



Supervisory behavior and teacher satisfaction  
by Kenneth Patrick Fraser

A thesis submitted in partial fulfillment of the requirements for the degree of DOCTOR OF  
EDUCATION

Montana State University

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Abstract:

The problem of this study was: (a) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana public schools during the 1978-1979 school year; and (b) to relate differences between actual and preferred supervisory behavior to the degree of teacher satisfaction with supervision.

The problem was investigated by: (a) a thorough review of the literature related to supervision and job satisfaction; (b) the development of a questionnaire, based on the literature review, to measure teacher perceptions of actual and preferred supervisory behavior, and teacher satisfaction with supervision; (c) a survey of a systematic random sample of Montana public school teachers; and (d) the tabulation, analysis, and comparison of the data collected.

The major findings of the study were that: (a) responses to a few of the items were dependent either on sex, or teaching level, or years of teaching experience; (b) many Montana teachers would prefer to experience more often thirty-one supervisory practices recommended in the literature since 1970; (c) satisfaction with supervision is significantly related to the absolute values of the difference between actual score and preferred score for these same thirty-one supervisory practices taken collectively; and (d) the absolute values of discrepancy scores for seventeen of the thirty-one recommended supervisory practices were found to make a significant, unique contribution to the prediction of one or more of the satisfaction indices.

The major recommendations of the study were: (a) that administrator training institutions ensure that supervisors be made aware of the teacher preferences for supervision expressed in this study; (b) that administrators develop mechanisms that will enable them to give supervisors feedback on teacher perceptions; and (c) that other studies be conducted to further refine the prediction of teacher satisfaction from supervisory behavior.

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SATISFACTION

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KENNETH PATRICK FRASER

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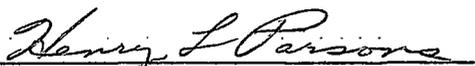
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ABSTRACT

The problem of this study was: (a) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana public schools during the 1978-1979 school year; and (b) to relate differences between actual and preferred supervisory behavior to the degree of teacher satisfaction with supervision.

The problem was investigated by: (a) a thorough review of the literature related to supervision and job satisfaction; (b) the development of a questionnaire, based on the literature review, to measure teacher perceptions of actual and preferred supervisory behavior, and teacher satisfaction with supervision; (c) a survey of a systematic random sample of Montana public school teachers; and (d) the tabulation, analysis, and comparison of the data collected.

The major findings of the study were that: (a) responses to a few of the items were dependent either on sex, or teaching level, or years of teaching experience; (b) many Montana teachers would prefer to experience more often thirty-one supervisory practices recommended in the literature since 1970; (c) satisfaction with supervision is significantly related to the absolute values of the difference between actual score and preferred score for these same thirty-one supervisory practices taken collectively; and (d) the absolute values of discrepancy scores for seventeen of the thirty-one recommended supervisory practices were found to make a significant, unique contribution to the prediction of one or more of the satisfaction indices.

The major recommendations of the study were: (a) that administrator training institutions ensure that supervisors be made aware of the teacher preferences for supervision expressed in this study; (b) that administrators develop mechanisms that will enable them to give supervisors feedback on teacher perceptions; and (c) that other studies be conducted to further refine the prediction of teacher satisfaction from supervisory behavior.

## CHAPTER I

### INTRODUCTION

Sergiovanni (1977) indicated that two of the major purposes of teacher supervision are to promote the professional growth of teachers and to improve student learning. Yet it seems certain that the term "supervision" has both negative and positive connotations for teachers, with most of the emphasis falling on the positive aspects in the more recent literature. However, supervision of teachers, as opposed to supervision by teachers, is necessarily linked to the administrative function, and often has negative valence for teachers. Supervisory control of teachers may be tightly imposed by mandate, or loosely applied by granting wide discretion to teachers.

During the last ten years, in the literature if not always in practice, supervisory roles appear to be almost equated with consultative and advisory activities which emphasize staff rather than line functions, and collegial rather than authority relationships. In these respects, supervision appears to have positive valence for teachers. Of course, the supervisor has to face the possibility of conflict between the evaluative and helping functions of his supervision.

Literature published since 1970 in the area of supervision recommends certain supervisory techniques and practices as being highly effective in improving the teaching-learning process. However, improvement of this process seems dependent upon teacher attitudes toward supervision.

While the principal is responsible for ensuring that his staff is adequately supervised, he may delegate the task of supervision to other personnel. This does not, however, relieve the principal of the ultimate responsibility for effective supervision in his school.

There is a wealth of research investigating the principal's supervisory and leadership styles. Only three findings are to be mentioned here. Firstly, Anderson and Brown (1966:12), as a result of Anderson's research using Stogdill's Leader Behavior Description Questionnaire (Form 12), reported that in terms of teacher satisfaction, the "good" supervisor appears to be one who leads his staff frequently, irrespective of the style of his leadership.

Secondly, McNamara and Enns (1966:7) reported McNamara's research. He used Fiedler's Least Preferred Co-worker instrument in conjunction with a measure called the Group Atmosphere. The findings showed that staff

acceptance of the principal is a crucial factor in his leadership effectiveness.

And thirdly, Parsons' (1971:8) study led him to recommend that persons far removed from the teacher, regardless of their supervisory skills, are unlikely to affect teacher behavior. The most influential supervision is likely that which is carried out by the principal.

From these studies, it may be concluded that it is not the leadership or supervisory style of the principal that is significant so much as teacher acceptance of that style.

The effectiveness of supervision, then, will depend on teacher attitudes toward the supervisory process. Unless teachers are satisfied with the supervision they receive, it will not have the desired effects of promoting professional growth and improving student learning.

It is imperative, therefore, that supervisors become aware of and understand teacher expectations of the supervisory process. Teacher satisfaction with supervision may be conceptualized as one element of (but distinct from) job satisfaction. It would seem to relate to the perceived difference between what an individual would prefer and what is actually experienced.

### Statement of the Problem

The problem of this study was two-fold: (a) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana schools during the 1978-1979 school year; and (b) to determine if a relationship exists between teacher satisfaction with supervision and the difference between teacher perceptions of actual and preferred supervisory behavior.

### Contribution to Supervisory Theory and Practice

The study was designed to indicate if the supervisory practices recommended in the literature since 1970 were really those practices that teachers would prefer. If they were not, one may question the theoretical bases posited in the literature for these practices.

It was also designed to help supervisors to understand teacher preferences for particular supervisory practices, and to recognize those discrepancies between actual and preferred supervisory behavior that contribute most to teacher satisfaction.

Consequently, the study may lead to the

establishment of more effective supervisory programs in the schools.

#### General Questions to be Answered

The questions considered in this study were:

1. How often do supervisors actually use each of the supervisory practices recommended in the literature since 1970?
2. How often would teachers prefer their supervisors to use each practice?
3. How satisfied are teachers with the supervision that they actually experience?
4. Is there a significant difference between the supervisory practices that teachers would prefer and those that they actually experience?
5. Are the differences between actual and preferred supervisory practices significantly related to the degree of teacher satisfaction with supervision?
6. For each of questions 1, 2, and 3, does response depend upon whether teachers belong to one of the following sub-categories:
  - (a) elementary, junior high, or senior high teachers?

(b) male or female teachers?

(c) beginning or experienced teachers?

### General Procedures

This study began with an extensive review of literature related to supervisory behavior and teacher satisfaction. This provided the basis for a survey questionnaire designed to gather data from teachers in Montana public schools.

To fulfill the study purposes it was necessary to complete the following tasks:

1. identify trends in supervisory behavior recommended in literature on supervision published since 1970;
2. identify criteria which may be used to assess teacher satisfaction with supervision, from the current literature on job satisfaction as it related to supervision;
3. develop a questionnaire to measure:
  - (a) teacher perceptions of actual supervisory behavior;
  - (b) teacher perceptions of preferred supervisory behavior, and
  - (c) teacher satisfaction with supervision.

The instrument was reviewed by the following experts in the area of supervision to ensure content validity:

Dr. Thomas J. Sergiovanni, Head  
Department of Administration, Higher and Continuing  
Education  
College of Education  
University of Illinois at Urbana-Champaign

Dr. Robert Bryce  
Department of Educational Administration  
The University of Alberta  
Edmonton, Alberta, Canada

Dr. Robert Van Woert  
Department of Educational Administration  
Montana State University  
Bozeman, Montana

Dr. Milton K. Negus  
Superintendent of Schools  
Bozeman Public School District #7  
Bozeman, Montana

In addition, these gentlemen made a number of valuable suggestions regarding the wording of particular items and questionnaire format.

Following this, a pilot study was conducted to determine the test-retest reliability of the instrument. The questionnaire was administered on two different occasions to twenty members of a graduate class in Curriculum at Montana State University during Fall Quarter, 1978. As a result of this pilot study, three items were eliminated

from the original instrument, and all of the items retained had a reliability co-efficient equal to or greater than .85.

The final questionnaire was administered to a systematic random sample drawn from a list of all public school teachers in the state of Montana.

The data has been analysed and the findings presented. From the findings, conclusions have been drawn and recommendations made for effective supervisory practice and for further study.

#### Delimitations

The study was delimited to the 1978-1979 school year, and considered only the perceptions of a systematic random sample of teachers in Montana public schools.

#### Definition of Terms

Supervisor: a person responsible for the supervision of a teacher in a school.

Supervisory behavior: things supervisors do to promote student learning and the professional growth of teachers. In this study, the above is operationalized in

terms of dimensions derived from the literature since 1970 which recommends specific supervisory techniques and practices.

Teacher: a member of the school faculty who spends the regular school day in a teaching-learning situation with students.

Beginning teachers: teachers with one to three years of experience.

Experienced teachers: teachers with four or more years of experience.

Elementary teacher: a teacher of grades one to six.

Junior high teacher: a teacher of grades seven to nine.

Senior high teacher: a teacher of grades ten to twelve.

Satisfaction: the contentment resulting from the gratification of a need or want.

Job satisfaction: the extent to which the institutional role expectations are congruent with personal need-dispositions.

Teacher satisfaction with supervision: the degree

of satisfaction that a teacher experiences as a result of actual supervisory behavior. In this study, it is conceptualized as one element of (but distinct from) job satisfaction.

### Summary

According to the recent literature, supervision is intended to have a positive effect on teachers. Specific supervisory techniques and practices are recommended because they are thought to promote professional growth and to improve student learning.

Research findings suggest, however, that the effectiveness of supervisory behavior will depend upon teacher attitudes toward the supervisory process.

The purpose of the study, then, was to compare teacher attitudes toward the recommended supervisory techniques and practices with teacher attitudes toward the actual supervisory behavior they experience in the schools. The study also determined if teacher satisfaction with supervision relates to the difference between actual and preferred supervisory behavior.

By helping supervisors to understand the

supervisory behavior preferred by teachers, the study should contribute to better supervision in Montana schools.

## CHAPTER II

### REVIEW OF LITERATURE

This chapter contains a review of the literature relating supervisory behavior, perception, and teacher satisfaction. It also contains a review of the literature presenting current theory and practice in the area of supervision. The method of organization is as follows:

1. Conceptual Framework
2. Research Related to the Conceptual Framework
3. Supervision Defined
4. Theory of Supervision
5. Current Trends in Supervisory Practice
6. Bases for Questionnaire Development

#### Conceptual Framework

Luthans (1973:326-329) developed a model of human behavior which enables the relationship between supervisory behavior, perception, and teacher satisfaction to be established. The model uses an interaction approach to integrate the classic stimulus-response (behavioristic) view that behavior is determined by the situation, with the humanistic (psychoanalytic) view that behavior comes from within the individual. (Luthans, 1973).

Working from a simple definition of behavior as ". . . something an organism does," Luthans proposes the  $S \leftrightarrow O \rightarrow B$  model. This represents a causal sequence. S, the situation, incorporates the immediate stimulus, the physical environment and the sociocultural environment. The human organism, O, includes the physiological being as well as the psychological processes and personality. A key aspect of the model is the interaction between S and O which precedes B, the behavior:

The interaction usually takes the form of the O's interpreting the immediate S. The type of interaction can be thought of as perception. However, this is only one simple form of interaction. In the  $S \leftrightarrow O \rightarrow B$  model, the perceptual process is part of the O, along with the other psychological processes of learning and motivation. (Luthans, 1973:328)

The formal definition of perception is consistent with this analysis. Locke (1969:316) considers perception to include: "(a) the awareness of existents (resulting from automatic integration of sensations by the brain) and (b) cognitive judgements."

Applying Luthans' definition above, supervisory behavior is simply things supervisors do. Supervisory behavior can be considered as a stimulus for the behavior of teachers. Alternatively, it can be considered as a response to the behavior of teachers.

Satisfaction and dissatisfaction may be seen as arising from perceptions associated with interactions between the situation and the human organism. In considering job satisfaction and dissatisfaction, for example, Locke (1969:316) proposed that: "Job satisfaction and dissatisfaction are a function of the perceived relationships between what one wants from one's job and what one perceives it as offering or entailing." Similarly Miskel, Glasnapp and Hatley (1975:40) suggested that the basic postulate of most conceptualizations of job satisfaction relates to this perceived difference between an individual expectation (arising from within the human organism) and what is actually experienced (perceptions of the situation).

Teacher satisfaction with supervision is conceptualized as one element of (but distinct from) job satisfaction. Hewitson (1975:13) suggested that it may depend on two critical aspects of professional autonomy: firstly, their involvement in decisions which directly affect them; and secondly, the supervisory practices of administrators who have the hierarchical power to thwart their needs for esteem and autonomy.

### Research Related to the Conceptual Framework

Halpin (1969:290) demonstrated that "leadership consideration" and "initiating structure" are key dimensions of leadership behavior. Initiating Structure refers to the leader's behavior in delineating the relationship between himself and subordinates, while Consideration refers to behavior indicative of trust, respect, and warmth.

House, Filley and Kerr (1971:19) found strong support for the hypothesis that subordinates' satisfaction is positively related to Consideration.

Miskel, Glasnapp and Hatley (1975:40) hypothesized that attitudinal discrepancies between motivational factors and organizational incentive factors are significant predictors of educators' job satisfaction. In addition, they proposed that a primary life interest factor may serve as an intervening variable. The findings of the study tended to support this hypothesis for some educator groups and predictor components though beta weights and amounts of explained variance were low. A key finding was that:

The strongest support for the theoretical model was found in relation to the intervening status of the primary life interest variable. With the exception of the scores of central office administrators, this variable exhibited a significant beta weight for all groups indicating that the greater the primary life interests were in the job, the higher was the level of satisfaction. (p. 51)

Herzberg's theory of motivation, first proposed in 1959, made explicit the relationship between administrative behavior and subordinate satisfaction. Herzberg proposed that factors which contribute to job satisfaction include achievement, recognition, the work itself, responsibility and advancement. On the other hand, factors which contribute most to job dissatisfaction include salary, interpersonal relations, supervision, working conditions, policy and administration. Herzberg (1974) mentioned that he performed his studies in business and industry.

Sergiovanni (1967) replicated the Herzberg studies with teachers and found that achievement, recognition and responsibility contributed most to satisfaction, whereas interpersonal relations (subordinates and peers), school policy and administration contributed most to dissatisfaction.

A key decision facing a supervisor is to determine

the extent to which teachers should participate in decision-making processes. Schein (1970:77) observed:

The number of studies which have shown, both for productivity and for the satisfaction and psychological growth of employees, the superiority of supervisory strategies which involve employee participation in decision-making, are now sufficient to suggest strongly that more shared decision-making, greater influence for employees, and power equalization should be considered seriously for many kinds of organizations.

Belasco and Alutto (1972:50-54) used a discrepancy approach to examine the relationship between levels of teacher satisfaction and the extent of their participation in decision making. They found that teachers who are decisionally deprived report significantly lower job satisfaction.

The relationship between perception of role (received role) and job satisfaction was explored by Greene and Organ (1973:95), who state:

. . . a person should ideally not only correctly perceive what others expect (role accuracy), and have a subjective sense of certainty in how to meet those expectations (role clarity), but also be in agreement with others about what those expectations should be (role consensus).

Thompson (1971:349) investigated the interrelationships of self-perception, perceived supervisory style and job satisfaction for professional employees and

administrators in a state department of education. More supportive styles of leadership were found to be associated with higher levels of job satisfaction with the effect moderated by favorable self-perception.

These findings emphasize the importance of the perceptions of teachers when one is considering the effect of supervisory behavior on teacher satisfaction. Supervisors need to realize that responses both in themselves and in teachers are a function of perceptions. For this reason, supervisors must understand the nature of individual differences in respect to factors which might promote subordinate satisfaction. The primary life interests of teachers will vary, for instance.

Nevertheless, it seems that teacher satisfaction is generally enhanced by supervisory behavior which facilitates and promotes achievement, recognition and responsibility, which ensures teacher involvement in decision making, and which is high on the Consideration dimension of leadership.

#### Supervision Defined

Burton and Brueckner (1955:85-88) identified certain principles which govern the operation of supervision.

Included in these principles are two which state that "The ultimate purpose of supervision is the promotion of pupil growth", while "The immediate purpose of supervision is co-operatively to develop favorable settings for teaching and learning."

Harris (1963) defined supervision as:

What school personnel do with adults and things for the purpose of maintaining or changing the operation of the school in order to directly influence the attainment of the major instructional goals of the school. Supervision has its impact on the learner, then, through other people and things.

Wiles (1967) described the supervisor's role as one of "supporting, assisting, and sharing, rather than directing."

Sergiovanni and Starratt (1971:9-13) pointed out that newer patterns of supervision ". . . depend largely upon promoting the personal and professional growth of the entire staff. . ." They defined supervision as: ". . . a process used by those in schools who have responsibility for one or another aspect of the schools' goals and who depend directly upon others to help them achieve these goals."

They emphasized (1971:10) that what differentiates supervisory behavior from other forms of organizational

behavior is "action to achieve goals through other people." For example, a principal who works to improve the effectiveness of the educational program for students by helping teachers become more effective in the classroom is behaving in a supervisory way.

An interesting corollary mentioned by Sergiovanni and Starratt (1971:13) is that "when administrators and others decide to behave in a supervisory way, they adopt the perspective of change agent."

#### Theory of Supervision

Sergiovanni and Starratt (1971:15-16) presented a synthesizing theory of supervision:

The theory identifies and describes three sets of variables. One set, the organizational success variables, represent the output which results from school efforts and activities. Another set, the initiating variables, represents those assumptions, actions, belief patterns, and modes of operation which are best described as administrative and organizational. The third set, the mediating variables, constitute the fabric of the human organization of any school.

The theory suggests that working to affect change in the mediating variables (which include such variables as teachers' attitudes, levels of job satisfaction, commitment to school goals, levels of performance goals held, levels of group loyalty, degree of confidence and trust,

sense of power and influence) will in the long run increase the schools' effectiveness.

Sergiovanni and Starratt defined the newer patterns of action by supervisors which attempt to change the mediating variables as enlightened supervision. They contended that "Enlightened supervision . . . fully coordinates, develops, and utilizes the resources of the human organization." They proposed (1971:124) that their concept of enlightened supervision entails: ". . . the principle of supportive relationships, group methods of supervision, Theory Y assumptions, self-control methods, ability authority, and so on." They added (1971:162) that "The enlightened supervisor works for his own extinction."

Of course, exceptions will exist. For example, Dubin (1965:487) argued plausibly against an unqualified acceptance of managerial assumptions characterized by McGregor's Theory Y or Argyris' growth assumptions: "Work for probably a majority of workers, and even extending into the ranks of management, may represent an institutional setting that is not a central life interest for its participants." A philosophy of direction and control

may be appropriate for certain individuals. Once again a supervisor will need to take into account individual differences in worker motivation and primary life interest.

Sergiovanni and Starratt (1971:86) made a similar point:

Enlightened supervision recognizes that forces in the client may require the supervisor to behave in a variety of ways. Highly dependent teachers will need paternalistic supervisory environments, and non-committed students will require close-controlled supervisory environments.

Nevertheless they added that "the enlightened supervisor works to end client dependency and to increase client commitment."

Sergiovanni and Carver (1973:63) stated that "esteem is the most powerful motivator for today's teachers." Teachers need to feel important as persons (self-concept) and as recognized, respected, and competent professionals (professional concept). To this end, they suggested (1973:118) that the supervisor is responsible for "insuring that the new teacher's career in the school is characterized by early, if not immediate, success."

Sergiovanni and Starratt (1971:49) stated that "a more equitable distribution of power, authority, and status is a prerequisite for the success of enlightened

supervision." It seems likely that many teachers will increase their self-esteem by participating in meaningful decisions related to their work.

It is obvious, then, that the success of a supervisory program will depend on the general supervisory climate in the school and on the educational leadership abilities of the supervisor.

Rubin (1975) identified four areas of professional growth of teachers:

1. Growth in sense of purpose, philosophy and meaning with respect to education.
2. Growth in one's understanding of students.
3. Growth in one's knowledge of subject matter.
4. Growth in one's mastery of technique.

In each of these areas, teachers need to talk with other teachers. This interaction is the lifeblood of professional growth and of educational program development. Professionals in schools need opportunities for mutual exchange of information and ideas.

#### Current Trends in Supervisory Practice

Sergiovanni (1977:371-436) distinguished between "evaluation which emphasizes on-going growth and development" (formative evaluation) and evaluation which is concerned with "judging and rating the teaching" (summative

evaluation). The latter is a basis for granting tenure, or increments, or for recommending dismissal. The former is more career-oriented. Its purpose is to improve teacher effectiveness, to inspire professional growth, and to shape a successful career.

Sergiovanni and Starratt (1971:180) stated that "Emerging supervisory practices are characterized by an increased emphasis on professional work groups." They added that:

In enlightened supervisory environments supervisors work with teachers, teachers work with teachers, and teachers work with students in problem-solving, feedback, evaluation, and decision-making relationships which focus on improving the educational program and increasing teacher-learner effectiveness.

Sergiovanni and Starratt (1971:180) stated that "Enlightened supervisors use group methods (of supervision)." Teams of experts (including, for example, the principal, a department head, and one or more colleagues skilled in the teacher's specialty) secure, over a period of time, a valid and reliable sample of the teacher's total behavior. This implies the availability of time for committees to meet for pre-visitation and post-visitation conferences with the teacher, for group discussions aimed at the sharing of mutual problems, for the provision of

demonstration lessons, for observation-team visitations, and so on. The use of group methods of supervision, involving an interaction between peers, is particularly relevant to instructional improvement over a period of time.

Because teacher esteem is important, evaluation must take place in a constructive and non-threatening atmosphere. To this end, criteria for appraisal must be agreed to and clearly understood by the teacher.

Cogan (1973:10-12) identified eight phases to the cycle of supervision:

1. Establishing the teacher-supervisor relationship. This entails building a relationship based on mutual trust and support, and inducting the teacher into the role of co-supervisor.
2. Intensive planning of units and lessons with the teacher.
3. Planning of the observation strategy by teacher and supervisor.
4. Observing in-class instruction.
5. Careful analysis of the teaching-learning process. This entails an attempt to identify patterns of teacher behavior which exist over time, and their effect on classroom activity.
6. Planning the conference strategy.
7. Holding the conference.
8. Resumption of planning.

Cogan's practices could be adapted readily to group methods of supervision. Depending upon the nature of the problem, varying coalitions of interdependent

expert professionals could work together with the teacher. Supervision then becomes a support system designed to deliver assistance directly to the teacher.

Sergiovanni (1977:380) suggested that support should be both psychological (toward accepting and encouraging the teacher) and technical (making available teaching and professional practice alternatives).

Feedback given to the teacher should be descriptive rather than judgmental, specific rather than general, and at a time as close to the actual behavior as possible. Moreover, due to the necessity of summative evaluation eventually, Sergiovanni (1977:381) stressed the importance of relying as much as possible on information whose accuracy can be reasonably documented. He added (1977:435) that:

. . . the actual evaluation report records should be supplemented by a brief, simple accounting system which indicates with whom (he) has worked, the nature of his supervisory activity, and the time spent with each teacher and on each activity.

The supervisor must be able to provide evidence of positive action taken in designated areas of need.

Sergiovanni (1977:384) stated that "An early step in developing an evaluation program is the development of a set of agreements. . . for the department." He added

(1977:387) that "Linking . . . ratings to a set of department agreements establishes credibility to the evaluation strategy."

Sergiovanni (1977:389) indicated that "teachers should be engaged continuously in a cycle of target setting designed to improve competencies in each area of professional growth."

For many teachers, self-evaluation should eventually become the primary means of effecting improved teaching performance. In this respect, it is the responsibility of each teacher to plan for his own success; it is the responsibility of his colleagues to advise him and help him; it is the responsibility of the supervisor to give counsel in planning, and to lend encouragement and support; and it is the responsibility of students to provide feedback to the individual teacher, which he may use at his discretion in setting future job targets for improvement.

Consistent with Sergiovanni, and with Cogan, is Redfern's "Performance Objectives Approach", as outlined by Lyle Berg (1975). This consists of a co-operative appraisal plan, based on specific job targets. Berg described a six step cycle as follows:

1. Writing job descriptions. The individual's job is defined and the responsibilities he accepts are detailed. These will reflect the major policies and goals of the school district, and will be written by committees including teachers.

2. Determining job targets. These pinpoint areas in which the teacher believes improvement is needed. This is a practical application of self-evaluation, and derives its direction from the major goals and responsibilities in the job description, and from descriptive feedback.

The teacher has an opportunity to consult with his supervisory committee members to discuss the goals he wishes to attain, to establish a time frame, to ask for additional resources or help, and to determine how completion of (and progress toward) the target will be measured.

3. Stating target activities. These show how the targets will be reached, and include a tentative schedule for action.

4. Collecting data. Evidence of progress is collected by the teacher and, independently, by his appraisers. During this time, the educator and his appraisers meet regularly to discuss how data should be collected, and to document progress. All methods used should be known and agreed upon by both parties.

5. Analysing the collected data. The teacher and the appraisers analyse the collected data independently at first. They then meet as a committee to discuss, compare, and cross-check findings and opinions. Diagnosis follows.

6. Preparing the final report. The teacher and his appraisers meet to evaluate the work and document the completion of the job target. Follow-up activities are suggested, and future job targets are discussed.

Such an approach, then, is co-operative, is diagnostic rather than judgmental, enhances personal and professional self-respect, fosters self-evaluation, and encourages experimentation. It also provides a supervisor

with documentation of everything done by himself and/or his delegated committee to help improve teacher effectiveness.

### Bases of Questionnaire Development

In the light of the literature reviewed, the following supervisory practices were identified as appropriate for research purposes:

#### Supervision related to classroom visitations.

- A. Before:
  - 1. departmental agreements, including a written statement defining role and responsibility.
  - 2. helping to plan units and lessons.
  - 3. performance expectations
  - 4. pre-visitiation conferences.
  - 5. evaluative criteria and methods
- B. During:
  - 6. frequency of classroom evaluation visits
  - 7. adequacy of time spent in supervision
  - 8. help in understanding students
- C. After:
  - 9. post-visitiation conferences
  - 10. immediacy of feedback

11. nature of feedback
12. help in understanding values and assumptions underlying teaching behaviors

Supervisory support:

A. Psychological:

13. concern for people
14. availability for consultation
15. collegiality
16. encouraging the use of discretion

B. Technical:

17. facilitation of teaching, by providing the necessary resources and assistance
18. provision of demonstration lessons
19. arranging visits to other schools.

Supervisory outcomes.

A. Related to individual and professional development:

20. self-evaluation
21. setting of job targets
22. inservice education
23. encouragement to pursue further training

24. participation in curriculum evaluation and revision
25. encouraging experimentation and innovation
26. bringing new developments in education to the attention of teachers

B. Related to school climate:

27. using group methods of supervision
28. facilitating sharing and communication between teachers.
29. openness of the supervisor to feedback.

Furthermore, based on the literature reviewed, the following criteria were selected as being suitable for assessing teacher satisfaction with supervision:

1. improvement of student learning
2. improvement of instruction
3. promotion of professional development
4. promotion of self-esteem
5. supportive interaction between peers
6. decisional involvement
7. recognition
8. influence

9. nature of the supervisory climate
10. overall satisfaction.

### Summary

The review of literature began by using a conceptual framework to relate the concepts of supervisory behavior, perception, and teacher satisfaction.

Then a consideration of research related to this framework emphasized the importance of perception in the supervisory process, and identified several criteria for the evaluation of teacher satisfaction with supervision.

There followed a section defining supervision in terms of "action to achieve goals through other people."

Next, a synthesizing theory of supervision stressed the importance of humanizing the supervisory process, by promoting the personal and professional growth of the entire staff. It was suggested that such enlightened supervision would evoke responses from subordinates characterized by high commitment to the work of the school, high loyalty to the membership, high performance goals, and a desire, combined with an opportunity, for personal and professional growth.

There followed a discussion of the current trends

in supervisory practice based on the above theory.

The review concluded by deriving from the literature reviewed the bases for the development of a questionnaire.

## CHAPTER III

### PROCEDURES

The problem of this study was: (a) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana public schools during the 1978-1979 school year; and (b) to relate differences between actual and preferred supervisory behavior to the degree of teacher satisfaction with supervision.

An instrument was prepared and mailed to a systematic random sample drawn from a list of all teachers in the state of Montana. Personnel at the Office of Public Instruction in Helena provided the researcher with access to the names and school addresses of all the public school teachers in Montana for the 1978-1979 school year.

The survey instrument asked the respondents to indicate the supervisory practices they would prefer, the supervisory practices they actually experienced, and their degree of satisfaction with supervision. (See Appendix B).

In this chapter, the following topics are discussed:

1. Population description and sampling procedures
2. Description of investigation categories

3. Method of collecting data.
4. Method of organizing data
5. Statistical hypotheses
6. Method of analysing data
7. Precautions taken for accuracy
8. Summary

#### Population Description and Sampling Procedures

The population consisted of all teachers employed in Montana public schools during the 1978-1979 school year.

Following the method outlined in Ferguson (1976:132) a systematic random sample was drawn from a list of all teachers in the state of Montana. The total number of teachers to be sampled was determined from the following formulae:  $n_0 = t^2 pq/d^2$  and  $n = n_0 / 1 + (n_0/N)$  (Cochran, 1977: 75-76). In the formulae,  $t$  is the abscissa of the normal curve which cuts off an area,  $\alpha$ , at the tails. The proportional division of the attributes of the population are represented by  $p$  and  $q$ . The margin of error is represented by  $d$ . The size of the population is represented by  $N$ .

To determine the number of teachers to be sampled in this study,  $t$  was taken as 1.96. Because the proportion of the population attributes was unknown, both  $p$  and  $q$  were taken as 0.5 to maximize their contribution to the

formulae. The margin of error represented by  $d$  was taken as 0.05. With these values,  $n_0=384$ .

Based on 10,000 teachers in the state of Montana, the number to be sampled was 370. Choosing the first teacher at random between 1 and 27, the systematic sample included every 27th teacher on the list.

#### Description of Investigation Categories

The study compared the responses of teachers according to (a) teaching level, (b) teaching experience, and (c) sex, within each of the following three investigation categories:

1. Preferred supervisory practices.
2. Actual supervisory practices.
3. Degree of satisfaction with supervision.

The study also investigated two further categories, based on the responses of the total sample. These were:

4. Differences between actual and preferred supervisory practices.
5. Relationship between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

### Method of Collecting Data

The researcher developed a questionnaire based on the review of the literature. This instrument was designed to measure teacher perceptions of actual and preferred supervisory behavior, and teacher satisfaction with supervision. It also obtained specific demographic information concerning the respondents.

Because all the questionnaire items were established from the literature, it was expected that the instrument would have content validity. However, to ensure this, the instrument was reviewed by a panel of experts in the area of supervision. These were Dr. Thomas Sergiovanni (Illinois), Dr. Robert Bryce (Alberta), Dr. Robert Van Woert (Montana State), and Dr. Milton Negus (Superintendent, Bozeman Public Schools).

A pilot study to determine the test-retest reliability was conducted by administering the same questionnaire on two different occasions to the same members of a graduate class in Curriculum at Montana State University during Fall quarter, 1978. There was a four week interval between administrations of the instrument (Ferguson, 1976). Scores on each item were correlated. Only those items having a

reliability co-efficient of .85 or greater were included in the final questionnaire. As a result of the pilot study, three of the original items were excluded from the survey instrument.

The final instrument, together with a cover letter explaining the study, was mailed to each teacher selected by systematic random sampling. A self-addressed, stamped envelope was included in which the respondents could return the questionnaire. A follow-up letter was sent to all non-responding teachers about two weeks after the initial mailing. (See Appendices A, B and C).

If a teacher failed to respond to just a few of the items, the researcher made a phone call to that teacher and thereby obtained the missing data. This enabled the researcher to use for analysis only completed questionnaires. The response rate for usable returns was eighty-two percent.

#### Method of Organizing Data

The data collected are presented in the form of tables. These tables are set up as follows:

1. A table giving the number and percentage of teachers involved in the distribution and return of the questionnaire.

2. Tables summarizing the demographic information pertaining to the respondents.

3. Tables comparing response frequencies for actual and preferred supervisory practices.

4. A table showing response frequencies for degree of satisfaction with supervision.

#### Statistical Hypotheses

Because no basis existed for stating directional alternatives, the null form only was used to state the statistical hypotheses. Therefore all null hypotheses were tested against non-directional alternative hypotheses. The .05 level of significance was chosen, because the researcher was prepared to accept a 5% probability of making a Type 1 error. The consequences of doing so were not critical in an exploratory study of this nature.

Similarly, because the consequences of making a Type 2 error were also not critical, the .05 level of significance was considered a good compromise value for this purpose. Moreover, the relatively large sample size further reduced the probability of making a Type 2 error (Ferguson, 1976:162-163).

Investigation categories 1 to 3 led to null hypotheses of the form:

Hypothesis 1

Ho: Preferred supervisory practices are independent of teaching level.

Hypothesis 2

Ho: Actual supervisory practices are independent of teaching level.

Hypothesis 3

Ho: Degree of satisfaction with supervision is independent of teaching level.

Investigation category 4 led to a null hypothesis of the form:

Hypothesis 4

Ho: There are no systematic differences in direction between paired responses to actual and preferred supervisory practices.

For each of the ten different measures related to degree of satisfaction with supervision, investigation category 5 led to a null hypothesis of the form:

Hypothesis 5

Ho: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

## Method of Analyzing Data

Hypotheses 1, 2, and 3 were tested using the chi square test of independence (Ferguson, 1976:195-198). This enabled the researcher to determine if the row and column variables are independent of one another, or if response to a particular item depends, for example, on teaching level.

Hypothesis 4 was tested using a sign test (Ferguson, 1976:385-386). This enabled the researcher to determine if, for each item, the difference between actual score and preferred score is positive for half the respondents and negative for the other half, or if there is a systematic difference in sign between paired responses.

Hypothesis 5 was tested using multiple regression analysis (Ferguson, 1976:455-464). This enabled the researcher to determine if a significant relationship exists between each of ten different criterion variables (measures related to satisfaction with supervision) and thirty-one predictor variables (absolute values of discrepancy scores for each item related to supervisor behavior). For each satisfaction measure, a prediction equation may be developed. This equation would then allow degree of teacher

satisfaction with supervision to be predicted from the discrepancies between actual and preferred supervisory behavior.

#### Precautions Taken for Accuracy

In an attempt to eliminate error, each survey instrument returned was initially hand-checked by the researcher for obvious omissions or discrepancies. Whenever a small number of responses were missing, a phone call to the teacher concerned enabled the researcher to obtain the missing data.

The data was then placed on Fortran coding forms, first by the researcher, and then by an independent agent. A third individual then checked one form against the other to ensure that transfer of data from the questionnaire was accurate.

Under the supervision of Dr. Albert Suvak, Director, Testing and Counseling Service, Montana State University, the data was next transferred to standard key punch cards at the Montana State University Computing Center. Dr. Suvak personally programmed and supervised the various data analyses, which were done by computer.

To further guard against error, the researcher has

made periodic checks of calculated values using a pocket calculator.

#### Summary

To answer the problem of this study, a valid and reliable questionnaire was prepared and mailed to a systematic random sample drawn from a list of all public school teachers in the state of Montana. The instrument was designed to measure teacher perceptions of actual and preferred supervisory behavior, and teacher satisfaction with supervision.

The data collected was compiled in the form of tables. Statistical hypotheses, stated in the null form, were tested at the 0.05 level of significance against non-directional alternative hypotheses. Statistical procedures used to analyse the data included the chi square test of independence, a sign test, and multiple regression analysis. To ensure accuracy, all computation was done by computer.

## CHAPTER IV

### DATA ANALYSIS

#### Introduction

The problem of this study was: (a) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana public schools during the 1978-1979 school year; and (b) to relate differences between actual and preferred supervisory behavior to the degree of teacher satisfaction with supervision.

The instrument was mailed with a cover letter and a stamped, self-addressed envelope to all participants on February 20, 1979. A follow-up reminder was mailed to all non-respondents two weeks later on March 6, 1979. (See Appendices A, B and C).

All instruments received by the researcher on or before April 3, 1979 were used as the data base for this study.

Following is a table displaying the percentage of returns:

Table 1

Number and Percentage of Questionnaires Returned

Sent	Returned	Usable Returns	Percent
370	330	305	82.5

The method of organization of the rest of this chapter is as follows:

1. Descriptive Statistics

Personal data

Supervisory behavior: actual and preferred

Satisfaction with supervision

2. Inferential Statistics

Chi square tests of independence

Sign tests

Multiple regression analyses

3. Summary

### Descriptive Statistics

#### Personal data

Three hundred and five teachers provided complete, usable responses to the questionnaire. Table two displays

the number and percentage of each sex.

Table 2

## Number and Percentage of Respondents by Sex

Sex	Number	Percentage
Male	155	50.8
Female	150	49.2
Total	305	100%

Table three displays the number and percentage of teachers according to main teaching level.

Table 3

## Number and Percentage of Respondents by Main Teaching Level

Main Teaching Level	Number	Percentage
Grades K to 6	79	25.9
Grades 7 to 9	68	22.3
Grades 10 to 12	83	27.2
Other	75	24.6
Total	305	100%

The response category "other" refers to those teachers who taught at more than one of the three distinct levels chosen for comparison in this study.

Table four displays the number and percentage of teachers according to years of teaching experience.

Table 4

Number and Percentage of Respondents by  
Years of Teaching Experience

Years of Teaching Experience	Number	Percentage
1 to 3 years	58	19.0
4 to 6 years	63	20.7
7 to 9 years	48	15.7
10 to 12 years	43	14.1
13 to 15 years	37	12.1
16 years and over	56	18.4
Total	305	100%

Table five displays the number and percentage of teachers according to the title of their primary supervisor.

Table 5

Number and Percentage of Respondents According  
to Primary Supervisor

Primary Supervisor	Number	Percentage
Principal	222	72.8
Assistant Principal	18	5.9
Department Head	17	5.7
Other	48	15.7
Total	305	100%

The response category "other" refers to supervisors of instruction from central office, or county superintendents.

Table six displays the number and percentage of teachers according to whether they have more than one supervisor.

Table 6

Number and Percentage of Respondents by  
Number of Supervisors

Number of Supervisors	Number	Percentage
One supervisor	183	60.0
More than one supervisor	<u>122</u>	<u>40.0</u>
Total	305	100%

Note that respondents who had more than one supervisor were instructed to answer the remainder of the questionnaire with regard to their primary supervisor only.

(See Appendix B).

Table seven displays the number and percentage of teachers according to frequency of classroom evaluation visits.

Table 7

Number and Percentage of Respondents according to Frequency of Classroom Evaluation Visits by Their Primary Supervisor during the Current School Year

Frequency of Classroom Evaluation Visits	Number	Percentage
Never	83	27.2
Once	107	35.1
2 or 3 times	84	27.5
4 or 5 times	19	6.2
6 or 7 times	5	1.6
8 or more times	7	2.3
Total	305	100%

#### Supervisory behavior

For each item associated with supervisory behavior, tables are presented which compare how often each practice was actually used to how often teachers would prefer each practice to be used as part of the process of supervision.

Table eight compares actual and preferred use for item 1: "At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities."

Table 8

Comparison of the Number of Respondents who  
Rank Item 1 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	174	55
Seldom	37	21
Occasionally	18	53
Often	7	38
Always	69	138
Total	305	305

Table nine compares actual and preferred use for  
item 2: "my supervisor helps me to plan units and  
lessons."

Table 9

Comparison of the Number of Respondents who  
Rank Item 2 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	231	126
Seldom	43	50
Occasionally	26	112
Often	4	11
Always	1	6
Total	305	305

Table ten compares actual and preferred use for item 3: "my supervisor states that he expects me to achieve a high level of teaching competence."

Table 10

Comparison of the Number of Respondents who Rank Item 3 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	88	45
Seldom	34	18
Occasionally	78	91
Often	37	62
Always	68	89
Total	305	305

Table eleven compares actual and preferred use for item 4: "my supervisor holds a pre-observation conference with me prior to any evaluation visit."

Table 11

Comparison of the Number of Respondents who  
Rank Item 4 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	188	58
Seldom	34	16
Occasionally	24	82
Often	18	43
Always	41	106
Total	305	305

Table twelve compares actual and preferred use for item 5: "During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed."

Table 12

Comparison of the Number of Respondents who  
Rank Item 5 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	236	89
Seldom	18	20
Occasionally	13	65
Often	17	56
Always	21	75
Total	305	305

Table thirteen compares actual and preferred use for item 6: "During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information."

Table 13

Comparison of the Number of Respondents who Rank Item 6 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	228	81
Seldom	24	19
Occasionally	20	83
Often	13	48
Always	20	74
Total	305	305

Table fourteen compares actual and preferred use for item 7: "My supervisor spends sufficient time observing me to secure a valid and reliable sample of my teaching behavior."

Table 14

Comparison of the Number of Respondents who  
Rank Item 7 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	70	3
Seldom	75	13
Occasionally	56	63
Often	53	97
Always	51	129
Total	305	305

Table fifteen compares actual and preferred use for item 8: "As part of the process of supervision, my supervisor helps me to better understand the students I teach."

Table 15

Comparison of the Number of Respondents who  
Rank Item 8 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	117	24
Seldom	50	19
Occasionally	79	98
Often	41	92
Always	18	72
Total	305	305

Table sixteen compares actual and preferred use for item 9: "My supervisor holds a post-observation conference with me to give me feedback as soon as possible after any observation visit."

Table 16

Comparison of the Number of Respondents who Rank Item 9 on a Five-Point Scale for Actual and Preferred Use.

Ranking Scale	Actual Use	Preferred Use
Never	78	6
Seldom	32	6
Occasionally	33	39
Often	33	45
Always	<u>129</u>	<u>209</u>
Total	305	305

Table seventeen compares actual and preferred use for item 10: "After each observation visit, my supervisor provides me with feedback in a supportive way."

Table 17

Comparison of the Number of Respondents who  
Rank Item 10 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	69	4
Seldom	34	9
Occasionally	35	32
Often	44	59
Always	123	201
Total	305	305

Table eighteen compares actual and preferred use for item 11: "My supervisor provides me with a written summary of each observation visit."

Table 18

Comparison of the Number of Respondents who  
Rank Item 11 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	87	5
Seldom	27	10
Occasionally	16	38
Often	27	29
Always	148	223
Total	305	305

Table nineteen compares actual and preferred use for item 12: "My supervisor shows a real concern for me as a person."

Table 19

Comparison of the Number of Respondents who Rank Item 12 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	13	0
Seldom	43	2
Occasionally	63	26
Often	55	60
Always	131	217
Total	305	305

Table twenty compares actual and preferred use for item 13: "My supervisor is available to see me whenever I need help or advice."

Table 20

Comparison of the Number of Respondents who Rank Item 13 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	6	1
Seldom	27	2
Occasionally	40	13
Often	101	88
Always	131	201
Total	305	305

Table twenty-one compares actual and preferred use for item 14: "As part of the process of supervision, my supervisor facilitates my work as a teacher."

Table 21

Comparison of the Number of Respondents who Rank Item 14 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	54	6
Seldom	48	9
Occasionally	75	60
Often	60	95
Always	68	135
Total	305	305

Table twenty-two compares actual and preferred use for item 15: "During each school term, my supervisor provides me with the opportunity to watch demonstration lessons."

Table 22

Comparison of the Number of Respondents who  
Rank Item 15 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	185	25
Seldom	62	25
Occasionally	34	130
Often	11	67
Always	13	58
Total	305	305

Table twenty-three compares actual and preferred use for item 16: "During each school term, my supervisor provides me with the opportunity to visit the classrooms of other teachers in different schools."

Table 23

Comparison of the Number of Respondents who  
Rank Item 16 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	184	21
Seldom	53	24
Occasionally	41	134
Often	8	65
Always	19	61
Total	305	305

Table twenty-four compares actual and preferred use for item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Table 24

Comparison of the Number of Respondents who Rank Item 17 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	25	2
Seldom	50	2
Occasionally	68	37
Often	63	95
Always	99	169
Total	305	305

Table twenty-five compares actual and preferred use for item 18: "I am free to modify my supervisor's suggestions at my discretion."

Table 25

Comparison of the Number of Respondents who  
Rank Item 18 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	32	0
Seldom	36	5
Occasionally	68	61
Often	68	106
Always	<u>101</u>	<u>133</u>
Total	305	305

Table twenty-six compares actual and preferred use for item 19: "Following each observation visit, my supervisor helps me to understand those teaching behaviors which seem inconsistent with my stated objectives."

Table 26

Comparison of the Number of Respondents who  
Rank Item 19 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	116	17
Seldom	52	21
Occasionally	64	84
Often	42	86
Always	<u>31</u>	<u>97</u>
Total	305	305

Table twenty-seven compares actual and preferred use for item 20: "During each school term, my supervisor expects me to use self-evaluation techniques."

Table 27

Comparison of the Number of Respondents who Rank Item 20 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	74	8
Seldom	24	9
Occasionally	62	85
Often	66	92
Always	79	111
Total	305	305

Table twenty-eight compares actual and preferred use for item 21: "During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness."

Table 28

Comparison of the Number of Respondents who  
Rank Item 21 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	129	15
Seldom	46	20
Occasionally	51	96
Often	36	87
Always	43	87
Total	305	305

Table twenty-nine compares actual and preferred use for item 22: "The inservice education my supervisor provides is designed specifically to help me teach more effectively."

Table 29

Comparison of the Number of Respondents who  
Rank Item 22 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	70	7
Seldom	75	4
Occasionally	82	55
Often	30	95
Always	48	144
Total	305	305

Table thirty compares actual and preferred use for item 23: "During each school term, my supervisor suggests that I should pursue further academic and professional training."

Table 30

Comparison of the Number of Respondents who Rank Item 23 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	136	47
Seldom	62	27
Occasionally	68	118
Often	19	61
Always	20	52
Total	305	305

Table thirty-one compares actual and preferred use for item 24: "During each school term, my supervisor allows me to participate in the evaluation of current curriculum packages and materials that are available."

Table 31

Comparison of the Number of Respondents who  
Rank Item 24 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	53	3
Seldom	47	7
Occasionally	54	59
Often	61	113
Always	90	123
Total	305	305

Table thirty-two compares actual and preferred use for item 25: "During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs."

Table 32

Comparison of the Number of Respondents who  
Rank Item 25 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	43	5
Seldom	39	3
Occasionally	63	65
Often	67	103
Always	93	129
Total	305	305

Table thirty-three compares actual and preferred use item 26: "My supervisor uses group methods of supervision."

Table 33

Comparison of the Number of Respondents who Rank Item 26 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	196	91
Seldom	44	48
Occasionally	43	118
Often	19	43
Always	3	5
Total	305	305

Table thirty-four compares actual and preferred use for item 27: "Supervision takes the form of problem-solving in work groups."

Table 34

Comparison of the Number of Respondents who  
Rank Item 27 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	181	74
Seldom	42	32
Occasionally	54	116
Often	18	58
Always	10	25
Total	305	305

Table thirty-five compares actual and preferred use for item 28: "My supervisor facilitates communication between myself and other teachers."

Table 35

Comparison of the Number of Respondents who  
Rank Item 28 on a Five-Point Scale for  
Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	63	12
Seldom	50	13
Occasionally	75	57
Often	57	98
Always	60	125
Total	305	305

Table thirty-six compares actual and preferred use for item 29: "My supervisor supports innovation."

Table 36

Comparison of the Number of Respondents who Rank Item 29 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	17	2
Seldom	35	1
Occasionally	65	35
Often	76	110
Always	<u>112</u>	<u>157</u>
Total	305	305

Table thirty-seven compares actual and preferred use for item 30: "During each school term, my supervisor brings new developments in education to my attention."

Table 37

Comparison of the Number of Respondents who Rank Item 30 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	70	5
Seldom	74	10
Occasionally	81	74
Often	50	118
Always	30	98
Total	305	305

Table thirty-eight compares actual and preferred use for item 31: "During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process."

Table 38

Comparison of the Number of Respondents who Rank Item 31 on a Five-Point Scale for Actual and Preferred Use

Ranking Scale	Actual Use	Preferred Use
Never	125	8
Seldom	55	15
Occasionally	54	97
Often	37	98
Always	34	87
Total	305	305

Satisfaction with supervision

For each of the ten items related to satisfaction with supervision, tables are presented which indicate how satisfied the respondents were with their current supervision. Respondents were asked to use a seven-point ranking scale ranging from "no satisfaction" to "complete satisfaction."

Table thirty-nine displays the frequency of each response to item 1: "Degree to which supervision helps improve student learning."

Table 39

Frequency and Percentage Frequency of Each Response to Item 1

Degree of Satisfaction	Frequency	Percentage Frequency
None	39	12.8
Very Little	65	21.3
Little	43	14.1
Some	79	25.9
Great	49	16.1
Very Great	23	7.5
Complete	7	2.3
Total	305	100%

Table forty displays the frequency of each

response to item 2: "Degree to which supervision helps improve instruction."

Table 40

Frequency and Percentage Frequency of Each Response to Item 2

Degree of Satisfaction	Frequency	Percentage Frequency
None	32	10.5
Very Little	58	19.0
Little	38	12.5
Some	90	29.5
Great	54	17.7
Very Great	29	9.5
Complete	4	1.3
Total	305	100%

Table forty-one displays the frequency of each response to item 3: "Degree to which supervision promotes my professional development."

Table 41

Frequency and Percentage Frequency of Each  
Response to Item 3

Degree of Satisfaction	Frequency	Percentage Frequency
None	44	14.4
Very Little	47	15.4
Little	40	13.1
Some	79	25.9
Great	50	16.4
Very Great	32	10.5
Complete	13	4.3
Total	305	100%

Table forty-two displays the frequency of each response to item 4: "Degree to which supervision contributes to my self-esteem."

Table 42

Frequency and Percentage Frequency of Each  
Response to Item 4

Degree of Satisfaction	Frequency	Percentage Frequency
None	45	14.8
Very Little	34	11.1
Little	27	8.9
Some	71	23.3
Great	59	19.3
Very Great	42	13.8
Complete	27	8.9
Total	305	100%

Table forty-three displays the frequency of each response to item 5: "Degree to which my supervisor helps establish a supportive staff interaction."

Table 43

Frequency and Percentage Frequency of Each Response to Item 5

Degree of Satisfaction	Frequency	Percentage Frequency
None	24	7.9
Very Little	50	16.4
Little	43	14.1
Some	65	21.3
Great	54	17.7
Very Great	40	13.1
Complete	29	9.5
Total	305	100%

Table forty-four displays the frequency of each response to item 6: "Degree to which my supervisor enables me to participate in significant decision-making."

Table 44

Frequency and Percentage Frequency of Each  
Response to Item 6

Degree of Satisfaction	Frequency	Percentage Frequency
None	24	7.9
Very Little	37	12.1
Little	42	13.8
Some	64	21.0
Great	62	20.3
Very Great	46	15.1
Complete	30	9.8
Total	305	100%

Table forty-five displays the frequency of each response to item 7: "Degree to which my supervisor gives me due recognition for my efforts."

Table 45

Frequency and Percentage Frequency of Each  
Response to Item 8

Degree of Satisfaction	Frequency	Percentage Frequency
None	22	7.2
Very Little	33	10.8
Little	29	9.5
Some	65	21.3
Great	64	21.0
Very Great	49	16.1
Complete	43	14.1
Total	305	100%

Table forty-six displays the frequency of each response to item 8: "Degree to which my supervisor allows me to influence the supervisory process."

Table 46

Frequency and Percentage Frequency of Each  
Response to Item 8

Degree of Satisfaction	Frequency	Percentage Frequency
None	46	15.1
Very Little	52	17.0
Little	44	14.4
Some	81	26.6
Great	49	16.1
Very Great	22	7.2
Complete	11	3.6
Total	305	100%

Table forty-seven displays the frequency of each response to item 9: "Degree to which my supervisor establishes a supervisory climate characterized by trust, respect, and warmth."

Table 47

Frequency and Percentage Frequency of Each Response to Item 9

Degree of Satisfaction	Frequency	Percentage Frequency
None	31	10.2
Very Little	38	12.5
Little	23	7.5
Some	55	18.0
Great	59	19.3
Very Great	46	15.1
Complete	53	17.4
Total	305	100%

Table forty-eight displays the frequency of each response to item 10: "Degree of overall satisfaction with supervision."

Table 48

Frequency and Percentage Frequency of Each  
Response to Item 10

Degree of Satisfaction	Frequency	Percentage Frequency
None	24	7.9
Very Little	42	13.8
Little	34	11.1
Some	61	20.0
Great	50	16.4
Very Great	48	15.7
Complete	46	15.1
Total	305	100%

### Inferential Statistics

#### Chi square tests of independence

The following section will report the chi square analyses of the data by sex, teaching level, and years of teaching experience.

#### SUPERVISORY BEHAVIOR

Teachers were asked to rate each of thirty-one items related to supervision on a five-point Likert scale, both for actual use and preferred use.

Therefore thirty-one contingency tables are used to display this part of the analysis. Taking one item at

a time, each table will include responses to both the actual and preferred scales, first by sex, then by teaching level, and finally by years of teaching experience.

In addition, critical chi square values ( $\chi^2$ ), calculated chi square values, and the degrees of freedom (df) are reported for each set of data.

Since it was necessary to collapse cells in some instances, when eighty percent of the expected cell frequencies did not equal or exceed five, the degrees of freedom will vary. Where cells have been collapsed, the response heading has been omitted from the table. All critical values reported are for the .05 level of significance.

Table forty-nine displays the responses for supervisory behavior, item 1: "At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities."

Table 49

## Chi Square Analyses for Item 1

Actual use	Never	Seldom	Occasionally	Often	Always
Male	88	13	13	3	38
Female	86	24	5	4	31
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.62$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Male	27	12	21	17	78
Female	28	9	32	21	60
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.42$		

Actual use	Never	Seldom	Occasionally	Often
Elementary	42	12	6	19
Junior High	44	4	3	17
Senior High	48	9	6	20
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 4.44$	

Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	17	7	11	12	32
Junior High	13	6	13	9	27
Senior High	15	4	13	10	41
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 3.4$		

Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	31	11	5	1	10
4 or more years	143	26	13	6	59
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.84$		

Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	6	2	12	8	30
4 or more years	49	19	41	30	108
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.80$		

Table forty-nine indicates that, at the .05 level, response to item 1 was independent of sex, teaching level, and years of teaching experience.

Table fifty displays the responses for item 2:  
"My supervisor helps me to plan units and lessons."

Table 50

## Chi Square Analyses for Item 2

Actual use	Never	Seldom	Occasionally		
Male	120	19	16		
Female	111	24	15		
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 0.88$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	70	24	51	7	3
Female	56	26	61	4	3
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.27$		
Actual use	Never	Seldom	Occasionally		
Elementary	49	20	10		
Junior High	53	5	10		
Senior High	65	11	7		
*df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 11.21$		
Preferred use	Never	Seldom	Occasionally		
Elementary	24	17	38		
Junior High	30	10	28		
Senior High	43	10	30		
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 8.26$		
Actual use	Never	Seldom	Occasionally		
1 to 3 years	43	10	5		
4 or more years	188	33	26		
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 0.69$		
Preferred use	Never	Seldom	Occasionally	Often	
1 to 3 years	18	12	23	5	
4 or more years	108	38	89	12	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.99$		

\*:significant at .05 level

The above analysis leads to the rejection of Null Hypothesis 1: Actual supervisory practices are independent of teaching level. It seems that there is a greater tendency on the part of elementary level supervisors to actually help teachers plan units and lessons.

Table fifty also indicates that at the .05 level, response to item 2 was independent of sex, and years of teaching experience. Preference by teachers for supervisors to help them plan units and lessons was also independent of teaching level.

Table fifty-one displays the responses for item 3: "My supervisor states that he expects me to achieve a high level of teaching competence."

Table 51

## Chi Square Analyses for Item 3

Actual use	Never	Seldom	Occasionally	Often	Always
Male	39	20	47	18	31
Female	49	14	31	19	37
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.95$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	22	13	49	26	45
Female	23	5	42	36	44
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.66$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	23	7	22	8	19
Junior High	17	10	15	8	18
Senior High	22	9	18	13	21
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 3.27$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	12	3	24	17	23
Junior High	9	5	23	12	19
Senior High	14	4	19	14	32
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 5.11$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	15	5	17	10	11
4 or more years	73	29	61	27	57
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.92$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	7	3	18	16	14
4 or more year	38	15	73	46	75
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.93$		

Table fifty-one indicates that, at the .05 level, response to item 3 was independent of sex, teaching level, and years of teaching experience.

Table fifty-two displays the responses for item 4: "My supervisor holds a pre-observation conference with me prior to any evaluation visit."

Table 52

## Chi Square Analyses for Item 4

Actual use	Never	Seldom	Occasionally	Often	Always
Male	87	20	11	13	24
Female	101	14	13	5	17
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.94$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	32	9	34	20	60
Female	26	7	48	23	46
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.24$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	46	7	8	5	13
Junior High	45	6	4	5	8
Senior High	49	11	3	6	14
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 4.96$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	16	1	25	10	27
Junior High	18	4	17	10	19
Senior High	17	3	18	13	32
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 6.14$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	36	6	4	3	9
4 or more years	152	28	20	15	32
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 0.42$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	10	0	18	11	19
4 or more years	48	16	64	32	87
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.62$		

Table fifty-two indicates that, at the .05 level, response to item 4 was independent of sex, teaching level, and years of teaching experience.

Table fifty-three displays the responses for item 5: "During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed."

Table 53

## Chi Square Analyses for Item 5

Actual use	Never	Seldom	Occasionally	Often	Always
Male	116	10	7	8	14
Female	120	8	6	9	7
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.68$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Male	48	12	28	25	42
Female	41	8	37	31	33
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.24$		

Actual use	Never	Seldom	Often	Always	
Elementary	58	11	4	6	
Junior High	55	3	4	6	
Senior High	63	9	6	5	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 4.39$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	23	6	18	13	19
Junior High	24	4	13	14	13
Senior High	27	5	15	15	21
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 2.16$		

Actual use	Seldom	Occasionally	Often
1 to 3 years	46	4	8
4 or more years	208	9	30
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 1.40$

Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	12	2	18	10	16
4 or more years	77	18	47	46	59
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.31$		

Table fifty-three indicates that, at the .05 level, response to item 5 was independent of sex, teaching level, and years of teaching experience.

Table fifty-four displays the responses for item 6: "During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information."

Table 54

## Chi Square Analyses for Item 6

Actual use	Never	Seldom	Occasionally	Often	Always
Male	108	16	13	5	13
Female	120	8	7	8	7
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.51$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Male	42	9	42	21	41
Female	39	10	41	27	33
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.71$		

Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	56	5	9	9	
Junior High	50	10	2	6	
Senior High	61	6	5	11	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 7.94$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	21	5	22	13	18
Junior High	22	8	15	12	11
Senior High	24	4	22	12	21
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 5.30$		

Actual use	Seldom	Occasionally	Often
1 to 3 years	46	4	8
4 or more years	206	16	25
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 0.69$

Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	11	2	18	9	18
4 or more years	70	17	65	39	56
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.18$		

Table fifty-four indicates that, at the .05 level, response to item 6 was independent of sex, teaching level, and years of teaching experience.

Table fifty-five displays the responses for item 7: "My supervisor spends sufficient time observing me to secure a valid and reliable sample of my teaching behavior."

Table 55

## Chi Square Analyses for Item 7

Actual use	Never	Seldom	Occasionally	Often	Always
Male	30	42	30	27	26
Female	40	33	26	26	25
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.75$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	0	9	32	45	69
Female	3	4	31	52	60
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.99$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	14	18	12	22	13
Junior High	13	15	18	9	13
Senior High	22	21	17	7	16
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 14.23$		
Preferred use	Seldom	Occasionally	Often	Always	
Elementary	4	17	29	29	
Junior High	4	15	20	29	
Senior High	6	13	23	41	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 4.01$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	16	12	14	10	6
4 or more years	54	63	42	43	45
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.16$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	0	13	20	25	
4 or more years	16	50	77	104	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 4.04$		

Table fifty-five indicates that, at the .05 level, response to item 7 was independent of sex, teaching level, and years of teaching experience.

Table fifty-six displays the responses for item 8:  
"As part of the process of supervision, my supervisor helps me to better understand the students I teach."

Table 56

## Chi Square Analyses for Item 8

Actual use	Never	Seldom	Occasionally	Often	Always
Male	61	25	41	19	9
Female	56	25	38	22	9
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 0.47$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	12	14	51	45	33
Female	12	5	47	47	39
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.89$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	25	11	26	12	5
Junior High	25	10	17	16	0
Senior High	39	15	18	6	5
*df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 16.00$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	4	4	30	24	17
Junior High	6	8	21	22	11
Senior High	12	6	24	23	18
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 8.03$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	20	10	15	9	4
4 or more years	97	40	64	32	14
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 0.66$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	0	1	19	21	17
4 or more years	24	18	79	71	55
*df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 9.83$		

\* : significant at .05 level

The analysis presented in table fifty-six leads to the rejection of Null Hypothesis 2: Actual supervisory practices are independent of teaching level. Supervisors at the senior high level seem to be less inclined to actually help teachers better understand the students they teach.

The analysis presented also leads to the rejection of Null Hypothesis 3: Preferred supervisory practices are independent of years of teaching experience. Less experienced teachers show a greater preference to have their supervisors help them to better understand the students they teach.

Table fifty-six also indicates that, at the .05 level, response to item 8 was independent of sex. Preference by teachers for supervisors to help them to better understand their students was independent of teaching level. Also, the actual use of this supervisory practice was independent of years of teaching experience.

Table fifty-seven displays the responses for item 9: "My supervisor holds a post-observation conference with me to give me feedback as soon as possible after any observation visit."

Table 57

## Chi Square Analyses for Item 9

Actual use	Never	Seldom	Occasionally	Often	Always
Male	38	16	16	21	64
Female	40	16	17	12	65
df = 4	Critical $x^2 = 9.49$		Calculated $x^2 = 2.46$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	6	19	23	107	
Female	6	20	22	102	
df = 3	Critical $x^2 = 7.82$		Calculated $x^2 = 0.09$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	23	9	10	11	26
Junior High	12	6	7	12	31
Senior High	20	10	9	5	39
df = 8	Critical $x^2 = 15.51$		Calculated $x^2 = 9.32$		
Preferred use	Occasionally	Often	Always		
Elementary	17	15	47		
Junior High	11	14	43		
Senior High	12	8	63		
df = 4	Critical $x^2 = 9.49$		Calculated $x^2 = 6.45$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	14	7	9	3	25
4 or more years	64	25	24	30	104
df = 4	Critical $x^2 = 9.49$		Calculated $x^2 = 3.81$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	0	9	9	40	
4 or more years	12	30	36	169	
df = 3	Critical $x^2 = 7.82$		Calculated $x^2 = 3.27$		

Table fifty-seven indicates that, at the .05 level, response to item 9 was independent of sex, teaching level, and years of teaching experience.

Table fifty-eight displays the responses for item 10: "After each observation visit, my supervisor provides me with feedback in a supportive way."

Table 58

## Chi Square Analyses for Item 10

Actual use	Never	Seldom	Occasionally	Often	Always
Male	35	16	18	27	59
Female	34	18	17	17	64
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.56$		

Preferred use	Seldom	Occasionally	Often	Always
Male	8	17	28	102
Female	5	15	31	99
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 0.93$	

Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	17	8	11	12	31
Junior High	14	8	4	12	30
Senior High	19	8	10	12	34
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 3.08$		

Preferred use	Occasionally	Often	Always
Elementary	15	18	46
Junior High	10	16	42
Senior High	10	11	62
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.81$

Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	11	8	8	12	19
4 or more years	58	26	27	32	104
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.17$		

Preferred use	Seldom	Occasionally	Often	Always
1 to 3 years	0	6	12	40
4 or more years	13	26	47	161
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.22$	

Table fifty-eight indicates that, at the .05 level, response to item 10 was independent of sex, teaching level, and years of teaching experience.

Table fifty-nine displays the responses for item 11: "My supervisor provides me with a written summary of each observation visit."

Table 59

## Chi Square Analyses for Item 11

Actual use	Never	Seldom	Occasionally	Often	Always
Male	38	11	10	16	80
Female	49	16	6	11	68
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 5.14$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	8	16	13	118	
Female	7	22	16	105	
df = 3	Critical $X^2 = 7.82$		Calculated $X^2 = 2.00$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	28	7	6	10	28
Junior High	12	7	3	6	40
Senior High	22	7	3	2	49
*df = 8	Critical $X^2 = 15.51$		Calculated $X^2 = 16.99$		
Preferred use	Occasionally	Often	Always		
Elementary	22	14	43		
Junior High	12	4	52		
Senior High	11	4	68		
*df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 17.75$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	17	5	5	6	25
4 or more years	70	22	11	21	123
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 2.19$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	1	8	6	43	
4 or more years	14	30	23	180	
df = 3	Critical $X^2 = 7.82$		Calculated $X^2 = 1.65$		

\*:significant at .05 level

The analysis presented in table fifty-nine leads to the rejection of Null Hypothesis 4: Actual supervisory practices are independent of teaching level. Elementary supervisors seem less inclined to actually provide teachers with a written summary of each observation visit.

The analysis presented also leads to the rejection of Null Hypothesis 5: Preferred supervisory practices are independent of teaching level. The higher the teaching level, the greater the preference for teachers to have supervisors provide them with a written summary of each observation visit.

Table fifty-nine also indicates that, at the .05 level, response to item 11 was independent of sex, and years of teaching experience.

Table sixty displays the responses for item 12: "My supervisor shows a real concern for me as a person."

Table 60

## Chi Square Analyses for Item 12

Actual use	Never	Seldom	Occasionally	Often	Always
Male	7	17	34	32	65
Female	6	26	29	23	66
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.76$		
Preferred use			Occasionally	Often	Always
Male			12	27	116
Female			16	33	101
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 2.13$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	1	12	18	13	35
Junior High	4	8	12	14	30
Senior High	2	8	21	16	36
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 5.14$		
Preferred use			Occasionally	Often	Always
Elementary			10	14	55
Junior High			4	16	48
Senior High			9	15	59
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.56$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	3	10	10	13	22
4 or more years	10	33	53	42	109
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.23$		
Preferred use			Occasionally	Often	Always
1 to 3 years			8	12	38
4 or more years			20	48	179
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 2.02$		

Table sixty indicates that, at the .05 level, response to item 12 was independent of sex, teaching level, and years of teaching experience.

Table sixty-one displays the responses for item 13: "My supervisor is available to see me whenever I need help or advice."

Table 61

## Chi Square Analyses for Item 13

Actual use	Never	Seldom	Occasionally	Often	Always
Male	3	12	21	43	76
Female	3	15	19	58	55
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 5.95$		
Preferred use			Occasionally	Often	Always
Male			7	35	113
Female			9	53	88
*df = 2	Critical $X^2 = 5.99$		Calculated $X^2 = 6.96$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	3	4	10	30	32
Junior High	2	10	7	20	29
Senior High	1	4	11	30	37
df = 8	Critical $X^2 = 15.51$		Calculated $X^2 = 8.21$		
Preferred use				Often	Always
Elementary				31	48
Junior High				27	41
Senior High				23	60
df = 2	Critical $X^2 = 5.99$		Calculated $X^2 = 3.21$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	1	6	7	19	25
4 or more years	5	21	33	82	106
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 0.27$		
Preferred use			Occasionally	Often	Always
1 to 3 years			3	20	35
4 or more years			13	68	166
df = 2	Critical $X^2 = 5.99$		Calculated $X^2 = 1.12$		

\*:significant at .05 level

The analysis presented in table sixty-one leads to the rejection of Null Hypothesis 6: Preferred supervisory practices are independent of sex. Men express a stronger preference than that of women to have their supervisor available to see them whenever they need help or advice.

Table sixty-one also indicates that, at the .05 level, response to item 13 was independent of teaching level, and years of teaching experience. Also the actual use of this supervisory practice was independent of sex.

Table sixty-two displays the responses for item 14: "As part of the process of supervision, my supervisor facilitates my work as a teacher."

Table 62

## Chi Square Analyses for Item 14

Actual use	Never	Seldom	Occasionally	Often	Always
Male	24	29	44	24	34
Female	30	19	31	36	34
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 7.32$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	9	31	48	67	
Female	6	29	47	68	
df = 3	Critical $X^2 = 7.82$		Calculated $X^2 = 0.60$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	8	14	20	17	20
Junior High	11	9	15	17	16
Senior High	16	11	27	13	16
df = 8	Critical $X^2 = 15.51$		Calculated $X^2 = 6.98$		
Preferred use	Seldom	Occasionally	Often	Always	
Elementary	6	14	21	38	
Junior High	4	16	25	23	
Senior High	5	16	23	39	
df = 6	Critical $X^2 = 12.59$		Calculated $X^2 = 4.44$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	13	8	14	14	9
4 or more years	41	40	61	46	59
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 3.28$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	2	11	25	20	
4 or more years	13	49	70	115	
df = 3	Critical $X^2 = 7.82$		Calculated $X^2 = 5.17$		

Table sixty-two indicates that, at the .05 level, response to item 14 was independent of sex, teaching level, and years of teaching experience.

Table sixty-three displays the responses for item 15: "During each school term, my supervisor provides me with the opportunity to watch demonstration lessons."

Table 63

## Chi Square Analyses for Item 15

Actual use	Never	Seldom	Occasionally	Often	Always
Male	93	31	16	4	11
Female	92	31	18	7	2
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.09$		

Preferred use	Never	Seldom	Occasionally	Often	Always
Male	17	14	59	32	33
Female	8	11	71	35	25
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.87$		

Actual use	Never	Seldom	Occasionally	Often
Elementary	35	23	11	10
Junior High	43	17	4	4
Senior High	60	10	11	2
*df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 20.15$	

Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	4	5	34	20	16
Junior High	11	7	33	11	6
Senior High	6	8	33	19	17
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 12.17$		

Actual use	Never	Seldom	Occasionally	Often
1 to 3 years	38	12	4	4
4 or more years	147	50	30	20
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 1.53$	

Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	2	6	28	12	10
4 or more years	23	19	102	55	48
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.08$		

\*:significant at .05 level

The analysis presented in table sixty-three leads to the rejection of Null Hypothesis 7: Actual supervisory practices are independent of teaching level. The higher the teaching level, the less inclined are supervisors to actually provide teachers with the opportunity to watch demonstration lessons.

Table sixty-three also indicates that, at the .05 level, response to item 15 was independent of sex, and years of teaching experience. Also the preferred use of this supervisory practice was independent of teaching level.

Table sixty-four displays the responses for item 16: "During each school term, my supervisor provides me with the opportunity to visit the classrooms of other teachers in different schools."

Table 64

## Chi Square Analyses for Item 16

Actual use	Never	Seldom	Occasionally	Often	Always
Male	94	27	21	2	11
Female	90	26	20	6	8
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.52$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	12	15	66	27	35
Female	9	9	68	38	26
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.07$		
Actual use	Never	Seldom	Occasionally	Often	
Elementary	40	16	11	12	
Junior High	47	11	6	4	
Senior High	55	10	12	6	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 9.31$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	3	5	42	16	13
Junior High	9	9	28	12	10
Senior High	4	6	36	20	17
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 10.75$		
Actual use	Never	Seldom	Occasionally	Often	
1 to 3 years	39	8	9	2	
4 or more years	145	45	32	25	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.69$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	3	6	26	14	9
4 or more years	18	18	108	51	52
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.86$		

Table sixty-four indicates that, at the .05 level, response to item 16 was independent of sex, teaching level, and years of teaching experience.

Table sixty-five displays the responses for item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Table 65

## Chi Square Analyses for Item 17

Actual use	Never	Seldom	Occasionally	Often	Always
Male	11	26	30	32	56
Female	14	24	38	31	43
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.02$		
Preferred use	Occasionally			Often	Always
Male	17			44	94
Female	24			51	75
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 3.77$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	9	9	17	24	20
Junior High	6	10	14	12	26
Senior High	7	13	20	16	27
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 6.44$		
Preferred use	Occasionally			Often	Always
Elementary	12			31	36
Junior High	10			19	39
Senior High	11			25	47
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.06$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	3	12	14	16	13
4 or more years	22	38	54	47	86
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.61$		
Preferred use	Occasionally			Often	Always
1 to 3 years	8			27	23
4 or more years	33			68	146
*df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 8.67$		

\*:significant at .05 level

The analysis presented in table sixty-five leads to the rejection of Null Hypothesis 8: Preferred supervisory practices are independent of years of teaching experience. The more experienced teachers show a greater preference for discussion with their supervisor to be a mutual exchange of ideas and information between colleagues. In other words, the more experienced teachers strongly prefer a collegial supervisory relationship.

Table sixty-five also indicates that, at the .05 level, response to item 17 was independent of sex, and teaching level. Also the actual use of this supervisory practice was independent of years of teaching experience.

Table sixty-six displays the responses for item 18: "I am free to modify my supervisor's suggestions at my discretion."

Table 66

## Chi Square Analyses for Item 18

Actual use	Never	Seldom	Occasionally	Often	Always
Male	16	17	37	36	49
Female	16	19	31	32	52
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 0.88$		
Preferred use			Occasionally	Often	Always
Male			36	51	68
Female			30	55	65
df = 2	Critical $X^2 = 5.99$		Calculated $X^2 = 0.68$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	9	9	14	23	24
Junior High	8	7	17	11	25
Senior High	8	10	22	19	24
df = 8	Critical $X^2 = 15.51$		Calculated $X^2 = 5.26$		
Preferred use			Occasionally	Often	Always
Elementary			15	33	31
Junior High			15	19	34
Senior High			22	30	31
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 4.61$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	4	7	16	13	18
4 or more years	28	29	52	55	83
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 1.88$		
Preferred use			Occasionally	Often	Always
1 to 3 years			12	25	21
4 or more years			54	81	112
df = 2	Critical $X^2 = 5.99$		Calculated $X^2 = 2.37$		

Table sixty-six indicates that, at the .05 level, response to item 18 was independent of sex, teaching level, and years of teaching experience.

Table seventy-seven displays the responses for item 19: "Following each observation visit, my supervisor helps me to understand those teaching behaviors which seem inconsistent with my stated objectives."

Table 67

## Chi Square Analyses for Item 19

Actual use	Never	Seldom	Occasionally	Often	Always
Male	52	34	34	20	15
Female	64	18	30	22	16
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.46$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	9	15	45	39	47
Female	8	6	39	47	50
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.10$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	29	11	20	16	3
Junior High	23	12	18	5	10
Senior High	33	15	13	13	9
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 12.31$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	3	7	25	27	17
Junior High	7	6	18	18	19
Senior High	6	4	22	17	34
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 11.93$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	22	9	10	10	7
4 or more years	94	43	54	32	24
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.46$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	1	2	14	23	18
4 or more years	16	19	70	63	79
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.78$		

Table sixty-seven indicates that, at the .05 level, response to item 19 was independent of sex, teaching level, and years of teaching experience.

Table sixty-eight displays the responses for item 20: "During each school term, my supervisor expects me to use self-evaluation techniques."

Table 68

## Chi Square Analyses for Item 20

Actual use	Never	Seldom	Occasionally	Often	Always
Male	35	15	27	37	41
Female	39	9	35	29	38
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.75$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	12	39	47	57	
Female	5	46	45	54	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.50$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	12	7	15	20	25
Junior High	15	6	18	10	19
Senior High	22	6	17	22	16
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 8.86$		
Preferred use	Occasionally	Often	Always		
Elementary	27	24	28		
Junior High	21	22	25		
Senior High	25	26	32		
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 0.39$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	19	5	10	7	17
4 or more years	55	19	52	59	62
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.87$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	0	2	16	16	24
4 or more years	8	7	69	76	87
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.59$		

Table sixty-eight indicates that, at the .05 level, response to item 20 was independent of sex, teaching level, and years of teaching experience.

Table sixty-nine displays the responses for item 21: "During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness."

Table 69

## Chi Square Analyses for Item 21

Actual use	Never	Seldom	Occasionally	Often	Always
Male	59	30	28	19	19
Female	70	16	23	17	24
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.30$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	10	14	47	44	40
Female	5	6	49	43	47
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.40$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	27	11	17	13	11
Junior High	25	13	13	7	10
Senior High	37	11	13	11	11
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 4.04$		
Preferred use	Seldom	Occasionally	Often	Always	
Elementary	11	26	20	22	
Junior High	7	30	19	12	
Senior High	8	25	25	25	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 5.84$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	29	6	9	8	6
4 or more years	100	40	42	28	37
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.09$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	0	4	15	23	16
4 or more years	15	16	81	64	71
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.39$		

Table sixty-nine indicates that, at the .05 level, response to item 21 was independent of sex, teaching level, and years of teaching experience.

Table seventy displays the responses for item 23:  
"The inservice education my supervisor provides is designed specifically to help me teach more effectively."

Table 70

## Chi Square Analyses for Item 22

Actual use	Never	Seldom	Occasionally	Often	Always
Male	38	38	38	16	25
Female	32	37	44	14	23
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.10$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	5	32	42	76	
Female	6	23	53	68	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.20$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	19	8	24	7	21
Junior High	14	21	22	6	5
Senior High	15	31	17	10	10
*df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 25.62$		
Preferred use	Occasionally	Often	Always		
Elementary	18	22	39		
Junior High	23	25	20		
Senior High	13	26	44		
*df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 11.41$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	16	16	12	4	10
4 or more years	54	59	70	26	38
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.69$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	0	8	24	26	
4 or more years	11	47	71	118	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 5.79$		

\*:significant at .05 level

The analysis presented in table seventy leads to the rejection of Null Hypothesis 9: Actual supervisory practices are independent of teaching level. Elementary supervisors seem more inclined to actually provide inservice that is designed specifically to help teachers teach more effectively.

The analysis presented also leads to the rejection of Null Hypothesis 10: Preferred supervisory practices are independent of teaching level. Junior high teachers tend to prefer less inservice education designed specifically to help them teach more effectively.

Table seventy also indicates that, at the .05 level, response to item 22 was independent of sex, and years of teaching experience.

Table seventy-one displays the responses for item 23: "During each school term, my supervisor suggests that I should pursue further academic and professional training."

Table 71

## Chi Square Analyses for Item 23

Actual use	Never	Seldom	Occasionally	Often	Always
Male	71	30	32	11	11
Female	65	32	36	8	9
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.16$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	29	16	49	32	29
Female	18	11	69	29	23
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.65$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	32	17	22	8	
Junior High	35	13	12	8	
Senior High	42	14	17	10	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 3.70$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	16	7	35	17	4
Junior High	13	9	27	7	12
Senior High	13	5	31	17	17
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 13.68$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	19	16	16	3	4
4 or more years	117	46	52	16	16
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.15$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	3	4	27	11	13
4 or more years	44	23	91	50	39
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.57$		

Table seventy-one indicates that, at the .05 level, response to item 23 was independent of sex, teaching level, and years of teaching experience.

Table seventy-two displays the responses for item 24: "During each school term, my supervisor allows me to participate in the evaluation of current curriculum packages and materials that are available."

Table 72

## Chi Square Analyses for Item 24

Actual use	Never	Seldom	Occasionally	Often	Always
Male	24	31	26	28	46
Female	29	16	28	33	44
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.71$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	8	32	51	64	
Female	2	27	62	59	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 5.22$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	7	10	12	22	28
Junior High	9	12	17	10	20
Senior High	22	14	12	12	23
*df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 17.39$		
Preferred use	Occasionally	Often	Always		
Elementary	16	29	34		
Junior High	21	21	26		
Senior High	19	28	36		
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.46$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	12	7	11	13	15
4 or more years	41	40	43	48	75
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.57$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	0	14	24	20	
4 or more years	10	45	89	103	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 4.17$		

\*:significant at .05 level

The analysis presented in table seventy-two leads to the rejection of Null Hypothesis 11: Actual supervisory practices are independent of teaching level. Supervisors of senior high teachers are less likely to actually allow them to participate in the evaluation of current curriculum packages and materials that are available.

Table seventy-two also indicates that, at the .05 level, response to item 24 was independent of sex, and years of teaching experience. Also the preferred use of this supervisory practice was independent of teaching level.

Table seventy-three displays the responses for item 25: "During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs."

Table 73

## Chi Square Analyses for Item 25

Actual use	Never	Seldom	Occasionally	Often	Always
Male	20	19	34	32	50
Female	23	20	29	35	43
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.21$		

Preferred use	Occasionally	Often	Always
Male	38	46	71
Female	35	57	58
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 2.53$

Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	11	9	18	16	25
Junior High	8	6	17	21	16
Senior High	10	15	13	15	30
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 9.60$		

Preferred use	Occasionally	Often	Always
Elementary	25	27	27
Junior High	17	24	27
Senior High	13	28	42
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 7.11$

Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	8	9	8	17	16
4 or more years	35	30	55	50	77
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.01$		

Preferred use	Seldom	Occasionally	Often	Always
1 to 3 years	2	11	20	25
4 or more years	6	54	83	104
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 0.39$	

Table seventy-three indicates that, at the .05 level, response to item 25 was independent of sex, teaching level, and years of teaching experience.

Table seventy-four displays the responses for item 26: "My supervisor uses group methods of supervision."

Table 74

## Chi Square Analyses for Item 26

Actual use	Never	Seldom	Occasionally	Often	Always
Male	88	22	28	15	2
Female	108	22	15	4	1
*df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 12.59$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	42	26	60	24	3
Female	49	22	58	19	2
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.61$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	45	13	14	6	1
Junior High	40	14	8	5	1
Senior High	55	10	11	6	1
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 3.39$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	26	10	29	13	1
Junior High	22	16	21	8	1
Senior High	21	14	34	12	2
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 5.41$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	35	14	6	3	
4 or more years	161	30	37	19	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 5.98$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	12	8	29	9	0
4 or more years	79	40	89	34	5
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 5.83$		

\*:significant at .05 level

The analysis presented in table seventy-four leads to the rejection of Null Hypothesis 12: Actual supervisory practices are independent of sex. Supervisors actually tend to use group methods of supervision more with men than with women.

Table seventy-four also indicates that, at the .05 level, response to item 26 was independent of teaching level, and years of teaching experience. Also the preferred use of this supervisory practice was independent of sex.

Table seventy-five displays the responses for item 27: "Supervision takes the form of problem-solving in work groups."

Table 75

## Chi Square Analyses for Item 27

Actual use	Never	Seldom	Occasionally	Often	Always
Male	85	22	33	12	3
Female	96	20	21	6	7
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 6.95$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	41	16	57	30	11
Female	33	16	59	28	14
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.25$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	49	10	14	6	
Junior High	42	9	10	7	
Senior High	43	12	18	10	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 2.86$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Elementary	23	7	30	13	6
Junior High	19	11	22	11	5
Senior High	17	9	37	12	8
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 5.01$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	31	9	12	4	2
4 or more years	150	33	42	14	8
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.07$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	10	5	27	13	3
4 or more years	64	27	89	45	22
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.29$		

Table seventy-five indicates that, at the .05 level, response to item 27 was independent of sex, teaching level, and years of teaching experience.

Table seventy-six displays the responses for item 28: "My supervisor facilitates communication between myself and other teachers."

Table 76

## Chi Square Analyses for Item 28

Actual use	Never	Seldom	Occasionally	Often	Always
Male	28	29	39	32	27
Female	35	21	36	25	33
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.56$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	6	8	28	54	59
Female	6	5	29	44	66
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.04$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	10	10	24	17	18
Junior High	14	14	13	17	10
Senior High	22	12	20	15	14
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 9.67$		
Preferred use	Seldom	Occasionally	Often	Always	
Elementary	4	14	28	33	
Junior High	10	17	19	22	
Senior High	8	15	29	31	
df = 6	Critical $\chi^2 = 12.59$		Calculated $\chi^2 = 6.39$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	14	9	13	14	8
4 or more years	49	41	62	43	52
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 2.99$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	2	1	7	22	26
4 or more years	10	12	50	76	99
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.81$		

Table seventy-six indicates that, at the .05 level, response to item 28 was independent of sex, teaching level, and years of teaching experience.

Table seventy-seven displays the responses for item 29: "My supervisor supports innovation."

Table 77

## Chi Square Analyses for Item 29

Actual use	Never	Seldom	Occasionally	Often	Always
Male	8	21	37	36	53
Female	9	14	28	40	59
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 3.16$		
Preferred use			Occasionally	Often	Always
Male			25	48	82
Female			13	62	75
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 5.80$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	2	8	11	17	41
Junior High	3	7	21	15	22
Senior High	4	8	21	25	25
df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 12.86$		
Preferred use			Occasionally	Often	Always
Elementary			9	28	42
Junior High			15	20	33
Senior High			10	32	41
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.57$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	6	7	10	16	19
4 or more years	11	28	55	60	93
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 4.01$		
Preferred use			Occasionally	Often	Always
1 to 3 years			5	23	30
4 or more years			33	87	127
df = 2	Critical $\chi^2 = 5.99$		Calculated $\chi^2 = 1.10$		

Table seventy-seven indicates that, at the .05 level, response to item 29 was independent of sex, teaching level, and years of teaching experience.

Table seventy-eight displays the responses for item 30: "During each school term, my supervisor brings new developments in education to my attention."

Table 78

## Chi Square Analyses for Item 30

Actual use	Never	Seldom	Occasionally	Often	Always
Male	35	40	43	22	15
Female	35	34	38	28	15
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 1.43$		
Preferred use	Seldom	Occasionally	Often	Always	
Male	8	44	55	48	
Female	7	30	63	50	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 3.22$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	12	10	22	24	11
Junior High	17	17	24	6	4
Senior High	23	29	14	10	7
*df = 8	Critical $\chi^2 = 15.51$		Calculated $\chi^2 = 30.87$		
Preferred use	Occasionally	Often	Always		
Elementary	17	34	28		
Junior High	30	25	13		
Senior High	25	29	29		
*df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 10.84$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	17	16	9	7	9
4 or more years	53	58	72	43	21
df = 4	Critical $\chi^2 = 9.49$		Calculated $\chi^2 = 8.04$		
Preferred use	Seldom	Occasionally	Often	Always	
1 to 3 years	3	10	22	23	
4 or more years	12	64	96	75	
df = 3	Critical $\chi^2 = 7.82$		Calculated $\chi^2 = 2.74$		

\*:significant at .05 level

The analysis presented in table seventy-eight leads to the rejection of Null Hypothesis 13: Actual supervisory practices are independent of teaching level. The higher the teaching level, the less likely supervisors actually are to bring new developments in education to the attention of their teachers.

The analysis presented also leads to the rejection of Null Hypothesis 14: Preferred supervisory practices are independent of teaching level. Junior high teachers tend to prefer that their supervisors bring new developments in education to their attention less often than do other teachers.

Table seventy-eight also indicates that, at the .05 level, response to item 30 was independent of sex, and years of teaching experience.

Table seventy-nine displays the responses for item 31: "During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process."

Table 79

## Chi Square Analyses for Item 31

Actual use	Never	Seldom	Occasionally	Often	Always
Male	54	30	31	23	17
Female	71	25	23	14	17
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 6.06$		
Preferred use	Never	Seldom	Occasionally	Often	Always
Male	4	6	46	49	50
Female	4	9	51	49	37
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 2.72$		
Actual use	Never	Seldom	Occasionally	Often	Always
Elementary	28	9	17	13	12
Junior High	27	19	10	9	3
Senior High	35	15	15	6	12
df = 8	Critical $X^2 = 15.51$		Calculated $X^2 = 14.14$		
Preferred use	Seldom	Occasionally	Often	Always	
Elementary	6	26	28	19	
Junior High	10	21	24	13	
Senior High	5	25	23	30	
df = 6	Critical $X^2 = 12.59$		Calculated $X^2 = 8.86$		
Actual use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	24	11	13	7	3
4 or more years	101	44	41	30	31
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 3.23$		
Preferred use	Never	Seldom	Occasionally	Often	Always
1 to 3 years	1	1	18	22	16
4 or more years	7	14	79	76	71
df = 4	Critical $X^2 = 9.49$		Calculated $X^2 = 2.49$		

Table seventy-nine indicates that, at the .05 level, response to item 31 was independent of sex, teaching level, and years of teaching experience.

## SATISFACTION WITH SUPERVISION

Teachers were asked to rate each of ten items related to satisfaction on a seven-point Likert scale.

Therefore ten contingency tables are used to display this part of the analysis. Taking one item at a time, each table will include responses first by sex, then by teaching level, and finally by years of teaching experience.

In addition, the degrees of freedom, critical chi square values, and calculated chi square values are reported for each set of data. All critical values reported are for the .05 level of significance.

Table eighty displays the responses for teacher satisfaction, item 1: "Degree to which supervision helps improve student learning."

Table 80

## Chi Square Analyses for Item 1

Sex	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
Male	16	29	23	47	26	9	5
Female	23	36	20	32	23	14	2
df = 6	Critical $\chi^2 = 12.59$				Calculated $\chi^2 = 7.54$		

Teaching Level	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
Elementary	12	8	9	23	16	10	1
Junior High	7	17	9	16	11	7	1
Senior High	11	20	12	24	11	3	2
df = 12	Critical $\chi^2 = 21.03$				Calculated $\chi^2 = 12.63$		

Teaching Experience	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	6	12	9	15	6	9	1
4 or more years	33	53	34	64	43	14	6
df = 6	Critical $\chi^2 = 12.59$				Calculated $\chi^2 = 8.05$		

Table eighty indicates that, at the .05 level, response to satisfaction item 1 was independent of sex, teaching level, and years of teaching experience.

Table eighty-one displays the responses for item 2: "Degree to which supervision helps improve instruction."

Table 81

## Chi Square Analyses for Item 2

Sex	Very					Very	
	None	Little	Little	Some	Great	Great	Complete
Male	12	26	21	53	28	14	1
Female	20	32	17	37	26	15	3
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 6.92$			

Teaching Level	Very					Very	
	None	Little	Little	Some	Great	Great	Complete
Elementary	9	11	7	24	18	9	1
Junior High	6	17	9	18	8	9	1
Senior High	10	13	11	27	14	7	1
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 7.97$			

Teaching Experience	Very					Very	
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	5	11	6	16	11	9	0
4 or more years	27	47	32	74	43	20	4
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 4.31$			

Table eighty-one indicates that, at the .05 level, response to satisfaction item 2 was independent of sex, teaching level, and years of teaching experience.

Table eighty-two displays the responses for item 3: "Degree to which supervision promotes my professional development."

Table 82

## Chi Square Analyses for Item 3

Sex	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Male	17	20	28	48	20	17	5
Female	27	27	12	31	30	15	8
*df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 16.11$			

Teaching Level	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Elementary	14	6	10	15	19	11	4
Junior High	7	13	10	17	8	10	3
Senior High	15	11	11	29	10	5	2
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 18.34$			

Teaching Experience	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	9	9	3	14	13	8	2
4 or more years	35	38	37	65	37	24	11
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 6.03$			

\*;significant at .05 level

The analysis presented in table eighty-two leads to the rejection of Null Hypothesis 15: Degree of satisfaction with supervision is independent of sex. Women tend to be more satisfied with the degree to which supervision promotes their professional development. On the other hand, a larger proportion of women tend to experience very little or no satisfaction. Consequently the responses of women to this item had a greater variability than the responses of men.

Table eighty-two also indicates that, at the .05 level, response to item 3 was independent of teaching level, and years of teaching experience.

Table eighty-three displays the responses for item 4: "Degree to which supervision contributes to my self-esteem."

Table 83

## Chi Square Analyses for Item 4

Sex	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Male	19	20	12	44	29	22	9
Female	26	14	15	27	30	20	18
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 9.58$			

Teaching Level	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Elementary	12	5	9	16	19	10	8
Junior High	11	10	3	19	10	11	4
Senior High	12	2	9	20	23	11	6
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 15.35$			

Teaching Experience	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	9	5	5	9	14	14	2
4 or more years	36	29	22	62	45	28	25
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 11.10$			

Table eighty-three indicates that at the .05 level, response to satisfaction item 4 was independent of sex, teaching level, and years of teaching experience.

Table eighty-four displays the responses for item 5: "Degree to which my supervisor helps establish a supportive staff interaction."

Table 84

## Chi Square Analyses for Item 5

Sex	None	Very Little	Little	Some	Great	Very Great	Complete
Male	9	27	24	33	27	23	12
Female	15	23	19	32	27	17	17
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 4.10$			

Teaching Level	None	Very Little	Little	Some	Great	Very Great	Complete
Elementary	3	12	9	17	20	11	7
Junior High	8	8	12	16	9	8	7
Senior High	8	11	13	18	13	11	9
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 8.25$			

Teaching Experience	None	Very Little	Little	Some	Great	Very Great	Complete
1 to 3 years	8	5	8	11	11	12	3
4 or more years	16	45	35	54	43	28	26
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 10.64$			

Table eighty-four indicates that, at the .05 level, response to satisfaction item 5 was independent of sex, teaching level, and years of teaching experience.

Table eighty-five displays the responses for item 6: "Degree to which my supervisor enables me to participate in significant decision-making."

Table 85

## Chi Square Analyses for Item 6

Sex	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Male	11	21	18	34	31	24	16
Female	13	16	24	30	31	22	14
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 2.09$			

Teaching Level	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Elementary	6	8	8	17	19	13	8
Junior High	6	9	9	19	10	9	6
Senior High	6	12	13	12	17	15	8
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 7.23$			

Teaching Experience	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	6	6	9	7	15	10	5
4 or more years	18	31	33	57	47	36	25
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 5.03$			

Table eighty-five indicates that, at the .05 level, response to satisfaction item 6 was independent of sex, teaching level, and years of teaching experience.

Table eighty-six displays the responses for item 7: "Degree to which my supervisor gives me due recognition for my efforts."

Table 86

## Chi Square Analyses for Item 7

Sex	None	Very Little	Little	Some	Great	Very Great	Complete
Male	12	16	13	34	36	24	20
Female	10	17	16	31	28	25	23
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 1.81$			

Teaching Level	None	Very Little	Little	Some	Great	Very Great	Complete
Elementary	8	5	6	20	13	15	12
Junior High	3	11	5	15	16	7	11
Senior High	6	8	8	17	20	11	13
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 9.22$			

Teaching Experience	None	Very Little	Little	Some	Great	Very Great	Complete
1 to 3 years	5	7	4	13	12	13	4
4 or more years	17	26	25	52	52	36	39
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 5.29$			

Table eighty-six indicates that, at the .05 level, response to satisfaction item 7 was independent of sex, teaching level, and years of teaching experience.

Table eighty-seven displays the responses for item 8: "Degree to which my supervisor allows me to influence the supervisory process."

Table 87

## Chi Square Analyses for Item 8

Sex	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Male	23	20	22	43	30	13	4
Female	23	32	22	38	19	9	7
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 7.01$			

Teaching Level	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
Elementary	15	9	16	19	11	6	3
Junior High	12	9	11	18	11	6	1
Senior High	10	17	9	23	15	6	3
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 7.68$			

Teaching Experience	Very			Very			
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	11	11	12	12	6	5	1
4 or more years	35	41	32	69	43	17	10
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 6.11$			

Table eighty-seven indicates that, at the .05 level, response to satisfaction item 8 was independent of sex, teaching level, and years of teaching experience.

Table eighty-eight displays the responses for item 9: "Degree to which my supervisor establishes a supervisory climate characterized by trust, respect, and warmth."

Table 88

## Chi Square Analyses for Item 9

Sex	Very		Little	Some	Great	Very	
	None	Little				Great	Complete
Male	13	21	12	26	36	19	28
Female	18	17	11	29	23	27	25
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 5.78$			

Teaching Level	Very		Little	Some	Great	Very	
	None	Little				Great	Complete
Elementary	8	7	6	14	18	13	13
Junior High	5	9	3	16	11	11	13
Senior High	9	10	4	14	21	7	18
df = 12	Critical $\chi^2 = 21.03$			Calculated $\chi^2 = 7.53$			

Teaching Experience	Very		Little	Some	Great	Very	
	None	Little				Great	Complete
1 to 3 years	9	6	5	10	11	13	4
4 or more years	22	32	18	45	48	33	49
df = 6	Critical $\chi^2 = 12.59$			Calculated $\chi^2 = 9.50$			

Table eighty-eight indicates that, at the .05 level, response to satisfaction item 9 was independent of sex, teaching level, and years of teaching experience.

Table eighty-nine displays the responses for item 10: "Degree of overall satisfaction with supervision."

Table 89

## Chi Square Analyses for Item 10

Sex	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
Male	9	22	17	31	29	24	23
Female	15	20	17	30	21	24	23
df = 6	Critical $\chi^2 = 12.59$				Calculated $\chi^2 = 2.81$		

Teaching Level	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
Elementary	5	5	8	18	15	16	12
Junior High	2	14	8	12	11	10	11
Senior High	11	9	7	18	15	11	12
df = 12	Critical $\chi^2 = 21.03$				Calculated $\chi^2 = 14.22$		

Teaching Experience	Very				Very		
	None	Little	Little	Some	Great	Great	Complete
1 to 3 years	7	9	5	13	10	10	4
4 or more years	17	33	29	48	40	38	42
df = 6	Critical $\chi^2 = 12.59$				Calculated $\chi^2 = 5.70$		

Table eighty-nine indicates that, at the .05 level, response to satisfaction item 10 was independent of sex, teaching level, and years of teaching experience.

### Sign Tests

The following section reports the analysis of the thirty-one items related to supervisory behavior using the sign test for two correlated samples. (Ferguson, 1976: 385-386).

For each item, actual score was subtracted from preferred score. Under the null hypothesis, the expected number of + and - signs would be equal.

We may denote the difference between the number of + and - signs by D. Ferguson (1976:385-386) explains that

$$z = \frac{|D| - 1}{\sqrt{N}}$$

where N is the total number of signs. This approaches the normal form as N increases in size. A value of 1.96 is required for significance at the .05 level.

Table ninety displays the results of the sign tests for all thirty-one items related to supervisory behavior.

Table 90

## Sign Tests for 31 Items Related to Supervisory Behavior

Item	Number of + signs	Number of - signs	Z	Significant at .05 level (*)
1	166	7	12.02	*
2	128	6	10.45	*
3	102	16	7.83	*
4	176	16	11.47	*
5	168	4	12.43	*
6	174	3	12.78	*
7	192	9	12.83	*
8	173	3	12.74	*
9	144	5	11.30	*
10	138	7	10.80	*
11	129	2	11.00	*
12	131	1	11.23	*
13	106	6	9.36	*
14	158	5	11.90	*
15	229	3	14.77	*
16	232	6	14.58	*
17	138	1	11.54	*
18	110	5	9.70	*
19	192	1	13.68	*
20	127	19	8.86	*
21	183	10	12.38	*
22	200	2	13.86	*
23	165	11	11.53	*
24	133	10	10.20	*
25	124	9	9.89	*
26	139	16	9.80	*
27	155	9	11.32	*
28	151	5	11.61	*
29	114	13	8.87	*
30	197	4	13.54	*
31	197	4	13.54	*

For each of the thirty-one supervisory items, the above analysis leads to the rejection of Null Hypothesis

16: There are no systematic differences in direction

between paired responses to actual and preferred supervisory practices.

In fact there is a significant systematic difference in favor of preferred scores. In other words, many teachers would prefer to experience more often all thirty-one supervisory practices. Consequently this study has confirmed that those supervisory practices recommended in the literature since 1970 are really those practices that a great many Montana teachers would prefer to experience more often.

Multiple regression analysis

The following section reports ten multiple regression analyses. There are thirty-one independent variables (absolute values of the difference between actual score and preferred score for each item of supervisory behavior). The dependent variable for each regression is the score on one of the ten items related to satisfaction with supervision. Therefore ten tables are used to display this part of the analysis.

Each table will include the thirty-one independent variables, their correlation with the satisfaction measure,  $b$ , calculated  $t$ , multiple  $R$ ,  $R$  square, and calculated  $F$ . In addition, the critical  $t$  and  $F$  values, the regression constant, and the standard error of estimate are displayed.

To obtain the critical  $t = 1.98$ ,  $df$  was taken as 120. To obtain the critical  $F = 1.52$ ,  $df$  were taken as 30, 200.

Table ninety-one depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 1 of satisfaction).

Table 91

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which  
supervision helps improve student learning

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.22	.053	.87	
2	-.19	.002	.02	
3	-.25	.055	.65	
4	-.35	-.105	-1.34	
5	-.31	-.095	-.91	
6	-.32	.099	.93	
7	-.43	-.123	-1.39	
8	-.42	-.092	-1.05	
9	-.30	.053	.64	
10	-.39	-.070	-.73	
11	-.29	.002	.03	
12	-.44	-.085	-.75	
13	-.32	-.027	-.25	
14	-.45	-.064	-.62	
15	-.18	.081	.95	
16	-.14	.106	1.27	
17	-.45	-.110	-.95	
18	-.30	.049	.50	
19	-.41	-.004	-.04	
20	-.34	-.001	-.01	
21	-.38	-.130	-1.60	
22	-.37	-.148	-2.07	*
23	-.28	.073	.87	
24	-.30	-.002	-.02	
25	-.30	.003	.04	
26	-.25	.047	.45	
27	-.33	-.112	-1.19	
28	-.46	-.010	-.10	
29	-.41	-.155	-1.54	
30	-.46	-.263	-2.82	*
31	-.43	.001	.01	

Constant = 14.28

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .62    R square = .39    S est = 1.30

Calculated F = 5.58

The analysis presented in table ninety-one leads to the rejection of Null Hypothesis 17: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value tests the significance of the proportion of variability in the dependent variable that is accounted for by a knowledge of all thirty-one independent variables taken collectively.

Therefore, the absolute values of discrepancies between preferred and actual supervisory behavior for the thirty-one independent variables relate significantly to the degree to which supervision helps improve student learning.

To examine the separate contributions of each of the thirty-one independent variables, consider the calculated t values. These test the significance of b from zero, and indicate which of the independent variables contribute significantly to the prediction of Y, after all the other thirty variables are taken into account.

Therefore, the t values in table ninety-one indicate that two of the independent variables are making a significant, unique contribution to the prediction of the

degree to which supervision helps improve student learning.

These are:

1. Supervisory behavior item 22: "The inservice education my supervisor provides is designed specifically to help me teach more effectively."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision helps improve student learning.

2. Supervisory behavior item 30: "During each school term, my supervisor brings new developments in education to my attention."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision helps improve student learning.

Table ninety-two depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 2 of satisfaction).

Table 92

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which  
supervision helps improve instruction

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.27	-.008	-.14	
2	-.21	-.049	-.55	
3	-.29	.010	.12	
4	-.36	-.074	-.99	
5	-.33	-.106	-1.06	
6	-.34	.075	.74	
7	-.43	-.103	-1.23	
8	-.41	-.037	-.44	
9	-.32	.032	.41	
10	-.42	-.105	-1.15	
11	-.30	.022	.31	
12	-.46	-.086	-.78	
13	-.35	-.064	-.62	
14	-.45	.036	.36	
15	-.19	.095	1.16	
16	-.16	.049	.61	
17	-.49	-.187	-1.69	
18	-.32	.076	.83	
19	-.43	-.012	-.14	
20	-.39	-.057	-.72	
21	-.41	-.171	-2.20	*
22	-.33	-.074	-1.08	
23	-.27	.035	.44	
24	-.29	.027	.34	
25	-.31	-.043	-.51	
26	-.19	.217	2.19	*
27	-.31	-.121	-1.36	
28	-.48	-.093	-1.02	
29	-.45	-.224	-2.33	*
30	-.42	-.124	-1.39	
31	-.41	.055	.70	

Constant = 14.71

At .05 level, critical value of T = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .64    R square = .41    S est = 1.24

Calculated F = 6.03

The analysis presented in table ninety-two leads to the rejection of Null Hypothesis 18: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which supervision helps improve instruction.

The t values in table ninety-two indicate that three of the independent variables are making a significant, unique contribution to the prediction of the degree to which supervision helps improve instruction. These are:

1. Supervisory behavior item 21: "During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision helps improve instruction.

2. Supervisory behavior item 26: "My supervisor uses group methods of supervision."

Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree to which supervision helps improve instruction.

This finding would seem to contradict the major thesis underlying this study: that greater satisfaction relates to smaller differences between what one prefers and what one actually experiences. However, a possible explanation may lie in the fact that the majority of teachers (64% according to table thirty-three) have never actually experienced this. It might be argued that more satisfied teachers would prefer to experience this kind of supervisory practice at least occasionally (54% according to table thirty-three). In other words these teachers are willing to try a new and different form of supervision in the hope that it might lead to improved instruction.

3. Supervisory behavior item 29: "My supervisor supports innovation."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller

the difference between actual score and preferred score for this item, the greater the degree to which supervision helps improve instruction.

Table ninety-three depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 3 of satisfaction).

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Table 93

Multiple Regression Analysis

Dependent Variable (Y): Degree to which supervision promotes my professional development

Independent Variables	Correlation with Y	b	t	Significant at .05 level(*)
1	-.27	-.054	-.87	
2	-.14	.083	.85	
3	-.30	-.028	-.32	
4	-.33	.007	.09	
5	-.31	-.114	-1.06	
6	-.34	-.010	-.09	
7	-.42	-.083	-.91	
8	-.38	.027	.30	
9	-.34	-.046	-.54	
10	-.41	-.080	-.81	
11	-.30	.031	.39	
12	-.46	-.095	-.80	
13	-.33	.050	.45	
14	-.47	-.044	-.41	
15	-.17	.151	1.71	
16	-.17	-.002	-.02	
17	-.52	-.347	-2.89	*
18	-.32	.136	1.36	
19	-.44	-.060	-.64	
20	-.38	-.005	-.06	
21	-.38	-.084	-1.00	
22	-.31	-.012	-.16	
23	-.28	.052	.60	
24	-.34	-.069	-.80	
25	-.35	-.088	-.96	
26	-.18	.271	2.53	*
27	-.33	-.210	-2.17	*
28	-.46	.017	.17	
29	-.48	-.252	-2.42	*
30	-.46	-.220	-2.30	*
31	-.43	.013	.15	

Constant = 15.45

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .66      R square = .44      S est = 1.35

Calculated F = 6.81      \*

The analysis presented in table ninety-three leads to the rejection of Null Hypothesis 19: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which supervision promotes professional development.

The t values in table ninety-three indicate that five of the independent variables are making a significant, unique contribution to the prediction of the degree to which supervision promotes professional development.

These are:

1. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision promotes professional development.

2. Supervisory behavior item 26: "My supervisor uses group methods of supervision."

Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree to which supervision promotes professional development.

Again, as explained in the discussion of table ninety-two, this may be due to the fact that teachers are willing to try a new and different kind of supervisory practice with the expectation that it might promote their professional development.

3. Supervisory behavior item 27: "Supervision takes the form of problem-solving in work groups."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision promotes professional development.

4. Supervisory behavior item 29: "My supervisor supports innovation."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller

the difference between actual score and preferred score for this item, the greater the degree to which supervision promotes professional development.

5. Supervisory behavior item 30: "During each school term, my supervisor brings new developments in education to my attention."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision promotes professional development.

Table ninety-four depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 4 of satisfaction).

Table 94

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which  
supervision contributes to my self-esteem

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.30	-.122	-1.84	
2	-.16	.100	.96	
3	-.32	-.132	-1.42	
4	-.34	-.053	-.61	
5	-.30	-.084	-.73	
6	-.32	.058	.49	
7	-.43	-.058	-.60	
8	-.37	.021	.21	
9	-.32	.041	.45	
10	-.41	-.104	-.99	
11	-.28	-.023	-.28	
12	-.56	-.288	-2.29	*
13	-.40	-.063	-.54	
14	-.50	-.151	-1.33	
15	-.19	.148	1.57	
16	-.20	-.082	-.89	
17	-.57	-.420	-3.29	*
18	-.40	.012	.11	
19	-.37	.072	.72	
20	-.32	.102	1.12	
21	-.31	.057	.63	
22	-.35	-.088	-1.12	
23	-.31	-.046	-.50	
24	-.32	-.046	-.50	
25	-.31	-.012	-.12	
26	-.20	.092	.80	
27	-.27	-.028	-.27	
28	-.47	.035	.33	
29	-.47	-.222	-2.00	*
30	-.39	.033	.32	
31	-.46	-.106	-1.17	

Constant = 18.85

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .68    R square = .46    S est = 1.43

Calculated F = 7.48

The analysis presented in table ninety-four leads to the rejection of Null Hypothesis 20: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which supervision contributes to self-esteem.

The t values in table ninety-four indicate that three of the independent variables are making a significant, unique contribution to the prediction of the degree to which supervision contributes to self-esteem. These are:

1. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person." Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision contributes to self-esteem.

2. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision contributes to self-esteem.

3. Supervisory behavior item 29: "My supervisor supports innovation."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervision contributes to self-esteem.

Table ninety-five depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 5 of satisfaction).

Table 95

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which my supervisor helps establish a supportive staff interaction

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.36	-.113	-2.05	*
2	-.24	-.040	-.46	
3	-.34	-.117	-1.52	
4	-.35	-.039	-.55	
5	-.32	-.092	-.96	
6	-.33	.124	1.28	
7	-.48	-.057	-.71	
8	-.44	.041	.51	
9	-.38	-.012	-.15	
10	-.46	-.174	-2.00	*
11	-.28	.131	1.88	
12	-.61	-.251	-2.40	*
13	-.43	.033	.34	
14	-.56	-.109	-1.14	
15	-.26	.063	.81	
16	-.20	.024	.31	
17	-.64	-.354	-3.34	*
18	-.44	.047	.53	
19	-.42	.146	1.77	
20	-.43	-.083	-1.10	
21	-.36	.088	1.18	
22	-.43	-.132	-2.01	*
23	-.34	.070	.92	
24	-.37	-.062	-.81	
25	-.33	.040	.48	
26	-.33	-.028	-.29	
27	-.39	-.143	-1.67	
28	-.63	-.234	-2.67	*
29	-.51	-.102	-1.10	
30	-.49	-.073	-.86	
31	-.51	-.071	-.94	

Constant = 20.22

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .77 R square = .59 S est = 1.19

Calculated F = 12.42 \*

The analysis presented in table ninety-five leads to the rejection of Null Hypothesis 21: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which the supervisor helps establish a supportive staff interaction.

The t values in table ninety-five indicate that six of the independent variables are making a significant, unique contribution to the prediction of the degree to which the supervisor helps establish a supportive staff interaction. These are:

1. Supervisory behavior item 1: "At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller

the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

2. Supervisory behavior item 10: "After each observation visit, my supervisor provides me with feedback in a supportive way."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

3. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

4. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Since the  $b$  is negative for this item, this indicates that,

when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

5. Supervisory behavior item 22: "The inservice education my supervisor provides is designed specifically to help me teach more effectively."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

6. Supervisory behavior item 28: "My supervisor facilitates communication between myself and other teachers." Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor helps establish a supportive staff interaction.

Table ninety-six depicts the analysis of relationships between the thirty-one independent variables

(absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 6 of satisfaction).

Table 96

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which my supervisor enables me to participate in significant decision-making

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.29	-.120	-1.93	
2	-.19	-.032	-.32	
3	-.28	-.101	-1.16	
4	-.29	-.048	-.59	
5	-.25	-.139	-1.28	
6	-.26	.136	1.23	
7	-.41	-.124	-1.35	
8	-.38	-.028	-.30	
9	-.31	-.045	-.52	
10	-.37	-.043	-.43	
11	-.22	.095	1.20	
12	-.50	-.222	-1.87	
13	-.38	.003	.03	
14	-.41	.079	.73	
15	-.12	.094	1.06	
16	-.06	.100	1.16	
17	-.49	-.163	-1.36	
18	-.43	-.143	-1.43	
19	-.35	-.026	-.27	
20	-.24	.165	1.93	
21	-.22	.109	1.29	
22	-.33	-.092	-1.25	
23	-.26	-.001	-.01	
24	-.32	-.005	-.06	
25	-.42	-.336	-3.64	*
26	-.22	.131	1.22	
27	-.29	-.092	-.95	
28	-.51	-.279	-2.80	*
29	-.44	-.141	-1.34	
30	-.40	-.066	-.68	
31	-.38	.090	1.05	

Constant = 17.64

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .67    R square = .45    S est = 1.35

Calculated F = 7.29

The analysis presented in table ninety-six leads to the rejection of Null Hypothesis 22: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which the supervisor enables the teacher to participate in significant decision-making.

The t values in table ninety-six indicate that two of the independent variables are making a significant, unique contribution to the prediction of the degree to which the supervisor enables the teacher to participate in significant decision-making. These are:

1. Supervisory behavior item 25: "During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score

for this item, the greater the degree to which the supervisor enables the teacher to participate in significant decision-making.

2. Supervisory behavior item 28: "My supervisor facilitates communication between myself and other teachers."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor enables the teacher to participate in significant decision-making.

Table ninety-seven depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 7 of satisfaction).

Table 97

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which my supervisor gives me due recognition for my efforts.

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.34	-.136	-2.40	*
2	-.18	.102	1.14	
3	-.35	-.134	-1.69	
4	-.31	.094	1.28	
5	-.31	-.136	-1.38	
6	-.32	.057	.57	
7	-.47	-.129	-1.56	
8	-.40	.124	1.51	
9	-.39	-.021	-.27	
10	-.48	-.138	-1.54	
11	-.32	.009	.13	
12	-.62	-.303	-2.82	*
13	-.47	-.160	-1.58	
14	-.51	.071	.73	
15	-.20	.126	1.56	
16	-.16	.015	.20	
17	-.64	-.408	-3.73	*
18	-.48	-.039	-.43	
19	-.46	-.089	-1.05	
20	-.38	.044	.57	
21	-.34	.043	.56	
22	-.38	-.096	-1.43	
23	-.32	.005	.06	
24	-.31	.081	1.02	
25	-.37	-.093	-1.11	
26	-.26	.036	.37	
27	-.31	-.020	-.22	
28	-.52	.004	.04	
29	-.53	-.221	-2.33	*
30	-.47	-.087	-.99	
31	-.49	-.071	-.92	

Constant = 20.43

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .75 R square = .57 S est = 1.23

Calculated F = 11.61 \*

The analysis presented in table ninety-seven leads to the rejection of Null Hypothesis 23: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which the supervisor gives the teachers due recognition for their efforts.

The t values in table ninety-seven indicate that four of the independent variables are making a significant, unique contribution to the prediction of the degree to which supervisors give teachers due recognition for their efforts. These are:

1. Supervisory behavior item 1: "At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller

the difference between actual score and preferred score for this item, the greater the degree to which supervisors give teachers due recognition for their efforts.

2. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person."  
Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervisors give teachers due recognition for their efforts.

3. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."  
Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which supervisors give teachers due recognition for their efforts.

4. Supervisory behavior item 29: "My supervisor supports innovation."  
Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for

this item, the greater the degree to which supervisors give teachers due recognition for their efforts.

Table ninety-eight depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 8 of satisfaction).

Table 98

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which my supervisor allows me to influence the supervisory process

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.33	-.125	-2.13	*
2	-.18	.087	.94	
3	-.23	.098	1.19	
4	-.29	.046	.60	
5	-.27	-.171	-1.68	
6	-.26	.127	1.22	
7	-.44	-.152	-1.77	
8	-.40	-.039	-.46	
9	-.33	-.001	-.02	
10	-.40	-.025	-.26	
11	-.30	-.039	-.52	
12	-.52	-.280	-2.52	*
13	-.43	-.173	-1.65	
14	-.44	.050	.50	
15	-.20	.048	.58	
16	-.12	.096	1.19	
17	-.51	-.116	-1.03	
18	-.41	-.098	-1.05	
19	-.40	-.070	-.79	
20	-.34	-.031	-.38	
21	-.29	.064	.80	
22	-.41	-.212	-3.04	*
23	-.31	-.039	-.48	
24	-.30	.083	1.02	
25	-.40	-.215	-2.48	*
26	-.17	.247	2.44	*
27	-.28	-.087	-.96	
28	-.47	-.036	-.39	
29	-.41	-.044	-.45	
30	-.44	-.101	-1.11	
31	-.45	-.015	-.18	

Constant = 15.87

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .68      R square = .46      S est = 1.27

Calculated F = 7.59      \*

The analysis presented in table ninety-eight leads to the rejection of Null Hypothesis 24: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which the supervisor allows the teacher to influence the supervisory process.

The t values in table ninety-eight indicate that five of the independent variables are making a significant, unique contribution to the prediction of the degree to which the supervisor allows the teacher to influence the supervisory process. These are:

1. Supervisory behavior item 1: "At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities."

Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score

for this item, the greater the degree to which the supervisor allows the teacher to influence the supervisory process.

2. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor allows the teacher to influence the supervisory process.

3. Supervisory behavior item 22: "The inservice education my supervisor provides is designed specifically to help me teach more effectively."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor allows the teacher to influence the supervisory process.

4. Supervisory behavior item 25: "During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor allows the teacher to influence the supervisory process.

5. Supervisory behavior item 26: "My supervisor uses group methods of supervision."

Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree to which the supervisor allows the teacher to influence the supervisory process.

Again, as explained in the discussion of table ninety-two, this may be due to the fact that teachers are willing to try a new and different kind of supervisory practice with the expectation that it might allow them greater influence over the supervisory process.

Table ninety-nine depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 9 of satisfaction).

Table 99

## Multiple Regression Analysis

Dependent Variable (Y): Degree to which my supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.34	-.103	-1.90	
2	-.23	.060	.71	
3	-.35	-.039	-.52	
4	-.37	.045	.64	
5	-.37	-.186	-1.98	*
6	-.38	.088	.92	
7	-.53	-.107	-1.34	
8	-.50	-.021	-.27	
9	-.41	-.005	-.06	
10	-.49	-.062	-.73	
11	-.33	.005	.08	
12	-.70	-.456	-4.43	*
13	-.47	.006	.06	
14	-.61	-.149	-1.60	
15	-.23	.165	2.14	*
16	-.18	.025	.34	
17	-.68	-.360	-3.44	*
18	-.51	-.086	-1.00	
19	-.47	.047	.58	
20	-.40	.018	.24	
21	-.36	.127	1.74	
22	-.44	-.146	-2.28	*
23	-.35	.015	.20	
24	-.36	-.008	-.10	
25	-.34	.070	.87	
26	-.33	.034	.36	
27	-.41	-.180	-2.14	*
28	-.64	-.152	-1.76	
29	-.53	-.109	-1.20	
30	-.50	-.071	-.85	
31	-.55	-.108	-1.46	

Constant = 22.41

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .82      R Square = .67      S est = 1.17

Calculated F = 17.71

The analysis presented in table ninety-nine leads to the rejection of Null Hypothesis 25: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

The t values in table ninety-nine indicate that six of the independent variables are making a significant, unique contribution to the prediction of the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth. These are:

1. Supervisory behavior item 5: "During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed." Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score

for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

2. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person." Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

3. Supervisory behavior item 15: "During each school term, my supervisor provides me with the opportunity to watch demonstration lessons." Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

As with the responses to item 26, this finding would also seem to contradict the major thesis that greater

satisfaction relates to smaller differences between actual and preferred supervisory behavior. Again, a possible explanation lies in the fact that the majority of teachers (61% according to table twenty-two) have never actually experienced this. It might be argued that those teachers already quite satisfied with their supervision would prefer to experience this kind of supervisory practice at least occasionally (84% according to table twenty-two). In other words, satisfied teachers are willing to try a new and different form of supervisory behavior in the hope that it might help establish a supervisory climate characterized by trust, respect, and warmth.

4. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

5. Supervisory behavior item 22: "The inservice

education my supervisor provides is designed specifically to help me teach more effectively."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

6. Supervisory behavior item 27: "Supervision takes the form of problem-solving in work groups."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth.

Table one hundred depicts the analysis of relationships between the thirty-one independent variables (absolute values of discrepancy scores for each item of supervisory behavior) and the dependent variable (item 10 of satisfaction).

Table 100

## Multiple Regression Analysis

Dependent Variable (Y): Degree of overall  
satisfaction with supervision

Independent Variables	Correlation with Y	b	t	Significant at .05 level (*)
1	-.35	-.052	-.97	
2	-.25	.025	.29	
3	-.38	-.078	-1.05	
4	-.37	.067	.97	
5	-.40	-.324	-3.50	*
6	-.37	.259	2.74	*
7	-.54	-.093	-1.19	
8	-.53	-.041	-.52	
9	-.43	.011	.15	
10	-.53	-.123	-1.46	
11	-.37	.031	.46	
12	-.63	-.288	-2.85	*
13	-.42	.080	.83	
14	-.61	-.133	-1.45	
15	-.26	.156	2.07	*
16	-.22	-.003	-.04	
17	-.65	-.332	-3.22	*
18	-.42	.109	1.28	
19	-.52	.037	.46	
20	-.49	-.158	-2.16	*
21	-.43	.079	1.10	
22	-.44	-.089	-1.40	
23	-.39	-.001	-.02	
24	-.38	-.008	-.10	
25	-.37	-.018	-.23	
26	-.38	-.069	-.75	
27	-.43	-.107	-1.29	
28	-.65	-.184	-2.17	*
29	-.51	-.060	-.67	
30	-.54	-.131	-1.60	
31	-.58	-.160	-2.19	*

Constant = 21.92

At .05 level, critical value of t = 1.98.

At .05 level, critical value of F = 1.52.

Multiple R = .81    R square = .65    S est = 1.15

Calculated F = 16.55

The analysis presented in table one-hundred leads to the rejection of Null Hypothesis 26: There are no significant relationships between degree of satisfaction with supervision and discrepancies between actual and preferred supervisory practices.

The calculated F value indicates that the absolute values of discrepancies between preferred and actual supervisory behavior, for all thirty-one independent variables taken collectively, relate significantly to the degree of overall satisfaction with supervision.

The t values in table one-hundred indicate that eight of the independent variables are making a significant, unique contribution to the prediction of the degree of overall satisfaction with supervision. These are:

1. Supervisory behavior item 5: "During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed." Since the b is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

2. Supervisory behavior item 6: "During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information."

Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

Again, as with items 15 and 26, the possible explanation for a positive correlation lies in the fact that the majority of Montana teachers sampled (75% according to table thirteen) have never actually experienced item 6. It might be argued that teachers already quite satisfied with supervision would prefer to experience this kind of supervisory practice at least occasionally (67% according to table thirteen). In other words, teachers already satisfied with supervision are willing to try a new and different form of supervisory behavior with the expectation that it might lead to greater satisfaction with supervision.

3. Supervisory behavior item 12: "My supervisor shows a real concern for me as a person."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

4. Supervisory behavior item 15: "During each school term, my supervisor provides me with the opportunity to watch demonstration lessons."

Since the  $b$  is positive for this item, this indicates that, when all other variables are held constant, the larger the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

Again, as explained in the discussion of table ninety-nine, this may be due to the fact that already satisfied teachers are willing to try a new and different kind of supervisory practice with the expectation that it may increase the degree of overall satisfaction with supervision.

5. Supervisory behavior item 17: "Discussion with my supervisor is a mutual exchange of ideas and information between colleagues."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

6. Supervisory behavior item 20: "During each school term, my supervisor expects me to use self-evaluation techniques."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

7. Supervisory behavior item 28: "My supervisor facilitates communication between myself and other teachers."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

8. Supervisory behavior item 31: "During each school term, my supervisor expects feedback from me on the

effectiveness of the supervisory process."

Since the  $b$  is negative for this item, this indicates that, when all other variables are held constant, the smaller the difference between actual score and preferred score for this item, the greater the degree of overall satisfaction with supervision.

#### Summary

Out of a random sample of three hundred and seventy Montana public school teachers, three hundred and five (82.5%) returned completed questionnaires. These constituted the data base for this study. Tables are used to display the frequency of each response to each item on the questionnaire.

As a result of the chi square tests of independence, fifteen null hypotheses were rejected, indicating that responses to particular items were dependent either on sex, or teaching level, or years of teaching experience. Significant findings were:

1. Elementary supervisors actually seemed more inclined to help teachers plan units and lessons.
2. Senior high supervisors actually seemed less inclined to help teachers better understand the students.

they teach.

3. Less experienced teachers indicated a greater preference to have their supervisors help them to better understand the students they teach.

4. Elementary supervisors actually seemed less inclined to provide teachers with a written summary of each observation visit.

5. The higher the teaching level, the more the teachers preferred to have their supervisors provide them with a written summary of each observation visit.

6. Men indicated a greater preference to have their supervisors available to see them whenever they need help or advice.

7. The higher the teaching level, the less inclined supervisors actually were to provide teachers with the opportunity to watch demonstration lessons.

8. More experienced teachers showed a greater preference for discussion with their supervisor to be a mutual exchange of ideas and information between colleagues.

9. Elementary supervisors actually seemed more inclined to provide inservice education that is designed specifically to help faculty teach more effectively.

10. Junior high teachers indicated a weaker preference than other teachers for inservice education that is designed specifically to help them teach more effectively.

11. Senior high supervisors actually seemed less inclined to allow teachers to participate in the evaluation of current curriculum packages and materials that are available.

12. Supervisors actually seemed more inclined to use group methods of supervision with men.

13. The higher the teaching level, the less inclined supervisors actually were to bring new developments in education to the attention of their teachers.

14. Junior high teachers indicated a weaker preference for their supervisors to bring new developments in education to their attention.

15. There was greater variability among women concerning the degree to which supervision promotes professional development. On the one hand, women tended to experience greater satisfaction than men on this issue. Yet, on the other hand, a larger proportion of women experienced very little or no satisfaction.

As a result of the sign tests, the null hypothesis was rejected for all thirty-one items of supervisory

behavior. This indicated that there was a significant systematic difference in favor of preferred scores. In other words, teachers would prefer to experience a significantly higher level than they actually were experiencing of all thirty-one supervisory practices.

Consequently this study has confirmed that those supervisory practices recommended in the literature since 1970 were really those practices that Montana teachers would prefer.

As a result of the multiple regression analyses, ten null hypotheses were rejected. This indicated that each of the ten indices of satisfaction with supervision related significantly to the absolute values of the difference between actual score and preferred score for all thirty-one supervisory practices taken collectively.

The t value associated with the b for each independent variable in the multiple regressions indicated specific supervisory practices that made a significant, unique contribution to the prediction of the satisfaction indices.

When all other variables were taken into account, there were two supervisory practices for which the absolute values of the difference between actual score and preferred

score were significant predictors of the degree to which supervision helps improve student learning. These were:

1. The inservice education my supervisor provides is designed specifically to help me teach more effectively.

(This was a negative correlation).

2. During each school term, my supervisor brings new developments in education to my attention. (This was a negative correlation).

When all other variables were taken into account, there were three supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which supervision helps improve instruction. These were:

1. During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness. (This was a negative correlation).

2. My supervisor uses group methods of supervision. (This was a positive correlation, and was explained in terms of the fact that the majority of teachers actually have never experienced this supervisory practice).

3. My supervisor supports innovation. (This was a negative correlation).

When all other variables were taken into account, there were five supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which supervision promotes professional development.

These were:

1. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).

2. My supervisor uses group methods of supervision. (This was a positive correlation).

3. Supervision takes the form of problem-solving in work groups. (This was a negative correlation).

4. My supervisor supports innovation. (This was a negative correlation).

5. During each school term, my supervisor brings new developments in education to my attention. (This was a negative correlation).

When all other variables were taken into account, there were three supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree

to which supervision contributes to self-esteem. These were:

1. My supervisor shows a real concern for me as a person. (This was a negative correlation).
2. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).
3. My supervisor supports innovation. (This was a negative correlation).

When all other variables were taken into account, there were six supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which the supervisor helps establish a supportive staff interaction. These were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities. (This was a negative correlation).
2. After each observation visit, my supervisor provides me with feedback in a supportive way. (This was a negative correlation).

3. My supervisor shows a real concern for me as a person. (This was a negative correlation).

4. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).

5. The inservice education my supervisor provides is designed specifically to help me teach more effectively. (This was a negative correlation).

6. My supervisor facilitates communication between myself and other teachers. (This was a negative correlation).

When all other variables were taken into account, there were two supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which the supervisor enables the teacher to participate in significant decision-making. These were:

1. During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs. (This was a negative correlation).

2. My supervisor facilitates communication between myself and other teachers. (This was a negative correlation).

When all other variables were taken into account, there were four supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which supervisors give teachers due recognition for their efforts. These were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities. (This was a negative correlation).

2. My supervisor shows a real concern for me as a person. (This was a negative correlation).

3. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).

4. My supervisor supports innovation. (This was a negative correlation).

When all other variables were taken into account, there were five supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which the supervisor allows the teacher to influence

the supervisory process. These were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities. (This was a negative correlation).
2. My supervisor shows a real concern for me as a person. (This was a negative correlation).
3. The inservice education my supervisor provides is designed specifically to help me teach more effectively. (This was a negative correlation).
4. During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs. (This was a negative correlation).
5. My supervisor uses group methods of supervision. (This was a positive correlation).

When all other variables were taken into account, there were six supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree to which the supervisor establishes a supervisory climate characterized by trust, respect, and warmth. These were:

1. During the pre-observation conference, my

supervisor and I agree upon objectives for the lesson to be observed. (This was a negative correlation).

2. My supervisor shows a real concern for me as a person. (This was a negative correlation).

3. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons. (This was a positive correlation, and was explained in terms of the fact that the majority of teachers actually have never experienced this supervisory practice).

4. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).

5. The inservice education my supervisor provides is designed specifically to help me teach more effectively. (This was a negative correlation).

6. Supervision takes the form of problem-solving in work groups. (This was a negative correlation).

When all other variables were taken into account, there were eight supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of the degree of overall satisfaction with supervision. These were:

1. During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed. (This was a negative correlation).

2. During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information. (This was a positive correlation, and was explained in terms of the fact that the majority of teachers actually have never experienced this supervisory practice).

3. My supervisor shows a real concern for me as a person. (This was a negative correlation).

4. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons. (This was a positive correlation).

5. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues. (This was a negative correlation).

6. During each school term, my supervisor expects me to use self-evaluation techniques. (This was a negative correlation).

7. My supervisor facilitates communication between myself and other teachers. (This was a negative

correlation).

8. During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process. (This was a negative correlation).

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

Sergiovanni (1977) indicated that two of the major purposes of teacher supervision are to promote the professional growth of teachers and to improve student learning. Other literature published since 1970 in the area of supervision has recommended particular supervisory techniques and practices as being highly effective in improving the teaching-learning process.

Research findings, however, suggested that the improvement of this process was dependent upon teacher attitudes toward supervision. Unless teachers were satisfied with the supervision they received, it would not have the desired effects of promoting professional growth and improving student learning.

Therefore the problem of this study was: (1) to determine the degree of agreement between teacher perceptions of actual and preferred supervisory behavior in Montana public schools during the 1978-1979 school year; and (2) to relate differences between actual and preferred supervisory behavior to the degree of teacher satisfaction

with supervision.

By helping supervisors to become aware of the kind of supervision teachers would prefer, it was hoped that this study would contribute to better supervision as well as greater teacher satisfaction in Montana schools.

The study began with an extensive review of the literature related to supervision and job satisfaction. Based on this review, a questionnaire was developed by the researcher.

To measure teacher perceptions of actual and preferred supervisory behavior, a number of supervisory practices that were recommended in the literature since 1970 became items for this part of the questionnaire. Teachers were then asked how often they actually experienced these supervisory practices, and how often they would prefer to experience these practices.

To measure the degree of teacher satisfaction with supervision, ten indices were taken from the literature on job satisfaction as it related to supervision. These ten satisfaction indices became items for a second part of the questionnaire. On each of these ten indices, teachers were asked to indicate how satisfied they were with their current supervision.

A third part of the questionnaire asked for specific demographic information.

To ensure content validity, the preliminary draft of the instrument was submitted for review to Dr. Thomas J. Sergiovanni of the University of Illinois at Urbana-Champaign, Dr. Robert Bryce of the University of Alberta in Edmonton, Dr. Robert Van Woert of Montana State University, and Dr. Milton Negus, Superintendent of Bozeman Public Schools.

Next, a pilot study was conducted to determine the test-retest reliability. The same questionnaire was administered on two different occasions to the members of Dr. Leroy Casagrande's graduate class in General School Curriculum during Fall quarter, 1978. There was a four-week interval between administrations of the questionnaire. Only those items with a reliability co-efficient equal to or greater than .85 were included in the final instrument.

Personnel at the Office of Public Instruction in Helena provided the researcher with access to the lists containing the names and school addresses of all the public school teachers in Montana for the 1978-1979 school year.

The final instrument was mailed to a systematic random sample of three hundred and seventy Montana public school teachers on February 20, 1979. A follow-up reminder was sent to all non-respondents on March 6, 1979.

By April 3, 1979, the researcher had received three hundred and five completed questionnaires, and these constituted the data base for this study.

Dr. Albert Suvak programmed and supervised the data analyses which were run at the Montana State University Computer Center.

Statistical procedures used to analyse the data were chi square tests of independence, sign tests for correlated samples, and multiple regression analyses.

After analysis, the data were summarized and presented in tabular form. Statistical hypotheses, stated in the null form, were tested at the .05 level of significance against non-directional alternative hypotheses.

As a result of the chi square tests of independence, fifteen null hypotheses were rejected, indicating that responses to particular items were dependent either on sex, or teaching level, or years of teaching experience. Significant findings were:

Dependent on sex:

1. Men indicated a greater preference to have their supervisors available to see them whenever they need help or advice.

2. With men, supervisors actually seemed more inclined to use group methods of supervision.

3. There was greater variability among women concerning the degree to which supervision promotes professional growth.

Dependent on teaching level:

1. The higher the teaching level, the greater the teacher preference to have supervisors provide them with a written summary of each observation visit.

2. The higher the teaching level, the less inclined supervisors actually were to provide teachers with the opportunity to watch demonstration lessons.

3. The higher the teaching level, the less inclined supervisors actually were to bring new developments in education to the attention of their teachers.

4. Elementary supervisors actually seemed more inclined to help teachers plan units and lessons.

5. Elementary supervisors actually seemed less inclined to provide teachers with a written summary of each observation visit.

6. Elementary supervisors actually seemed more inclined to provide inservice education designed specifically to help their teachers to teach more effectively.

7. Junior high teachers showed less preference for inservice education designed specifically to help them teach more effectively.

8. Junior high teachers showed less preference to have their supervisors bring new developments in education to their attention.

9. Senior high supervisors actually seemed less inclined to help teachers better understand the students they teach.

10. Senior high supervisors actually seemed less inclined to allow teachers to participate in the evaluation of current curriculum packages and materials that are available.

Dependent on years of teaching experience:

1. Beginning teachers indicated a greater preference to have their supervisors help them to better understand

the students they teach.

2. Experienced teachers showed a greater preference for discussion with their supervisor to be a mutual exchange of ideas and information between colleagues.

As a result of the sign tests, the null hypothesis was rejected for all thirty-one items of supervisory behavior. This indicated that many teachers would prefer to experience a significantly higher level than they actually were experiencing of all thirty-one supervisory practices.

The number of teachers who would prefer to experience particular supervisory practices more often ranged from 102 (33%) for item 3 to 232 (76%) for item 16. The mean number of teachers who would prefer to experience particular supervisory practices more often was 157 (52%).

Consequently this study has confirmed that those supervisory practices recommended in the literature since 1970 were really those practices that a great number of Montana teachers would like to experience more often.

As a result of the multiple regression analyses, ten null hypotheses were rejected. This indicated that each of the ten indices of satisfaction with supervision

related significantly to the absolute values of the difference between actual score and preferred score for all thirty-one supervisory practices taken collectively.

Moreover, the  $t$  value associated with  $b$  for each independent variable in the multiple regressions indicated specific supervisory practices that were making a significant, unique contribution to the prediction of each one of the satisfaction indices.

In other words, when all other variables were taken into account, there were particular supervisory practices for which the absolute values of the difference between actual score and preferred score were significant predictors of each one of the satisfaction indices. These are listed below.

Supervisory practices that were significant predictors of the degree to which supervision helped improve student learning were:

1. The inservice education my supervisor provides is designed specifically to help me teach more effectively.

2. During each school term, my supervisor brings new developments in education to my attention.

Supervisory practices that were significant predictors of the degree to which supervision helped improve instruction were:

1. During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness.

2. My supervisor uses group methods of supervision.

3. My supervisor supports innovation.

Supervisory practices that were significant predictors of the degree to which supervision promoted professional development were:

1. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.

2. My supervisor uses group methods of supervision.

3. Supervision takes the form of problem-solving in work groups.

4. My supervisor supports innovation.

5. During each school term, my supervisor brings new developments in education to my attention.

Supervisory practices that were significant predictors of the degree to which supervision contributed to self-esteem were:

1. My supervisor shows a real concern for me as a person.
2. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.
3. My supervisor supports innovation.

Supervisory practices that were significant predictors of the degree to which the supervisor helped establish a supportive staff interaction were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities.
2. After each observation visit, my supervisor provides me with feedback in a supportive way.
3. My supervisor shows a real concern for me as a person.
4. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.
5. The inservice education my supervisor provides is designed specifically to help me teach more effectively.
6. My supervisor facilitates communication between myself and other teachers.

Supervisory practices that were significant

predictors of the degree to which the supervisor enabled the teacher to participate in significant decision-making were:

1. During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs.

2. My supervisor facilitates communication between myself and other teachers.

Supervisory practices that were significant predictors of the degree to which supervisors gave teachers due recognition for their efforts were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities.

2. My supervisor shows a real concern for me as a person.

3. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.

4. My supervisor supports innovation.

Supervisory practices that were significant predictors of the degree to which the supervisor allowed the teacher to influence the supervisory process were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities.

2. My supervisor shows a real concern for me as a person.

3. The inservice education my supervisor provides is designed specifically to help me teach more effectively.

4. During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs.

5. My supervisor uses group methods of supervision.

Supervisory practices that were significant predictors of the degree to which the supervisor established a supervisory climate characterized by trust, respect, and warmth were:

1. During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed.

2. My supervisor shows a real concern for me as a person.

3. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons.

4. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.

5. The inservice education my supervisor provides is designed specifically to help me teach more effectively.

6. Supervision takes the form of problem-solving in work groups.

Supervisory practices that were significant predictors of the degree of overall satisfaction with supervision were:

1. During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed.

2. During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information.

3. My supervisor shows a real concern for me as a person.

4. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons.

5. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.

6. During each school term, my supervisor expects me to use self-evaluation techniques.

7. My supervisor facilitates communication between myself and other teachers.

8. During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process.

### Conclusions

The findings of this study have made possible the following conclusions:

First, satisfaction with supervision may legitimately be conceptualized as one element of (but distinct from) job satisfaction. Like job satisfaction, it relates to the perceived difference between an individual expectation and what is actually experienced; or, as defined in this study, the perceived difference between the kind of supervision one would prefer and the supervision one actually experiences.

Second, a great many Montana teachers (ranging from 33% to 76% in this study) would prefer to experience more often all thirty-one of the supervisory practices recommended in the literature since 1970.

Third, there were very few differences in response

according to sex, teaching level, and years of teaching experience. Since there were 216 chi square tests, it would be expected that, at the .05 level of significance, about eleven null hypotheses would be rejected by chance alone. It is quite conceivable that all fifteen significant findings may have been due to Type 1 error.

Fourth, the positive  $b$  obtained between satisfaction and discrepancy scores for three of the supervision items suggested that teachers who were already relatively satisfied were asking for the opportunity to experience more of these three supervisory practices:

1. During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information.

2. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons.

3. My supervisor uses group methods of supervision.

Fifth, the absolute values of discrepancy scores for seventeen of the thirty-one recommended supervisory practices were found to be significant predictors of one or more of the satisfaction indices. These seventeen

supervisory practices and their related satisfaction indices were:

1. At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities.

This supervisory behavior was a significant predictor of staff support, recognition for effort, and influence over supervision.

At least occasionally, many teachers (75% according to table 8) expect a written statement defining their job and detailing their responsibilities. Presumably a written job description would clarify a teacher's rights, duties, and responsibilities, and help avoid subsequent misunderstandings and duplication of effort.

2. During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed.

This supervisory behavior was a significant predictor of supervisory climate, and overall satisfaction.

At least occasionally, many teachers (64% according to table 12) want to use a pre-observation conference to reach agreement with their supervisor upon the objectives for lessons to be observed. Criteria for appraisal

must be agreed to and clearly understood by the teacher.

3. During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information.

This supervisory behavior was a significant predictor of overall satisfaction.

At least occasionally, many teachers (67% according to table 13) want to use a pre-observation conference to discuss with their supervisors how and what evaluation data should be collected. Seventy-five percent actually have never been given this opportunity. Methods of appraisal must be agreed to and clearly understood by the teacher.

4. After each observation visit, my supervisor provides me with feedback in a supportive way.

This supervisory behavior was a significant predictor of staff support.

At least occasionally, nearly all teachers (96% according to table 17) want their supervisors to provide them with feedback in a supportive way.

5. My supervisor shows a real concern for me as a person.

This supervisory behavior was a significant predictor of self-esteem, staff support, recognition for effort, influence over supervision, supervisory climate, and overall satisfaction.

At least occasionally, nearly all teachers (99% according to table 19) want their supervisors to show a real concern for them as a person. This is one of the two most consistent predictors of teacher satisfaction.

6. During each school term, my supervisor provides me with the opportunity to watch demonstration lessons.

This supervisory behavior was a significant predictor of supervisory climate, and overall satisfaction.

At least occasionally, most teachers (84% according to table 22) want to be given the opportunity to watch demonstration lessons. Sixty-one percent actually have never been given this opportunity.

7. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.

This supervisory behavior was a significant predictor of professional development, self-esteem, staff support, recognition for effort, supervisory climate, and overall satisfaction.

At least occasionally, nearly all teachers (99%

according to table 24) want discussion with their supervisors to be a mutual exchange of ideas and information between colleagues. This is one of the two most consistent predictors of teacher satisfaction.

8. During each school term, my supervisor expects me to use self-evaluation techniques.

This supervisory behavior was a significant predictor of overall satisfaction.

At least occasionally, nearly all teachers (94% according to table 27) expect to be required to use self-evaluation techniques. This suggests that, for many teachers, self-evaluation could eventually become the primary means of effecting improved teaching performance.

9. During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness.

This supervisory behavior was a significant predictor of instructional improvement.

At least occasionally, most teachers (89% according to table 28) want their supervisors to help them to set job targets aimed at improving their teaching effectiveness.

10. The inservice education my supervisor provides is designed specifically to help me teach more effectively.

This supervisory behavior was a significant predictor of student learning, staff support, influence over supervision, and supervisory climate.

At least occasionally, nearly all teachers (96% according to table 29) want inservice education designed specifically to help them teach more effectively.

11. During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs.

This supervisory behavior was a significant predictor of decisional participation, and influence over supervision.

At least occasionally, nearly all teachers (97% according to table 32) want to participate in curriculum revision. This suggests that the supervisor had better know something about curriculum development.

12. My supervisor uses group methods of supervision.

This supervisory behavior was a significant predictor of instructional improvement, professional development, and influence over supervision.

At least occasionally, many teachers (54% according to table 33) would like their supervisors to use group methods of supervision. Sixty-four percent actually have never been given this opportunity.

A supervisory group might consist of, for example, the principal, the department head, and one or more colleagues skilled in the teacher's specialty. The interaction between peers should be particularly relevant to instructional improvement. Moreover, the group would be capable of providing the teacher with both psychological and technical support.

13. Supervision takes the form of problem-solving in work groups.

This supervisory behavior was a significant predictor of professional development, and supervisory climate.

At least occasionally, many teachers (65% according to table 34) would like supervision to take the form of problem-solving in work groups.

14. My supervisor facilitates communication between myself and other teachers.

This supervisory behavior was a significant

predictor of staff support, decisional participation, and overall satisfaction.

At least occasionally, nearly all teachers (92% according to table 35) want their supervisors to facilitate communication between themselves and other teachers.

15. My supervisor supports innovation.

This supervisory behavior was a significant predictor of instructional improvement, professional development, self-esteem, and recognition for effort.

At least occasionally, nearly all teachers (99% according to table 36) expect their supervisors to support innovation.

16. During each school term, my supervisor brings new developments in education to my attention.

This supervisory behavior was a significant predictor of student learning, and professional development.

At least occasionally, nearly all teachers (95% according to table 37) expect their supervisors to bring new developments in education to their attention.

17. During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process.

This supervisory behavior was a significant predictor of overall satisfaction.

At least occasionally, nearly all teachers (93% according to table 38) want the opportunity to give feedback to their supervisors on the effectiveness of supervision.

Sixth, it appears that the nature of the supervisory relationship may be more important than specific supervisory techniques. The two most consistent predictors of the different satisfaction indices, including overall satisfaction, were:

1. My supervisor shows a real concern for me as a person.
  2. Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.
- This suggests, firstly, that teachers expect a genuine, caring, empathic relationship with their supervisor; and, secondly, that teachers have the professional expectation that this relationship will be collegial rather than authoritarian.

Seventh, the frequency of evaluation visits was generally low. Table 7 indicates that 27% of the teachers had no evaluation visit at all during the current school year;

an additional 35% had one visit only; consequently, only 38% had two or more evaluation visits. This suggests that, in practice, supervision and evaluation of teaching do not appear to take first priority with the supervisors in Montana public schools.

Eighth, the findings of this study lend strong support to the theory of supervision presented in the review of literature, and confirm the validity of the recommended supervisory practices, especially those derived from the writings of Thomas J. Sergiovanni and his associates.

Finally, it can be concluded that Montana superintendents, principals, and other supervisors could use the instrument developed for this study, Supervisory Behavior and Teacher Satisfaction, to ascertain teacher attitudes toward supervision in their particular school or school district. This would enable them to improve their supervisory behavior, and thereby increase the degree of teacher satisfaction. Consequently, this study should lead to the establishment of more effective supervisory programs in the schools.

## Recommendations

1. Supervisors in Montana should become more aware both of the theory and of the recommended supervisory practices to be found in the literature on supervision that is cited in this study.

2. Supervisors in Montana should be made aware of the importance of perception in the administrative and supervisory processes. They need to realize that responses both in themselves and in teachers are a function of perceptions. This should better enable them to understand individual differences in teacher perceptions.

3. Administrators of school districts in Montana should use survey feedback techniques to determine their teachers' perceptions. This would enable them to provide other supervisory personnel with information related to the effectiveness of the supervision in their schools.

4. Supervisors should be made aware that teachers want to be treated both as professionals and as colleagues. They need to understand that few professionals prefer a management hierarchy based primarily on authority relationships.

5. Supervisors should be made aware of the importance of establishing a supervisory relationship characterized by concern for each teacher as a person.

6. Because supervision is essentially a helping relationship with teachers, graduate students in Educational Administration should be required to take course work that will enable them to become more effective helping professionals.

7. Individuals concerned with the development of training and in-service programs for educational administrators in Montana should do their best to ensure that present and potential supervisors are made aware of the teacher preferences for supervision expressed in this study. They should highlight those aspects of supervision that contribute most to teacher satisfaction.

8. Supervisors in Montana should pay careful attention to the major preferences expressed by Montana teachers in this study. In particular, they should focus on those supervisory behaviors that were significant predictors of one or more of the teacher satisfaction indices.

9. Because this was essentially an exploratory study, other studies should be conducted to further refine the

prediction of teacher satisfaction from supervisory behavior. For example:

(a) Replication might focus just on one school, on one school district, or on one teaching level. This should make it possible to further refine the predictive models, and give them greater practical utility.

(b) The study might be replicated in a state other than Montana, allowing comparisons to be made.

(c) In addition to full regression models, a variety of restricted models might be run, and the best predictive models could be cross-validated.

(d) Although this study revealed few differences in response according to sex, teaching level, and years of teaching experience, specific regression models could be run within each category. By this means it would be possible to determine if the significant predictors of satisfaction varied according to sex, or teaching level, or years of teaching experience.

(e) Other demographic variables that might be included for consideration are: school size; school district size; sex of the supervisor; years of supervisory experience; and teacher personality characteristics (self-image,

primary life interests, and so on).

(f) Factor analysis of the data could lead to the development of important constructs in the area of supervision.

10. In the light of the generally low frequency of classroom evaluation visits, serious consideration should be given in school districts to developing a prioritized list of the functions required of a supervisor. It seems that supervisors should be encouraged (and enabled) to spend more time involved in the formative evaluation of teaching than is presently the case.

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APPENDICES

## APPENDIX A

Dear

The enclosed questionnaire is part of a state-wide study to determine the attitudes of Montana teachers toward supervision.

Recent literature in the area of supervision recommends certain supervisory techniques and practices as being highly effective in improving the teaching-learning process. However, unless teachers are happy with the supervision they receive, supervision may not have the desired effects of promoting professional growth and improving student learning. Consequently, the hope is that this study will lead to better supervision in Montana, by enabling supervisors to become aware of teacher attitudes toward supervision.

I realize the demands made upon your time. Yet I would greatly appreciate it if you could complete and return the questionnaire in the stamped, self-addressed envelope provided. It should take no more than twenty minutes.

Your replies will be held in the strictest confidence. All responses will be reported in group statistics only; neither individuals nor specific schools will be identified.

The number appearing in the upper right hand corner of the instrument will be used only for follow-up purposes if this becomes necessary.

The results of the survey will be greatly enhanced by having a large percentage of the questionnaires returned. Since you have been selected as one member of the representative sample of Montana teachers, it will be greatly appreciated if you can return the questionnaire as soon as possible.

Yours sincerely,

Ken P. Fraser

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APPENDIX B

SUPERVISORY BEHAVIOR  
AND  
TEACHER SATISFACTION

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Department of Educational Services  
Faculty of Education  
Montana State University

## SUPERVISORY BEHAVIOR AND TEACHER SATISFACTION

## SECTION A

## PERSONAL DATA

Please write the number of the appropriate response in the parentheses provided.

1. Sex  
(1) Male  
(2) Female ( )
2. Main teaching level  
(1) Grades K - 6  
(2) Grades 7 - 9  
(3) Grades 10 - 12  
(4) Other (describe): ( )
3. Years of teaching experience (count the present year as a full year)  
(1) 1 to 3 years (4) 10 to 12 years  
(2) 4 to 6 years (5) 13 to 15 years  
(3) 7 to 9 years (6) 16 years and over ( )
4. Whom do you regard as your primary supervisor?  
(1) Principal  
(2) Assistant Principal  
(3) Department Head  
(4) Other (describe): ( )
5. Do you have more than one supervisor?  
(1) No  
(2) Yes (describe): ( )

6. How frequently have you had a classroom evaluation visit by your primary supervisor during this current school year?

- (1) Never
- (2) Once
- (3) 2 or 3 times
- (4) 4 or 5 times
- (5) 6 or 7 times
- (6) 8 or more times

SUPERVISORY BEHAVIOR

Answer the remainder of the questionnaire with regard to your primary supervisor only.

In order to establish a common basis for analysis of responses, consider the school year as two terms: the first term is from the opening of school through to the end of January; the second term is from February through to the summer holidays.

As part of the process of supervision, how often does your supervisor actually use each of the following supervisory practices?

Also, how often would you prefer your supervisor to use each practice?

Circle the appropriate response in both the actual and preferred columns using the following five-point scale:

Never	Seldom	Occasionally	Often	Always
1	2	3	4	5

ACTUAL USE

PREFERRED USE

- |           |    |   |           |
|-----------|----|---|-----------|
| 1 2 3 4 5 | 1. | At the beginning of each school term, my supervisor provides me with a written statement defining my job and detailing my responsibilities. | 1 2 3 4 5 |
| 1 2 3 4 5 | 2. | My supervisor helps me to plan units and lessons.   | 1 2 3 4 5 |

Never 1      Seldom 2      Occasionally 3      Often 4      Always 5

ACTUAL USEPREFERRED USE

- |           |   |           |
|-----------|---|-----------|
| 1 2 3 4 5 | 3. My supervisor states that he expects me to achieve a high level of teaching competence.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 4. My supervisor holds a pre-observation conference with me prior to any evaluation visit.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 5. During the pre-observation conference, my supervisor and I agree upon objectives for the lesson to be observed.                | 1 2 3 4 5 |
| 1 2 3 4 5 | 6. During the pre-observation conference, my supervisor and I discuss the methods to be used to gather information.               | 1 2 3 4 5 |
| 1 2 3 4 5 | 7. My supervisor spends sufficient time observing me to secure a valid and reliable sample of my teaching behavior.               | 1 2 3 4 5 |
| 1 2 3 4 5 | 8. As part of the process of supervision, my supervisor helps me to better understand the students I teach.                       | 1 2 3 4 5 |
| 1 2 3 4 5 | 9. My supervisor holds a post-observation conference with me to give me feedback as soon as possible after any observation visit. | 1 2 3 4 5 |
| 1 2 3 4 5 | 10. After each observation visit, my supervisor provides me with feedback in a supportive way.                                    | 1 2 3 4 5 |

Never                      Seldom                      Occasionally                      Often                      Always  
 1                                      2                                      3                                      4                                      5

ACTUAL USEPREFERRED USE

- |           |     |   |           |
|-----------|-----|---|-----------|
| 1 2 3 4 5 | 11. | My supervisor provides me with a written summary of each observation visit.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 12. | My supervisor shows a real concern for me as a person.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 13. | My supervisor is available to see me whenever I need help or advice.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 14. | As part of the process of supervision, my supervisor facilitates my work as a teacher.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 15. | During each school term, my supervisor provides me with the opportunity to watch demonstration lessons.                                 | 1 2 3 4 5 |
| 1 2 3 4 5 | 16. | During each school term, my supervisor provides me with the opportunity to visit the classrooms of other teachers in different schools. | 1 2 3 4 5 |
| 1 2 3 4 5 | 17. | Discussion with my supervisor is a mutual exchange of ideas and information between colleagues.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 18. | I am free to modify my supervisor's suggestions at my discretion.   | 1 2 3 4 5 |

Never	Seldom	Occasionally	Often	Always
1	2	3	4	5

ACTUAL USEPREFERRED USE

- |           |     |  |           |
|-----------|-----|--|-----------|
| 1 2 3 4 5 | 19. | Following each observation visit, my supervisor helps me to understand those teaching behaviors which seem inconsistent with my stated objectives. | 1 2 3 4 5 |
| 1 2 3 4 5 | 20. | During each school term, my supervisor expects me to use self-evaluation techniques.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 21. | During each school term, my supervisor helps me to set job targets aimed at improving my teaching effectiveness.                                   | 1 2 3 4 5 |
| 1 2 3 4 5 | 22. | The inservice education my supervisor provides is designed specifically to help me teach more effectively.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 23. | During each school term, my supervisor suggests that I should pursue further academic and professional training.                                   | 1 2 3 4 5 |
| 1 2 3 4 5 | 24. | During each school term, my supervisor allows me to participate in the evaluation of current curriculum packages and materials that are available. | 1 2 3 4 5 |
| 1 2 3 4 5 | 25. | During each school term, my supervisor makes it possible for me to participate in the revision of curriculum programs.                             | 1 2 3 4 5 |

Never                      Seldom                      Occasionally                      Often                      Always  
 1                                      2                                      3                                      4                                      5

ACTUAL USEPREFERRED USE

- |           |     |  |           |
|-----------|-----|--|-----------|
| 1 2 3 4 5 | 26. | My supervisor uses group methods of supervision.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 27. | Supervision takes the form of problem-solving in work groups.  | 1 2 3 4 5 |
| 1 2 3 4 5 | 28. | My supervisor facilitates communication between myself and other teachers.                                       | 1 2 3 4 5 |
| 1 2 3 4 5 | 29. | My supervisor supports innovation.   | 1 2 3 4 5 |
| 1 2 3 4 5 | 30. | During each school term, my supervisor brings new developments in education to my attention.                     | 1 2 3 4 5 |
| 1 2 3 4 5 | 31. | During each school term, my supervisor expects feedback from me on the effectiveness of the supervisory process. | 1 2 3 4 5 |

## SECTION C

## SATISFACTION WITH SUPERVISION

Circle the appropriate response for each item, indicating how satisfied you are with your current supervision, using the following seven-point scale:

None	Very Little	Little	Some	Great	Very Great	Complete
1	2	3	4	5	6	7

1. Degree to which supervision helps improve student learning.      1 2 3 4 5 6 7

None	Very Little	Little	Some	Great	Very Great	Complete					
1	2	3	4	5	6	7					
2.	Degree to which supervision helps improve instruction.				1	2	3	4	5	6	7
3.	Degree to which supervision promotes my professional development.				1	2	3	4	5	6	7
4.	Degree to which supervision contributes to my self-esteem.				1	2	3	4	5	6	7
5.	Degree to which my supervisor helps establish a supportive staff interaction.				1	2	3	4	5	6	7
6.	Degree to which my supervisor enables me to participate in significant decision-making.				1	2	3	4	5	6	7
7.	Degree to which my supervisor gives me due recognition for my efforts.				1	2	3	4	5	6	7
8.	Degree to which my supervisor allows me to influence the supervisory process.				1	2	3	4	5	6	7
9.	Degree to which my supervisor establishes a supervisory climate characterized by trust, respect, and warmth.				1	2	3	4	5	6	7
10.	Degree of overall satisfaction with supervision.				1	2	3	4	5	6	7

## APPENDIX C

Dear

This is just a note to remind you that you have been selected to participate in a state-wide study to determine the kind of supervision that Montana teachers would prefer.

While we are very pleased with the number of early responses, we still need a greater number of returns for the study to be considered both valid and reliable. Please do not underestimate the importance of your return. We need your assistance in this project.

If you have misplaced the original instrument, please let me know and I will send you an additional copy immediately.

Recommendations from this study will be used in the development of training and in-service programs for educational administrators in Montana. Those aspects of supervision that contribute to teacher satisfaction will be highlighted.

Please take a few minutes to complete the questionnaire and return it as soon as possible. Thank you for your cooperation in this study.

Yours sincerely,

Ken P. Fraser

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