  7
<table>
<thead>
<tr>
<th></th>
<th>1 strongly disagree</th>
<th>2 disagree</th>
<th>3 somewhat disagree</th>
<th>4 neutral</th>
<th>5 somewhat agree</th>
<th>6 agree</th>
<th>7 strongly agree</th>
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<tbody>
<tr>
<td>11. I will be anxious while student teaching.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>12. I will feel pressured while student teaching.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>13. I think I will do pretty well, compared to other student teachers.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>14. I expect student teaching to be very interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>15. While I am student teaching, I will be enjoying it.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>16. After a week of student teaching, I will feel pretty competent.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>17. I won't put as much energy into student teaching as I could.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>18. I will be very relaxed while I am student teaching.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>19. I expect to be satisfied with my performance as a student teacher.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>20. I will be pretty skilled at student teaching.</td>
<td>1</td>
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</tbody>
</table>
STUDENT TEACHER QUESTIONNAIRE (POST)

DIRECTIONS:
The following items concern your perception of your student teaching experience, taken as a whole. For each item, please circle the number that best indicates how strongly you agree or disagree with the statement using the following scale as a guide:

1 2 3  4 5 6  7
strongly disagree somewhat disagree somewhat neutral somewhat agree agree strongly agree

1. I enjoyed student teaching very much.
   1  2 3  4 5 6  7

2. I put a lot of effort into student teaching.
   1  2 3  4 5 6  7

3. I did not feel nervous at all while doing this.
   1 2 3  4 5 6  7

4. Student teaching was fun to do.
   1  2 3  4 5 6  7

5. I thought student teaching was boring.
   1  2 3  4 5 6  7

6. I think I was pretty good at student teaching.
   1  2 3  4 5 6  7

7. I didn't try as hard as I could at student teaching.
   1  2 3  4 5 6  7

8. I felt very tense while student teaching.
   1  2 3  4 5 6  7

9. It was very important to me to do well at student teaching.
   1  2 3  4 5 6  7

10. Student teaching did not keep my interest very well.
    1  2 3  4 5 6  7
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
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<td>11. I was anxious while student teaching.</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
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<tr>
<td>13. I think I did pretty well, compared to other student teachers.</td>
<td></td>
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<tr>
<td>14. I would describe student teaching as very interesting.</td>
<td></td>
<td></td>
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<td>4</td>
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<td>6</td>
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</tr>
<tr>
<td>15. While I was student teaching, I was thinking how much I enjoyed it.</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
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<td>16. After a week of student teaching, I felt pretty competent.</td>
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<td>7</td>
</tr>
<tr>
<td>17. I didn't put as much energy into student teaching as I could have.</td>
<td></td>
<td></td>
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<td>7</td>
</tr>
<tr>
<td>19. I am satisfied with my performance as a student teacher.</td>
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</table>
Cooperating Teacher Questionaire

DIRECTIONS:
These situations offer four options for responses that a cooperating teacher could make to situations involving his or her student teacher. Rate the appropriateness, in your view, of each response by circling one number per response.

1. Dave, your student teacher, is having serious trouble maintaining classroom discipline. You could:

a. Tell Dave how to restore order and see that he does so.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

b. Encourage Dave to visit other classrooms and see how other teachers maintain order.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

c. Discuss the problem with Dave and encourage him to work out a solution.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

d. Tell Dave how to restore order and show him how he can benefit from your advice.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

2. While Sherie, your student teacher, is teaching her lesson, she writes some incorrect information on the board and instructs the students to copy this information into their notes. You could:

a. Stop the lesson and tell Sherie to recheck her information.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

b. Later tell Sherie that some of her content was incorrect and let her recheck and adjust as she feels necessary.
1.....2......3......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate
c. Later tell Sherie that some of her content was incorrect and suggest that she check with other student teachers on ways to avoid content mistakes.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

d. Later tell Sherie what content was incorrect and point out to her the importance of accuracy.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

3. How appropriate are the following statements in describing your training of a student teacher:

a. I want to train the student teacher to teach in the way that my experience has shown to be best.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

b. I want the student teacher to understand the norms and values of good teachers and to feel an obligation to live up to those standards.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

c. I would like the student teacher to compare herself to very good teachers and behave the way they do.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

d. I want to make the student teacher aware of the elements of good teaching and encourage her to take responsibility for doing a good job.

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate

4. Assess these responses of a cooperating teacher to Jim, his student teacher, after seeing Jim teach a poor lesson:

a. "Jim, I'll show you how to improve that lesson."

1.2.3.4.5.6.7
very moderately very
inappropriate appropriate appropriate
b. "It would be good to talk about that lesson with other student teachers, Jim."
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

c."Jim, you should prepare your lessons more carefully."
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

d."Jim, how do you feel you could improve your lesson?"
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

5. Richard, your student teacher, loses his temper with the students frequently. He consistently blames the youngsters for these confrontations. You could:

a. Emphasize how important it is for him to "control himself" in order to succeed as a teacher.
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

b. Demonstrate classroom management techniques for him and let him continue teaching only if he starts to use those techniques.
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

c. Help him see how other teachers handle the situations that make him angry.
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate

d. Discuss with him his angry comments in the classroom and encourage him to consider what changes he can make in his approach to the students.
1.......2.......3.......4.......5.......6.......7
very moderately very
inappropriate appropriate appropriate
6. Lucy is your student teacher. She has done satisfactory teaching during the first three weeks but has become distracted and apathetic in the past week and a half. She is no longer planning her lessons carefully. You could:

a. Impress upon her the importance of careful lesson planning in order to successfully complete her student teaching.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

b. Let her know that she doesn't have to do detailed lesson planning every day and see if you can help her to overcome her distraction.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

c. Supervise her during planning period to see that she completes her lesson plans.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

d. Encourage her to put in effort similar to other student teachers in your school.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

7. Your student teacher has been doing just the minimum work to "get by." It is the midpoint in the student teaching experience. You could:

a. Give him a midterm report showing your concern and get his reaction to it.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

b. Tell him that his level of effort is less than that of other student teachers you have had.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate

c. Stress that he should do better with his student teaching or that he may not be able to get a teaching job.

1       2       3       4       5       6       7
very modestly very inappropriate appropriate appropriate
d. Tell him that his work so far is disappointing and offer to write him an especially good evaluation if he can make major improvements during the second half.

1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate

8. Your student teacher does not speak to other teachers in your school. She makes no effort to establish connections with anyone outside of the classes she teaches. You are concerned about her ability to relate to other professionals on the job. You could:

a. Prod her into interactions and provide her with much praise for any social initiative.
1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate

b. Talk to her and emphasize the benefits of communicating with other educators.
1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate

c. Invite her to talk about her relations with other people in the school, and encourage her to take small steps when she's ready.
1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate

d. Encourage her to observe how other teachers and student teachers relate and to join with them.
1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate

9. Bill, your student teacher, has been generally effective in his teaching. However, on Wednesday nights he plays on a rugby team. After the game, the players all go out for drinks until quite late at night. You've noticed that Bill is irritable with the students on Thursdays and gives them worksheets to do all day. You could:

a. Ask him how he plans to handle the problem.
1........2........3........4........5........6........7
very moderately very
inappropriate appropriate appropriate
b. Tell him he probably ought to give up the Wednesday night game or at least the drinks.

very  moderately  very
inappropriate  appropriate  appropriate

1......2.......3......4......5......6......7

very  moderately  very
inappropriate  appropriate  appropriate

1......2.......3......4......5......6......7

c. Suggest that he put in as much steady effort through the week as other student teachers do.

very  moderately  very
inappropriate  appropriate  appropriate

1......2.......3......4......5......6......7

d. Tell him that you won't be able to fully recommend him as a teacher if he continues to perform poorly on Thursdays so he'll need to change his Wednesday night schedule.

very  moderately  very
inappropriate  appropriate  appropriate

1......2.......3......4......5......6......7

DIRECTIONS:
These situations offer four options for responses that a cooperating teacher could make to situations involving his or her student teacher. Based on your experience with your cooperating teacher, indicate how appropriate you believe your cooperating teacher would consider each response. Remember, there are no right answers. Just indicate how you think your cooperating teacher would view each response.

1. Dave, your student teacher, is having serious trouble maintaining classroom discipline. You could:
   a. Tell Dave how to restore order and see that he does so.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate
   b. Encourage Dave to visit other classrooms and see how other teachers maintain order.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate
   c. Discuss the problem with Dave and encourage him to work out a solution.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate
   d. Tell Dave how to restore order and show him how he can benefit from your advice.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate

2. While Sherie, your student teacher, is teaching her lesson, she writes some incorrect information on the board and instructs the students to copy this information into their notes. You could:
   a. Stop the lesson and tell Sherie to recheck her information.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate
   b. Later tell Sherie that some of her content was incorrect and let her recheck and adjust as she feels necessary.
      1.very 2. moderately 3. inappropriate 4. appropriate 5. very 6. moderately 7.
      inappropriate appropriate appropriate
c. Later tell Sherie that some of her content was incorrect and suggest that she check with other student teachers on ways to avoid content mistakes.

1. very
2. moderately
3. inappropriate

Inappropriate very

3. How appropriate are the following statements in describing your training of a student teacher:

a. I want to train the student teacher to teach in the way that my experience has shown to be best.

1. very
2. moderately
3. inappropriate

Inappropriate very

b. I want the student teacher to understand the norms and values of good teachers and to feel an obligation to live up to those standards.

1. very
2. moderately
3. inappropriate

Inappropriate very

c. I would like the student teacher to compare herself to very good teachers and behave the way they do.

1. very
2. moderately
3. inappropriate

Inappropriate very

d. I want to make the student teacher aware of the elements of good teaching and encourage her to take responsibility for doing a good job.

1. very
2. moderately
3. inappropriate

Inappropriate very

4. Assess these responses of a cooperating teacher to Jim, his student teacher, after seeing Jim teach a poor lesson:

a. "Jim, I'll show you how to improve that lesson."

1. very
2. moderately
3. inappropriate

Inappropriate very

b. "It would be good to talk about that lesson with other
student teachers, Jim."
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate

"Jim, you should prepare your lessons more carefully."
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate

d."Jim, how do you feel you could improve your lesson?"
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate

5. Richard, your student teacher, loses his temper with the
students frequently. He consistently blames the youngsters
for these confrontations. You could:

a. Emphasize how important it is for him to "control
himself" in order to succeed as a teacher.
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate

b. Demonstrate classroom management techniques for him and
let him continue teaching only if he starts to use those
techniques.
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate

c. Help him see how other teachers handle the situations
that make him angry.
1 ......2 ......3 ......4 ......5 ......6 ......7
very  moderately  very
inappropriate  appropriate  appropriate

d. Discuss with him his angry comments in the classroom and
encourage him to consider what changes he can make in his
approach to the students.
1......2......3......4......5......6......7
very  moderately  very
inappropriate  appropriate  appropriate
6. Lucy is your student teacher. She has done satisfactory teaching during the first three weeks but has become distracted and apathetic in the past week and a half. She is no longer planning her lessons carefully. You could:

a. Impress upon her the importance of careful lesson planning in order to successfully complete her student teaching.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate
   6. appropriate
   7. appropriate

b. Let her know that she doesn't have to do detailed lesson planning every day and see if you can help her to overcome her distraction.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate

   c. Supervise her during planning period to see that she completes her lesson plans.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate

   d. Encourage her to put in effort similar to other student teachers in your school.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate

7. Your student teacher has been doing just the minimum work to "get by." It is the midpoint in the student teaching experience. You could:

a. Give him a midterm report showing your concern and get his reaction to it.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate

b. Tell him that his level of effort is less than that of other student teachers you have had.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate

   c. Stress that he should do better with his student teaching or that he may not be able to get a teaching job.
   1. very
   2. moderately
   3. very
   4. appropriate
   5. appropriate
d. Tell him that his work so far is disappointing and offer to write him an especially good evaluation if he can make major improvements during the second half.

very moderately very
inappropriate appropriate appropriate

8. Your student teacher does not speak to other teachers in your school. She makes no effort to establish connections with anyone outside of the classes she teaches. You are concerned about her ability to relate to other professionals on the job. You could:

a. Prod her into interactions and provide her with much praise for any social initiative.

very moderately very
inappropriate appropriate appropriate

b. Talk to her and emphasize the benefits of communicating with other educators.

very moderately very
inappropriate appropriate appropriate

c. Invite her to talk about her relations with other people in the school, and encourage her to take small steps when she's ready.

very moderately very
inappropriate appropriate appropriate

d. Encourage her to observe how other teachers and student teachers relate and to join with them.

very moderately very
inappropriate appropriate appropriate

9. Bill, your student teacher, has been generally effective in his teaching. However, on Wednesday nights he plays on a rugby team. After the game, the players all go out for drinks until quite late at night. You've noticed that Bill is irritable with the students on Thursdays and gives them worksheets to do all day. You could:

a. Ask him how he plans to handle the problem.

very moderately very
inappropriate appropriate appropriate
b. Tell him he probably ought to give up the Wednesday night game or at least the drinks.

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c. Suggest that he put in as much steady effort through the week as other student teachers do.

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d. Tell him that you won't be able to fully recommend him as a teacher if he continues to perform poorly on Thursdays so he'll need to change his Wednesday night schedule.

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Vita

Richard Newton Weber

Birthdate: June 27, 1952

Birthplace: Montclair, New Jersey

Education:

1982-1986 The College of William and Mary
   Williamsburg, Virginia
   Educational Specialist

1975-1978 Elmira College
   Elmira, New York
   Master of Education

1970-1974 Cornell University
   Ithaca, New York
   Bachelor of Arts