

A Q STUDY OF THREE TEACHER PERCEPTIONS:
SELF, EFFECTIVE TEACHERS AND
MERIT-PAY RECIPIENTS

By

L. SUE HOEVELMAN

Bachelor of Science
Oklahoma State University
Stillwater, Oklahoma
1962

Master of Teaching Arts
University of Tulsa
Tulsa, Oklahoma
1968

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
December, 1984

Thesis
1984D
H695g
cop. 2



A Q STUDY OF THREE TEACHER PERCEPTIONS:
SELF, EFFECTIVE TEACHERS AND
MERIT-PAY RECIPIENTS

Thesis Approved:

Kenneth H. Clai

Thesis Adviser

Kenneth H. McKinley

Jerry R. Hill

William E. Segall

Norman D. Durham

Dean of the Graduate College

ACKNOWLEDGEMENTS

I sincerely appreciate the support and advisement of my committee members: Dr. Kenneth St. Clair for his wise counsel and unending patience; Dr. William Segal for his philosophical direction; Dr. Larry Gill for his practical concerns; and Dr. Kenneth McKinley for his statistical guidance.

I am indebted to the Q network throughout the United States for the many shared communiques--calls, letters, articles, software--that made this study possible. Especially helpful to me were the guidance of Dr. Diane Montgomery and the Q expertise of Dr. Norman Van Turbergen, of the University of Kentucky.

Among those researchers whose work has been invaluable to me are Dr. Richard P. Manatt, of Iowa State University, for sharing his prepublication School Improvement Model material and Dr. Sid Pruitt of Alvarado, Texas. Without the cooperation of the participating teachers, this study could not have occurred.

Without the encouragement of friends, relatives and colleagues, the preparation of this paper would have been less rewarding and more burdensome. I thank my husband, Ralph, for unselfishly allowing one of my goals to dominate a year of our lives.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of Problem	5
Significance of Study	8
Rationale	9
Definition of Terms	10
Self	10
Effective Teachers	10
Merit Pay	11
Summary	12
II. REVIEW OF LITERATURE	14
Self Concept	14
Autonomy	15
Motivation	16
Discrepancy	17
Dissonance	18
Behavior Change	20
Perception of Others	21
Summary	22
Effective Teachers	23
History of Research	23
Measurement Of	26
Characteristics Of	27
Teachers' Perceptions	32
Summary	33
Merit Pay Programs	33
Background	33
Other Areas	35
Rationale	38
Characteristics Of	42
Evaluation	43
Summary	46
Q Methodology	47
Summary	48
III. METHOD AND PROCEDURES	49
Design of Study	50
Statement Collection	51
Subject Selection	55
Administration of Q-Sort	61

Chapter	Page
Construction of Q-Sort	62
Data Analysis	65
IV. ANALYSIS OF DATA AND RESULTS	67
Analysis of Condition One Statistics	69
Analysis of Condition One Factor Scores	74
Condition One: Factor One	74
Condition One: Factor Two	75
Condition One: Factor Three	76
Analysis of Condition Two Statistics	77
Analysis of Condition Two Factor Scores	80
Condition Two: Factor One	82
Condition Two: Factor Two	83
Condition Two: Factor Three	84
Analysis of Condition Three Statistics	85
Analysis of Condition Three Factor Scores	89
Condition Three: Factor One	89
Condition Three: Factor Two	90
Consensus and Discrepancy	91
V. SUMMARY AND CONCLUSIONS	94
Factors	94
Condition One	94
Condition Two	95
Condition Three	96
Research Questions	97
Limitations	103
Recommendations	104
Discussion	104
BIBLIOGRAPHY	109
APPENDIX A - Letters	122
APPENDIX B - QUANAL Computations	125

LIST OF TABLES

Table	Page
I. Q Methodology as a Theoretical Framework of Study	52
II. Balanced Design of Q Statements	53
III. Source of Q Statements	55
IV. Statement for Q-Sort	56
V. P-Set Structure for Q Study	59
VI. Condition One: Variable Assignments with Factor Weights	70
VII. Condition One: Loadings by Demographic Percentages	73
VIII. Condition One: Correlations Between Factors . .	73
IX. Condition Two: Variable Assignment with Factor Weights	78
X. Condition Two: Loadings by Demographic Percentages	81
XI. Condition Two: Correlations Between Factors . .	81
XII. Condition Three: Variable Assignment with Factor Weights	86
XIII. Condition Three: Loadings by Demographic Percentages	88
XIV. Condition Three: Correlations Between Factors .	89
XV. Teacher Types as Revealed in Q-Sorts	95
XVI. Items Found in High Positive Z-Scores	101
XVII. Items Found in High Negative Z- Scores	102
XVIII. Condition One: Principal Axis (Components) Factor Matrix	126

Table	Page
XIX. Condition One: Simple Structure Matrix	129
XX. Condition One: Re-Ordered Factor Matrix	132
XXI. Condition One: Typal Z-Scores	134
XXII. Condition One: Descending Arrays, Factor One . . .	135
XXIII. Condition One: Descending Arrays, Factor Two . . .	136
XXIV. Condition One: Descending Arrays, Factor Three . .	137
XXV. Item Descriptions and Descending Array of Differences Between Types 1 and 2	138
XXVI. Condition One: Descending Array of Differences, One/Three	140
XXVII. Condition One: Descending Array of Differences, Two/Three	142
XXVIII. Condition One: Typal Z Differences, Factor One . .	144
XXIX. Condition One: Typal Z Differences, Factor One . .	145
XXX. Condition One: Typal Z Differences, Factor Two . .	146
XXXI. Condition One: Typal Z Differences, Factor Two . .	147
XXXII. Condition One: Typal Z Differences, Factor Three .	148
XXXIII. Condition One: Typal Z Differences, Factor Three .	149
XXXIV. Condition One: Consensus Items	150
XXXV. Condition Two: Principal Axis (Components) Factor Matrix	151
XXXVI. Condition Two: Primary Pattern Matrix	154
XXXVII. Condition Two: Simple Structure Matrix	157
XXXVIII. Condition Two: Re-Ordered Factor Matrix	160
XXXIX. Condition Two: Typal Z-Scores	162
XXXX. Condition Two: Descending Array, Factor One . . .	164
XXXXI. Condition Two: Descending Array, Factor Two . . .	166
XXXXII. Condition Two: Descending Array, Factor Three . .	167

Table	Page
XXXXIII. Condition Two: Descending Array of Differences, One/Two	168
XXXXIV. Condition Two: Descending Array of Differences, One/Three	170
XXXXV. Condition Two: Descending Array of Differences, Two/Three	172
XXXXVI. Condition Two: Typal Z Differences, Factor Two . .	174
XXXXVII. Condition Two: Typal Z Differences, Factor One . .	75
XXXXVIII. Condition Two: Typal Z Differences, Factor Two . .	176
XXXXIX. Condition Two: Typal Z Differences, Factor Two . .	177
L. Condition Two: Typal Z Differences, Factor Three .	178
LI. Condition Two: Typal Z Differences, Factor Three .	179
LII. Condition Two: Consensus Items	180
LIII. Condition Three: Principal Axis (Components) Factor Matrix	181
LIV. Condition Three: Simple Structure Matrix	184
LV. Condition Three: Re-Ordered Factor Matrix	187
LVI. Condition Three: Typal Z-Scores	189
LVII. Condition Three: Descending Arrays, Factor One . .	190
LVIII. Condition Three: Descending Arrays, Factor Two . .	191
LIX. Condition One: Descending Array of Differences, Two/Three	192
LX. Condition Three: Consensus Items	194

LIST OF FIGURES

Figure	Page
1. Teachers' Perceptions	7
2. Q-Sort Form Board	62
3. Distribution of Q-sort Compared to Normal Distribution . .	64

CHAPTER I

INTRODUCTION

Evaluation of teachers has been going on since man first tried to communicate information to his fellowman. Its rewards are well documented in the Talmud and the Apology--some teachers are esteemed while others are persecuted. What creates that difference in the reception of the teaching act--the sender or the receiver--is of interest to all involved--the teacher, the student, the administrator, the parent and the outsider. Quality education is of so much interest in America, in fact, that over forty reports were released in 1983 studying or making recommendations regarding what happens inside schools. Three of the well-known investigations recommend merit pay for better work in their attempts to convey the importance of education. The National Commission on Excellence in Education (1983) calls it "performance-based pay;" the Task Force on Education for Economic Growth (Education Commission of the States, 1983), "extra-ordinary rewards;" and the Council for Basic Education (Uzell, 1983), "more pay." All three also include evaluation procedures which are subjective ratings to determine, respectively, "superior," "extraordinary," and "more competent" teachers. Regardless of the terms, the intent is the same: to recognize those teachers whose students produce greater learning gains.

The Carnegie Foundation for the Advancement of Teaching reported that the percentage of public school expenditures for teaching has

dropped from 49 percent to 41 percent in the last ten years and that, while education expenditures have risen, the proportion allocated to teachers' salaries has fallen (Merit Pay Task Force Report, 1983).

Merit-pay programs become important, then, since in many school districts fewer dollars are available to produce the greater results expected by the public. Boards of education, charged with the education of every child within their districts, are concerned with ways to improve the quality of instruction with the same or less revenue, and professional salaries do comprise the largest single item in a district's budget, from seventy to eighty-five percent of the total operating expenditures. Every state, too, is concerned since, on the average, forty-nine percent of a school's education budget comes from the state (Ranbom, 1983).

Lower teachers' salaries mean less holding power for education. The NEA recommended in May, 1983, that entry-level salaries for all teachers be at least equivalent to those of accountants and engineers--\$17,000 to \$22,000 ("The Government Union Critique," 1983). That contrasted to the average entry-level teacher's salary of \$13,000 reveals why many capable graduates enter areas other than teaching. Businesses needing mathematics and science majors have been especially aggressive and successful in recruiting would-be educators. "How do you provide an incentive for attracting the best and the brightest into education?" President Reagan asked in a letter to Willard H. McGuire, national NEA president, in May, 1983, and answered his own question, "Merit pay" (Maeroff, 1983).

The third reason merit-pay programs are of interest and have been for some time is that employees expect to be rewarded for hard work

The Puritan work ethic is founded on the Calvinist views that one should work hard at his station in life and that hard work reaps rewards. To pay all teachers the same, regardless of their productivity, defies the performance concept that is intrinsic in the educational system: excellence is rewarded. Money, indeed, is not the only reward--recognition, flexible hours, additional training--are all incentives. But these, too, are lacking in the typical school.

The final and perhaps most important reason merit-pay programs must be studied once again is that the public--parents, businessmen, school people--see improved instruction as a must for America. Citing falling SAT scores, losing competitions with European countries, and poor quality of in-coming teachers, researchers, mediemen, and politicians have alarmed voters so much that 45 percent said they would pay higher taxes for merit-pay funding ("The Merits of Merit Pay," 1983). Implicit in the idea of merit pay is that the best teachers will be drawn to and stay in teaching and, consequently, students will learn more. A Gallup Poll regarding teacher pay reported in September, 1983, that 61 percent of the Americans surveyed were in favor of paying teachers on their quality of work; 31 percent favored the standard pay scale, 8 percent had no opinion. The Business Poll in September, 1983, of 108 top executives of Fortune 1300 companies found that 57 percent of the business leaders felt teachers should be paid for performance; 43 percent felt teachers should be paid for performance and length of service ("Business Favors Merit Pay," 1983)

In a survey conducted by the American Association of School Administrators, 80 percent of the school superintendents responding said they favor merit pay; 16.4 percent had been involved with a merit-pay

program; 6.7 percent knew of a successful one; and 23.4 percent of them had discussed merit pay with their school boards (Toch, 1983). That merit pay is also wanted by teachers was recently proved in a survey of 1,261 teachers. Sixty-two percent of those responding to a questionnaire from the American School Board Journal in May, 1983 (Rist), said they think merit pay is a "sound idea."

This "sound idea," however, has not been acceptable in application. Ruth Holmes, president of the Florida Teaching Profession, voiced the Florida teachers' concern about a plan based on student performance: "There are too many things we don't have control over as teachers, including parental support " (Walton, 1983).

Two superintendents responding to a survey from the present writer substantiate this rejection:

The plan failed after two years because . . . evaluators were too generous or reluctant to make the tough calls--and the teachers became increasingly uncomfortable with the administration having so much latitude under the plan in determining a teacher's finances." (Fiander, 1984)

The plan ran one year. It did not work at all. Teachers did not share. Hard to evaluate teachers. Some teachers thought weaker teachers received too much pay and others who should have received did not. It looked like a good idea on paper, but it failed." (Toeph, 1983)

According to Education Week of May 2, 1984 (Ranbom, 1984), twenty-four states and the District of Columbia are studying the idea, and six states already have some form of merit pay in action. Marshall Smith of the University of Wisconsin's Center for Education Research maintains such state-imposed merit-pay programs will not work because they rebuke the principle behind American education--that all children receive an equal opportunity. If some teachers are better than others, classroom opportunities are not equal. ("Front Lines," 1983). This is an

unwarranted fear, however, in the minds of some people because they feel the theory that learning gains will increase if students receive better instruction has not been substantiated by research. "No scientific identification of fruitful teaching behaviors can be made," said Macdonald and Clark (1976).

So, faced with the imminent need to design merit-pay programs, the lack of conclusive research regarding behaviors of effective teachers and the rejection by teachers of current merit-pay programs, educators are looking for additional information to formulate workable programs that will meet the requisites of teachers, paying them for that which they want to be paid, and of the public, improving the quality of education in America's schools.

Statement of the Problem

If the purpose of merit pay is to improve the quality of instruction, two bodies of information must be known and one process must occur. Research must determine 1) what teacher behaviors do facilitate student learning and 2) which of these behaviors do teachers see as important to be rewarded. Before merit-pay programs will be accepted by teachers they must agree upon the criteria used for merit-pay evaluation. The characteristics for which teachers are given merit pay, then, must be both teacher-determined and research-supported as those characteristics of effective teachers. Only one study could be found that asked the question. "For what do teachers want to receive merit pay?" The American School Board Journal (Rist, 1983) conducted a merit-pay survey nationally in May, 1983, because of a "glaring lack of information. Until now, no one we know of has asked teachers the simple question of

whether they think merit pay is a sound idea" (p.23). Using the definition of "a monetary stipend or salary increase paid for superior performance, as determined by a classroom performance evaluation" (p.23), Journal editors asked the teachers throughout the nation in May, 1983, three questions: 1) Do you agree or disagree that "Teachers who are more effective in the classroom should receive larger salary increases than teachers who are less effective?" 2) Who should evaluate teachers' classroom performance? and 3) How should teacher salary increases be determined? Of the 1,261 teachers responding to the survey, 62.7 percent agreed that "Teachers who are more effective in the classroom should receive larger salary increases than teachers who are less effective." Classroom performance and "more" and "less effective," however, are not defined in this study. Therefore, the questions remain: For what characteristics do teachers want merit pay? How are these characteristics associated by research with those of teachers whose students have learning gains?

This study, then, in an attempt to answer these questions has as a purpose the investigation of the relationships among three teacher perceptions of self, of the effective teacher and of the merit-pay recipient (See Figure I). Four specific questions to be addressed are

1. Can factors be identified that are descriptive of different types of teacher behaviors?
2. How do teachers' perceptions of effective teacher characteristics reflect those found in research?
3. What differences in perceptions can be distinguished between teachers regarding self, effective teachers, and merit-pay recipients as determined by
 - a. Level taught
 - b. Amount of experience
 - c. Gender
 - d. Locale of school?

4. What characteristics are common to teachers regarding their perceptions of
- Self
 - Effective teachers
 - Merit-pay recipients?

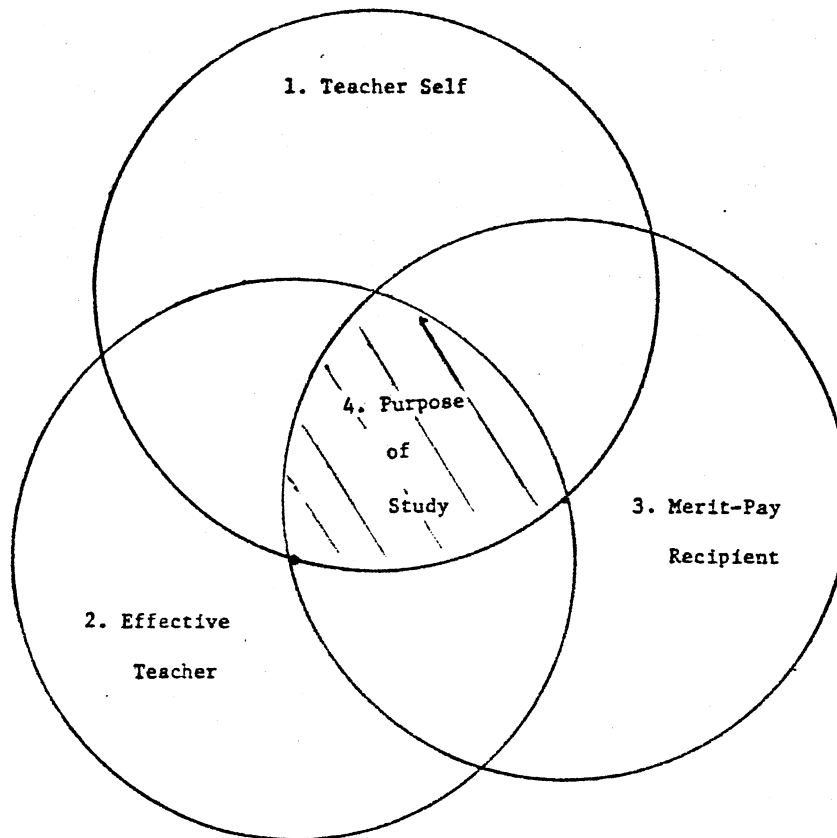


FIGURE 1. Teachers' Perceptions

Behaviors (4.) identified by teachers that reflect their self-perceptions (1.), those of effective teachers (2.), and those of merit-pay recipients (3.).

Significance of Study

Several current phenomena make timely a study of teachers' perceptions regarding merit pay. Many Americans--parents, politicians, newsmen, and some educators--believe that merit-pay programs will cause increased student learning by increasing teacher effectiveness through pay incentive. Consequently, states and school boards across the nation are either studying or implementing merit-pay programs. At the same time teachers' organizations are rejecting proposed merit-pay programs because 1) additional pay is needed for all teachers and 2) present evaluation criteria and procedures are unrelated to student learning and unfairly discriminate among teachers by reflecting variables other than teacher performance ("The Government Union Critique," 1983.)

Therefore, the results of an inquiry into the relationships of three teacher perceptions--self, effective teacher, and merit-pay recipient--may help those in positions of leadership in planning and implementing merit-pay programs. A lack of congruence between perceptions about effective teachers and merit-pay recipients may indicate that teachers favor "input" behaviors which include such activities as attending professional meetings, earning additional college hours and sponsoring activities. If that should be the finding in a district, perhaps a different kind of pay schedule would be more suitable for consideration. Also, a lack of congruence between the teacher-self-perception and effective-teacher-perception may indicate an area for supervision and/or professional development activities sponsored by a district desiring a merit-pay program based on improved student learning.

Rationale

Merit-pay programs are perceived by the public and educators as one solution to America's current problem of student learning gains lower than those in previous years, than those of competitor nations and than those Americans desire. Before merit pay can, if indeed it will, attract more capable people into education, retain existing high performing teachers or motivate mediocre teachers to improve their performances, today's teachers must accept at the local level merit-pay plans that include evaluation of those teacher behaviors that do create student learning gains.

One contention on which this study is based is that merit-pay programs must include evaluation of those characteristics which have empirical support as being those of teachers whose students have learning gains.

The second idea on which this study is based is that teachers must determine the characteristics for which they are evaluated for merit-pay purposes. They will not accept merit-pay programs that evaluate characteristics they themselves do not have or that are so subjectively measured that no definite criteria can be determined.

Many existing additional pay programs are called "merit pay" when in actuality they award pay for extra or different work, not better pay for better work. Determining those performance behaviors teachers perceive as common to themselves, to effective teachers and to merit-pay recipients will provide the criteria to be used as a foundation for evaluation in merit-pay programs. This study will provide one piece of information useful to states and local districts wanting merit-pay programs that reward teachers who have better teaching performances.

Definition of Terms

Self

Raimy (1943, n.p.) defines the self as ". . . what a person believes about himself, . . . the more or less organized perceptual object resulting from present and past self observation . . . the map which each person consults in order to understand himself, especially during moments of crisis or choice." For the purpose of this study, self will mean those beliefs one associates with his identity, character or essential qualities as a teacher apart from all others. These beliefs are those "general guiding self-views" Rosenberg (1979, p. 64) defines as the extant self, or, as in the present study, how the individual sees himself as a teacher.

Effective Teachers

Several variables influence the intensity and duration of a teacher's effectiveness. Teachers' job performances are not consistent from one year to the next and do not influence all students equally (Brophy, 1973). Effectiveness also varies in terms of subject content, grade level and types of students. A third problem is that extraneous influences of other agents--parents, peer groups, and media--cannot be measured and/or removed. Since terms such as competencies, characteristics, performances, behaviors, and effectiveness have been used with different meanings by researchers, establishing one set of behaviors with agreed-upon meanings is impossible. Behaviors and outcomes cannot be manipulated; therefore, to identify and separate the functional relationships between teacher behaviors and student achievement is an imposing task for researchers.

Distinction must be made among the three terms most often associated in research with behaviors of teachers--performance, competence, and effectiveness. Teacher performance refers to the behaviors of the teacher both inside and outside the classroom; it is defined in teacher behaviors. Teacher competence is defined in the knowledges, abilities and beliefs of a teacher. Teacher effectiveness is defined in student behaviors in relationship to classroom experiences. Both performance and effectiveness are products of interactions between the teacher and the teaching situation; therefore, they are unstable and inconsistent. Competence, however, is stable and consistent. Both performance and competence are bases from which effectiveness may be inferred.

For the purpose of this study behaviors of effective teachers will refer to those behaviors linked by research to the performance of teachers whose students have gains in learning as measured by objective evaluation.

Merit Pay

Generally merit pay refers to any kind of pay plan that rewards job performance. After her study of 138 school districts in 1960, Swain wrote that educational merit-pay programs are ones in "which a teacher's salary is to some extent dependent upon a judgement as to his competence whether or not that judgement stems from a formal rating plan" (Swain, 1960).

The conventional merit-pay program provides for differentiated pay as either a higher percentage raise or a standard bonus. Because the planning and implementation are usually determined by district administrators, the purpose, selection criterion, and procedures vary widely.

Such programs should be distinguished from other pay programs such as seniority schedules, career ladders and incentives.

Unlike seniority schedules, merit pay is not awarded to all teachers permanently in equal amounts nor is it free from evaluation. Unlike career ladders, merit pay is not awarded to teachers with specialized skills for activities other than classroom performance. Unlike incentives, merit pay requires evaluation after the performance and rewards differentially according to individual performance.

For the present study, a definition paraphrased from a Phi Delta Kappa Research Bulletin, (Learning About Merit Pay from Business and Industry, 1984) will be used as a foundation for a more specific definition: merit-pay plans award different wages on the basis of different qualities of work for teachers who have the same job descriptions and responsibilities. By limiting this concept to classroom teachers and the act of teaching, such variables as training, experience and extra-curricular responsibilities are excluded from consideration for pay.

Therefore, merit pay will be that monetary reward given to teachers for the quality of their performance in the classroom as measured annually.

Summary

The purpose of this study is to investigate the perceptions of teachers in order to produce criteria of teaching behaviors for which teachers wish to receive merit pay. Measurements of teachers' opinions 1) of self, 2) of effective teacher behaviors and 3) of teaching behaviors they believe appropriate for merit pay will be taken. The self-perceptions are those behavioral characteristics of effective teachers that the subjects perceive to be most like and most unlike themselves.

The effective teacher perceptions are those behavioral characteristics that subjects perceive to be most like and most unlike those of effective teachers. The merit-pay recipient perceptions are those behavioral characteristics most like and unlike those teachers for whom the subjects would approve differentiated pay based on quality of classroom performance. The specific list of behavioral characteristics used for this study consists of items from research, literature and existing merit-pay programs.

The present study will utilize Q methodology, a research approach that can measure subjective opinions about behaviors and compare the relative strengths of those behaviors within an individual. By examining the three perceptions of specific teaching behaviors through factor analysis, types of teaching behaviors will emerge to permit a ranking of those aspects which teachers will most prefer having evaluated.

CHAPTER II

REVIEW OF LITERATURE

Studies in the past have attempted to determine the effectiveness of schools by examining records which reflect the generalized performances of good and bad teachers but which ignore individual teachers. Most recent research has revealed a number of characteristics that are positively correlated to student learning gains, but little research has been conducted to ascertain teachers' feelings about these characteristics. Three perceptions of the teacher will be researched in this study--the teacher's perception of himself, the teacher's perception of the effective teacher, and the teacher's perception of the merit-pay recipient. A review of the literature in four areas will be included, that of teacher self concept, characteristics of effective teachers, merit pay in public school districts, and Q methodology.

Self Concept

In the literature related to teacher concept, psychologists have agreed that, "the behavior of a teacher, like that of everyone else, is a function of self" (Combs, 1972, p. 24).

In the same physical setting, the exactly identical situation, each teacher's perception will vary. Each will react or interact in terms of what the situation means to him. The factors that affect his behaviors are his alone at the moment of behavior: "All behavior,

without exception," Combs and other perceptual psychologists say, "is completely determined by and pertinent to the perceptual field of the behaving organism" (p. 18). "To understand a person the only reality we need to be concerned with is what seems real to him" (p. 24). The Q methodology gives that insight into "what seems real." Because people behave according to the situation as they perceive it, the perceptions of teachers regarding merit-pay programs must be determined and acted upon if such programs are to be accepted by teachers.

The act of teaching requires assuming responsibility for others. Having self-esteem is requisite to accepting such responsibility.

The taking of responsibility either for oneself or for others indicates the possession of enough personal confidence and self-security to enable an individual to be willing to risk taking a responsibility role (Horrocks and Jackson, 1972, p. 133).

Autonomy

For a teacher to perceive himself as a responsible person, he must have a degree of autonomy. He must perceive himself as independent, separate from others' control of his actions, and controlled by self. In Garrett's study of the effect of sex upon teacher perception, 393 teachers in East Texas ranked twenty factors--ten teacher-controlled and ten non-teacher-controlled--as to effect upon teacher performance. While both sexes ranked "Possesses skill in human relations" most important, considerable deviation occurred among the other factors. Women placed more importance on teacher-controlled factors such as "Possesses substantial knowledge of subject taught" and "Possesses skills in methods of instruction." Men, on the other hand, attributed their students' success to their socio-economic status, a view more

related to that of research. They regarded the ability of their students of moderate importance while women rated student ability extremely low. Garrett attributes women's greater degree of satisfaction with teaching to his findings that they feel they have more control over the outcome of their performances. They have perceptions of greater autonomy than the men in this study (Garrett, 1977).

In their study of elementary teachers in schools of different socioeconomic levels, Brophy and Evertson (1976) found that teachers who were effective in all cognitive areas felt in control of their own behavior as well as that of their students. They were less concerned about external measurements, such as students' standardized test scores and administrators' evaluations, than less effective teachers.

Taddeo (1977) considers this sense of autonomy second only to knowing oneself: "A teacher must know and believe in himself if he is to be capable of knowing and believing in others" (p. 11).

Motivation

When a person is intrinsically motivated to perform a task, he does so because of the feelings of self-determination and competence he receives from having done it. When he receives external rewards or is controlled externally, he loses his intrinsic motivation because he becomes dependent upon those rewards or controls. Only rewards that assure the individual he is competent and in control increase intrinsic motivation. The teacher who does not receive merit pay may interpret that as meaning he is incompetent and consequently may lose his intrinsic motivation. Also, since extrinsic rewards can interrupt intrinsic motivation, the teacher may perceive his source of reward to be from

outside his self and, again, reduce his locus of control, his feeling of self-determination.

Another way in which intrinsic motivation may change is through feedback. If a person's sense of competence and self-determination is enhanced by positive feedback, he will more likely continue that behavior without extrinsic reward. If, however, his sense of competence and self-determination is diminished by negative feedback, his intrinsic motivation will decrease (Deci, 1975).

Because one's self is made up of the reflected appraisals of others, evaluators must be very accurate in identifying and giving positive feedback regarding those teachers' behaviors which significantly contribute to student learning gains. This suggests that teachers receiving negative feedback, those unlikely to receive merit pay, are actually those who most need merit pay as a motivator.

Discrepancy

The recent common talk regarding merit pay may actually be harmful in light of the discrepancy model of job satisfaction since teachers' expectations about monetary rewards may change to the extent that they expect more pay. People who feel they are unfairly paid will perform poorly. Only among teachers who have high choice, i.e. condition to refuse, is the effect of minimum compensation negligible upon intrinsic motivation (Folger, Rosenfield and Hays, 1978). If a teacher feels he has met the criteria for merit pay but does not receive it, he may perceive a discrepancy and become dissatisfied with teaching as a career.

Evaluating a teacher by a standard other than his own or asking him to compare himself to his ideal self assumes that if a discrepancy exists between the two, the teacher will be motivated to change when confronted

with this discrepancy. One of the reasons this often fails is that teachers do not have clear goals. Keeping a classroom running smoothly means constant modification of goals other than those needed for discipline. Consequently, instructional goals may be non-existent or partially defined in abstract ways. If goals are absent or vague, little discrepancy arises. For discrepancy to create motivation, as in the assumption, the teacher must know and be able to evaluate himself and have a clear concept of his ideal teacher. Joyce and Showers (1980) maintain that teachers do not know who they are professionally because they do not know how they compare to other teachers.

Dissonance

Since social psychologists say people want to evaluate their abilities and they want to keep improving their skills, the cognitive dissonance created when a teacher does confront discrepancy between self and ideal self should give rise to change. Trying to eliminate this dissonance could, therefore, bring about an improvement in teaching performance as defined in the present study if 1) the teacher can accurately represent himself, 2) his perception of the ideal teacher is of one whose students have learning gains, 3) he is motivated to resolve the cognitive dissonance if discrepancy occurs, and 4) his behavior adapts to that of his ideal teacher.

Assuming the first three conditions occur, the existence of and value of a reward can affect the possibility and degree of the fourth occurring. If the value of the merit pay by either literal or symbolic standards is great enough to create high levels of anxiety, the ability of the teacher to adapt his behavior may be impeded. The Yerkes-Dodson

principle that optimum anxiety for learning decreases with increased task difficulty applies to the teacher who highly values merit pay and who develops high levels of anxiety regarding his inability to earn it. His anxiety may hinder the adaptation of his behavior to that of his ideal teacher as well as to that behavior essential to receive merit pay (Farrar, 1981).

Whether this last condition will occur depends upon the teacher's defense mechanisms. If they are flexible and varied, he will adapt toward his ideal; if they are inflexible and limited, he may never reach confrontation. Failure to reach confrontation will produce no behavior change; failure to resolve dissonance may change behavior in two ways--productive or non-productive (Franken, 1982).

Schmuke (1971) describes four ways in which teachers might handle anxiety without changing their classroom behavior:

1. Perceive their concept of ideal teacher as unrealistic,
2. Perceive information about their actual performances as invalid,
3. Perceive discrepancies between real and ideal performances as typical for all teachers, or
4. Perceive their real performances as meeting unstated goals.

Teachers who have low anxiety regarding their cognitive dissonance may be more highly motivated to change their behavior if stress is induced. Mandler and Sarason (1952) find that giving people immediate feedback regarding success or failure, establishing a time frame for task completion and exciting the ego by telling people their performances measure individual competencies induce stress. All of these stress inducers could be implemented in a merit-pay program. Therefore, to be effective and appropriate for all teachers within a district, two kinds

of programs should be considered--one that lowers stress and one that heightens stress.

Cognitive dissonance is unavoidable in evaluation. Unless 100 percent of the teachers receive 100 percent of the remuneration, dissonance will exist. The teacher with the highly-differentiated concept of himself as a teacher, a concept formed after experiences and a number of interactions in the school environment, will resolve dissonance more easily than the teacher with an undifferentiated self-concept. The teacher with the narrow, simple self-concept will experience a high level of anxiety if evaluated negatively and will blame himself for failure (Doris and Sarason, 1955).

Behavior Change

That merit pay can effect change must be considered in relationship to behavior change itself. Change in self depends upon the individual's having a perception that affects him, the way in which that perception fits into his existing self concept and the relationship of that perception to his needs.

The stability of the phenomenal self makes change difficult by causing us (a) to ignore aspects of our experience which are inconsistent with it, or (b) to select perceptions in such a way as to confirm the concepts of self we already possess" (Combs and Snygg, 1959, p. 30).

In their discussion of the effectiveness of staff development, Joyce and Showers (1980) say that teachers have a built-in reluctance to change because normative group pressures support conformity. No research is available to suggest the effectiveness of merit-pay programs or administrators in providing perceptions of a magnitude sufficient to change behavior.

Those members of the community who fall short of this somewhat indefinite, normal degree of prowess or of property suffer in the esteem of their fellow man; and consequently they suffer also in their own esteem, since the usual basis of self-respect is the respect by one's neighbors. Only individuals with aberrant temperament can in the long run retain their self-esteem in the face of disesteem of their fellows (Rosenberg, 1970, p. 30).

Because people need "consensual validation" (Rosenberg, 1979) of self, teachers with low self-confidence will be less receptive to confronting themselves and to acknowledging dissonance. Their seeking information consonant to their self-concept makes them rigid in their behavior.

The individual experiences himself as such not directly, but only indirectly, from the particular standpoints of other individual members of the same social group as a whole to which he belongs (Mead, 1934, p. 138).

The idea often expressed in the cliché, "We see ourselves as others see us," is self-referent, not group-referent, as found in a study by Reeder, Donohue and Biblarz (1960) who asked fifty-four military men to rank self, to rank others, and to rank others' view of self as either high, medium, or low in leadership ability. Those who were ranked high accurately estimated that ranking (nine of eleven); those who were ranked low believed they were ranked high or medium by their peers (fifteen of thirty-one). The conclusion was that people accurately perceive others' views of self if they are favorable. Similar studies concur: people have more favorable perceptions of themselves than others have of them (North and Hatt, 1953; Simmons and Rosenberg, 1971).

Perceptions of Others

The perception of others is also important in the psychology of self. In discussing a person's perception of others, DeCharms (1968)

and Bridgeman (Deci, 1975) say that since every observer is motivated by self-interest, he does not view others' success as outcomes of their behavior but as effects of luck or environmental factors. He sees others' failures, however, as outcomes of their behaviors. In school districts defining success as "receiving merit pay," those teachers who do not receive merit pay will attribute others' success to factors outside their behavior (competencies and performance). They will not perceive their failure to receive merit pay as attributable to themselves but to environmental factors, viz., the merit-pay evaluation and evaluators.

After studying self-estimate and self-value for the ability to work with hands among 533 adults, Rosenberg (1979) found that sixty-eight percent of those who felt they were good at working with their hands valued the skill a great deal; only six percent valued it who did not feel they were good at it. After testing sixteen other qualities, he found "without exception, those who consider themselves good in terms of these qualities were more likely to value them than those who considered themselves poor" (p. 266). The adult "will be disposed to value those things at which he considers himself good and to devalue those qualities at which he considers himself poor" (p. 266). In other words, teachers will select characteristics to be rewarded by merit pay that they feel they possess themselves.

Summary

An individual's motivation to change may originate from either endogenous or exogenous variables. If this motivation is produced endogenously, discrepancy and dissonance in behavior accompany the will to change. If motivated exogenously, these two requisites to change--

discrepancy and dissonance--must be created by interaction with significant others or desire for external rewards. Research findings vary as to the intensity, longevity and internal effects of external incentives as well as to the appropriateness of offering the same incentive to all individuals.

Effective Teachers

"No educational system will be better than the quality of teachers," (Rockefeller Brothers Fund, 1958) an idea voiced every decade, is usually followed by statements regarding the quality of teachers. To define effective has been the goal of research for the last half century and that of education forever. Ineffectiveness is inherent in the educational setting says Deterline. ". . . teachers and students fail, not because they don't try hard enough, but because of the limitations imposed upon them by the way they are forced to go about it" (Deterline, 1971, p. 16). Bain sees accurate measure of failure or success impossible: "The classroom has either too little control or no control over the factors that might render accountability either feasible or fair" (Bain, 1971, p. 413). Nevertheless, if the purpose of awarding merit pay is to improve the quality of instruction in a school district, the program must include criteria for effectiveness and a method for assessing them.

History of Research

The research regarding effective teachers has been fraught with poor design and lack of innovation. From the first study in 1896 by Kratz (1896), which asked elementary students to write descriptions

of how the best teacher they had ever had differed from other teachers, until the product-process research of Mitzel (1961) in 1960, two assumptions permeated research. One was that anyone who had been to school could judge teacher effectiveness; the other was that good teachers are "born, not made" because the characteristics typically mentioned were pre-existing or presage factors such as adaptability, considerateness, enthusiasm, good judgment, honesty and magnetism. The most discriminating study from these seventy-five years is that by Hart (1936) in which he asked students to distinguish between the most-liked and the most-learned-from teacher. The list of characteristics for the second condition contained no pre-existing ones. However, the original research approach that mixed pre-existing characteristics with those associated with effectiveness has dictated policy-making in the public schools.

After an extensive analysis of thirty-nine studies, Barr concluded in 1952 that

1. No one appears to have developed a satisfactory working plan or system that can be used by personnel officers who must make judgments about teacher effectiveness.

2. Little has been done in evaluating the nonclassroom responsibilities of the teacher--his activities as a friend and a counselor of pupils, his activities as a member of a school staff, his activities as a member of the profession.

3. Very little has been done in differential measurement and prediction. Concern seems to have been chiefly with the general merit of teachers. Administrators often need teachers with special abilities.

4. Teaching effectiveness generally has been treated as something apart from the situation giving rise to it. More needs to be known about the situational determiners of effective teaching (Barr, 1952).

A decade later Getzels and Jackson (1963) determined that after a half century of research, the nature and measurement of teacher personality and the relationship between teacher personality and teacher effectiveness remained unknown. Many of the studies they examined had produced no significant results; others produced only partisan findings. "What is needed," they said, "is not research leading to reiteration of the self-evident but to the discovery of the specific and distinctive features of teacher personality of the effective teacher" (p. 574). Another decade later, after a review of the research, Bloom said, "There is little support for believing the characteristics of teachers . . . have much effect on the learning of students" (Bloom, 1976, p. 683).

Improvements have been made in the research design by using more explicit definitions of the variables and objective measurements. Four labels--presage, process, product and environmental/contextual--are generally used to describe variables in teacher effectiveness. Definitions differ as does the extent to which they may be measured. Feldvebel (1983) maintains that consideration of all four must be included in evaluation. The rationale for merit-pay programs aimed at increasing student learning would have evaluation on only the process (teacher behavior and product, teacher effectiveness) criteria. Medley and others (1981) have found that the presage criteria Feldvebel uses--sex, age, race, social status and general and professional education--are not positively correlated to student learning gains. King (1981) omits the contextual factors which Feldvebel and Houston's Second Mile Plan (Texas School

Board Association, 1983) consider important and divides the presage into two areas--professional and personal--in her attempt to separate the preoperational variables. Many existing programs include the presage and some, the contextual.

Measurements Of

The rating scale used in many schools today was first introduced in 1915 in one of the National Society for the Study of Education yearbooks (Boyce, 1915). It was the prototype for 209 scales Barr collected in 1930, none of which listed characteristics that had been validated by research. Observer judgments, which assumedly distinguish the more effective teacher from the less effective one, are usually ranked on a scale from one to ten with a numerical average to describe the degree of teacher effectiveness. Barr attempted to validate such ratings in 1935 with no success (Barr, 1935). In 1982, Medley wrote (1982) ". . . no evidence has yet been published that ratings of teacher effectiveness made by superiors have any relationship to teacher effectiveness" (p. 1896).

In 1963, Gage (1963) introduced the low-inference observation schedule to measure teacher evaluation by correlating measures of teacher performance to measures of teacher effectiveness. Even though many researchers have tried to define good teaching in terms of characteristic acts or behaviors of teachers, no specific agreed-upon list of characteristics of effective teachers has been determined.

In his review of the research in 1977, Medley (1977) found fourteen of the 732 studies fit the following criteria: 1) presented new knowledge, 2) used outcome measures based on long-term gains of students,

3) derived data from objective records of classroom behaviors and
4) reported at least one process-product correlation that was significant and important. These fourteen had been funded by the federal government to study the instruction of disadvantaged children in the primary grades. Since the students studied were of low social-economic status, the implications for all students are unclear, but Medley did find 613 significant correlations relating to three aspects of teacher performance: learning environment, use of pupil time and discussion strategy.

One drawback to product-process studies is that they are descriptive; they do not establish cause-effect relationships. The result of a teacher's performance-competence-effectiveness varies with the amount of performance-competence of the student. Another product-process research flaw is that classes, not individuals, are studied; therefore, within-class variations are unnoted. Also, since observations are averaged from over a period of time, intentional modifications in teacher processes are considered measurement errors, thereby ignoring what may be an important variable in effectiveness--modification of behavior for pre-determined purposes. Some success, however, has been made by studying teachers' perceptions of their tasks, themselves, students, and the ends and means of education (Combs, Blume, Newman, and Wass, 1974).

Characteristics Of

Research has not yet been successful in identifying and defining those processes Hunter says comprise the act of teaching, "the process of making and implementing decisions, before, during, and after

instruction, to increase the probability of learning" (Hunter, 1979, p. 65). This lack of criterion measurements and operational definitions has been, perhaps, the greatest obstacle to the measurement of effective teaching.

A 1983 publication indicates that a few positive correlations do exist, however, between teacher behavior and student learning. The authors of Effective Schools and Classrooms: A Research-Based Perspective (Squires, Huitt, and Segars, 1983) state that "few single teachers' behaviors are critical in and of themselves" (p. 10). The greatest factor, they concluded after their research of the literature, in increased student learning is student classroom behavior. Teachers' behaviors can, however, help bring about increased learning and can be classified into three categories: planning, management, and instruction. Coupled with three student behaviors--involvement, coverage, and success--these behaviors bring about student achievement. After their review of over fifty studies, the authors determined that the amount of these teacher behaviors necessary for learning gain to occur varies depending upon grade level, student ability and interest, and subject content.

Any number of compilations of teacher behaviors have been made. McGreal (1983) lists thirty-five specific teachers' behaviors associated with student learning gains in four typically-mentioned areas: classroom climate, planning, teaching, and management. Other lists emphasize characteristics such as planning (Ryans, 1960) types of teacher-student interaction, (Flanders, 1970) and clarity and variety (Rosenshine and Furst, 1971). The literature does, however, show several characteristics reappearing among those teachers whose students have gains in learning.

Teachers who do make a difference in their students' achievements are those who

1. Set high standards for student behavior and inform students of these in writing by teaching and reviewing realistic procedures and rules (Anderson, 1980; Emmer, 1980 and 1982; Evertson, 1982; Good, 1979; Kounin, 1977).
2. Manage student behavior by establishing clear discipline procedures appropriate to building rules and student developmental levels. Discipline action is focused upon the infraction, not the personality (Armor, 1976; Brophy, 1979; Emmer, 1980 and 1982; Evertson, 1982; Sanford, 1981).
3. Provide instruction appropriate to students' achievement level in large and small heterogeneous and homogeneous groups (Brookover, 1979; Good, 1979; Medley, 1979; Rosenshine, 1979 and 1982; Webb, 1980).
4. State specific learning objectives by telling students the goals of each lesson and the skills and knowledges they must learn. (Becker, 1977 and 1980; Fitzpatrick, 1982; Good, 1979; Levine, 1981 and 1982; Rosenshine, 1979 and 1982).
5. Interact with students by showing interest in their problems and accomplishments both in and out of the classroom. Their students know they care about them (Emmer, 1981; Evertson, 1981; Rutter, 1979).
6. Utilize time for learning in the classroom by managing administrative tasks efficiently, establishing orderly, efficient classroom management procedures and eliminating time wasted off-task (Berliner, 1979; Rosenshine, 1979 and 1982; Stallings, 1980).
7. Allow students to experience success by creating a reward system that acknowledges every student's accomplishment (Brophy, 1980).

and 1981; Emmer, 1981; Evertson, 1981; Hunter and Russell, 1977).

8. Present lessons in an organized manner, introducing, reviewing and reteaching key concepts and skills (Bloom, 1976; Hyman and Cohen, 1979; Levin, 1981; Reid, 1980; Rosenshine, 1982).

9. Use a variety of teaching methods and materials (Bloom, 1976; Good, 1979; Levin, 1981; Rosenshine, 1982).

10. Give students and parents prompt, accurate reports of students' progress (Anderson, 1979; Good and Grouws, 1979).

11. Have a business-like approach to classroom management (Arlin, 1979; Berliner, 1979).

12. Show enthusiasm for the subject content (Berliner, 1979).

Disagreement is found, however, regarding many behaviors. Dunkin and Biddle (1974), for example, advocate varying the level of difficulty of questions asked of students while Rosenshine and Furst (1971) found little need for this teacher practice. Both Medley (1979) and Rosenshine (1979) found the direct teacher approach superior to the indirect advocated by Flanders (1970) and Gage (1978).

One school of thought posits that teachers make little or no difference upon student learning. Teachers are only a small fraction of the environmental influences upon students whose performance is determined by cognitive abilities (Banfield, 1974; Wilson, 1975; Jensen, 1979). Environmentalists, on the other hand, emphasize the influence of social, cultural and psychological factors associated with family and home life, peer influences and preschool learning (Bloom, 1980; Hunt, 1978; Smilansky, 1979). Other researchers (Popham, 1971 and 1973; Moody and Bausell, 1971; Dembo and Jennings, 1971) conclude that teachers have little influence upon student

learning and many others maintain that too little significant research is available for any correlations between teacher behaviors and student learning to be made.

A recent study by Soar and others (1983) of the efficacy of the often-used criteria found 1) no relationship between the rating scales and student learning scores, 2) no relationship between teachers' scores on intelligence tests and students' achievement gains, 3) no relationship between teachers' scores on the National Teacher Examinations and students' achievement gains, and 4) no relationship between teachers' scores on state competency tests and students' achievement gains.

Soar's group did find that the two strongest influences on students' achievement are their own intelligence quotients and their previous achievement, a reiteration of conclusions of Brophy and many others. These researchers repeated another supported conclusion--home background and peer group are also important influences on students' learning gains. All four are factors over which the teacher has no control. They support Brophy's (1973) and Good and Grouw's (1979) findings that teachers are not consistent. If the teacher is the most dominant influence in bringing about student achievement gains, student achievement gains should be stable from year to year for an individual teacher.

. . . the median stability coefficient is about .30. Measurement experts generally agree that a measure used to make decisions about individuals should have a reliability of at least .90. Using Spearman-Brown formula, we estimate that the mean of 20 mean gain scores (each with a reliability of .30) would be needed to reach a reliability of .90. In other words,

it would take 20 years to find out by this method whether an elementary teacher is competent or not" (Soar, et al., 1983, p. 242).

Teachers' Perceptions

That teachers know what constitutes "effective" teaching behaviors has not been determined. In their argument that new instruments are not needed, only accurate, objective records taken by trained observers using existing instruments and operational definitions, Medley, Coker and others (Medley, et al., 1981) 1) asked teachers to compile a list of generic competencies, 2) selected well-defined observation instruments reflecting these competencies, 3) tested attitudes and achievement of students in selected classrooms, 4) had observers use the identified instruments in the classrooms of measured students, and 5) then correlated the observation ratings with student test scores. They attempted to determine the consistency among four teacher-competency observation instruments by constructing twenty-five keys, indicators of observable teacher behaviors, and observing in one hundred classrooms in a rural school system for two years. The original behaviors to be measured were defined by teachers; these behaviors were keyed to the observation instruments by their authors and expert consultants to be certain the behaviors corresponded to the instrument item. Problems with the study were instability of teacher behavior from scoring to scoring, observer disagreement in coding the behaviors, and inconsistency among the items. The outcomes regarding the observation instrumentation were as follows:

1. Observation instruments should not be treated as if they are of equal quality.

2. Reliability as such does not exist because different scores on the same instrument vary widely in reliability.

3. Administrators should choose teacher observation instruments as carefully as they choose student achievement tests.

Their study revealed that teachers do not know the characteristics of effective teachers: "Apparently, the behaviors that our group of teachers (and those experts who created the original lists) regarded as indications of effective teaching were about as likely to indicate ineffective teaching instead" (p. 245). This had been documented previously by Medley (1979) and Wilkinson (1980).

Summary

No consensus exists among researchers and educators regarding the effective teacher. Attempts to describe, differentiate and measure those characteristics that distinguish the teacher whose performance results in increased student learning have produced many instruments, but few conclusions, and have had little significant impact upon the existing evaluation-reward process in public schools.

Merit Pay Programs

Background

Interest in merit-pay programs has had twenty-year cycles from the early 1900's until the present. From the often-mentioned one in Newton, Massachusetts, 1908, to the most recently established one in Tennessee in May, 1984, concern for rewarding superior job performances has been affected by economic and social conditions. The single salary

schedule became popular during the 1930's and 40's but lost favor because teachers' salaries in merit-pay districts dropped below those in non-merit-pay districts. A resurgence in the 1950's was manifested in state legislation but Kidwell found that only one-third of the 149 programs studied by McKinley in 1958 were in effect a decade later. Major problems he cites were caused by ignoring suggestions in the literature and failing to meet objectives (Kidwell, 1968; McKinley, 1958). In 1970, no more than seven to ten percent of the districts in the United States had merit-pay programs; fewer than five percent do in 1984. Determining the exact number of school districts currently having merit-pay programs in effect is difficult. Of the 115 schools responding as having programs in the 1979 ERS survey (Merit Pay for Teachers, 1979), sixty-one responded to a 1984 inquiry from the present writer. Twenty-six districts have continued their programs; thirty-three have not. Only two systems, those in Bloomingdale, Illinois, and in New Trier, Illinois, answered to the present writer that teacher input into the formation of teacher evaluation criteria and into the on-going evaluation of the program had been sought.

Forty-seven of the above 115 schools having merit-pay programs in 1979 responded to an ERS survey in 1983 as still having merit-pay programs (Merit Pay for Teachers: Status and Descriptions, 1983). Many of these are incentive programs, like that of Seiling, Oklahoma (Daugherty, 1983), which reward all teachers who volunteer to participate or are based upon building as well as individual attainment of specified goals. Or they are unique programs such as one in Dalton, Georgia, (McCurdy, 1984) which has had a merit-pay program for twenty years in which all teachers who are performing as expected are rewarded by teacher

evaluators and may appeal the evaluation. LaDue, Missouri, (The School District of the City of LaDue, 1976) which has had a program for thirty years, averages twelve students per classroom and gives merit payments ranging from \$2,100 to \$4,500. For ten years Round Valley, California (Burke, 1982) has had each of its thirty teachers prove to an evaluation committee that he deserves merit pay. Lake Forest, Illinois, reported a merit-pay plan had been the only pay schedule in that district since 1861 in a summer, 1983, survey; but the superintendent reported in December, 1983, that the plan had worked for ten years (Cramer, 1983).

Other Areas

One of the reasons merit-pay programs appeal to the American public is that such programs appear to have worked in other sectors such as business and government. General beliefs are that merit pay works in business, that it can be implemented in any organization and that it is a cheap motivator to increase and/or improve performance. Barber and Klein (1983) call such ideas "myths" and cite Silverman and Brinks in the claim that

. . . neither the federal government nor private business has found merit pay to be widely usable. Developing objective measures of performance and maintaining the necessary record-keeping systems are too difficult, expensive, and time consuming to be of much practical interest (Silverman, 1983, pp. 294-97, 300-302; Brinks, 1980, pp. 59-64).

The economic feasibility is often overlooked by the public. The cost of implementation of merit-pay programs comparable to those in business, those that do, perhaps, produce changes in job performance, would be overwhelming. The Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy's National

Master Teacher Program (The Twentieth Century Fund, 1983) would cost as much as five billion dollars by the fifth year of implementation.

Research says the reward for merit must be of significance to change teacher behavior and the amount that most school districts could afford in a full-faculty participation program would be nominal.

The first goal of many of the current merit-pay programs in business is one many educators find impossible: to measure employee performance realistically. Patz (1975) found a lack of simple, objective measures to evaluate middle and top managers' performance in his study of nineteen companies. Most ratings were subjective and limited with 3-, 4-, and 5-point scales which are poor for differentiating among performance levels. Even though management-by-objectives had several proponents during the early 1970's, including Secretary of Education, Terrell Bell, and Dean of Education, Stephen Knezevich of the University of Southern California, Latham and Yukl found that management-by-objectives is very difficult to implement in education because the more complex the job and the more difficult the evaluation, the more difficult goal setting becomes (Latham and Yukl, 1975). As Allan Caudill, president of the Education Association of Alexandria, Virginia, said, "In sales there's a bottom line: How many sales did you make? In education, there's no objective measure" (Latimer, 1983).

One of the greatest differences between education and business is the lack of uniformity in "raw" products. The business worker is given a set of variables for which the outcome can be relatively accurately predicted. Not so in education. The factors the teacher faces in the classroom are many and diverse; the "raw" products contain many extraneous variables such as intelligence, background and

environment. Farrar (1981) says this analogy of the student as raw material, schooling as the process, and the "re-tooled" student as the product is inappropriate because the teacher lacks "quality control."

Business managers often think merit-pay programs are vehicles for improving and increasing employee performance. Mikalachi (1976) concluded that "most middle managers want it (merit pay) until they get it, and then they don't want it at all" because it does not fulfill its purpose: "It does not make a poor performer excellent" (p. 46). In fact, merit pay may have negative effects on performance as indicated in Meyer, Kay and French's study of General Electric managers when they found that average performers actually reduced output after having received negative evaluations (Meyer, Key and French, 1965). In a later article Meyer's (1975) first reason for the degenerative effects of merit pay in business is that voiced by educators: creation of dissension among staff members.

1. Competitors are seen as enemies, and thus hostility develops toward them.
2. Perceptions of one's self become distorted positively, while perceptions of competitors become distorted negatively.
3. Interaction and communication with competitors are decreased. (p. 42)

Another area the public cites as an example for education to follow is government. Of the National Commission on Productivity and Work Quality's sixteen identified areas for incentive pay, the most frequently used by the states is the varying work hours, an impossibility for education. Of the twenty-five states using the output-oriented plan, only four percent have a formal evaluation of the program. Consequently, government success with merit pay programs is undocumented, (National Commission on Productivity and Work Quality, 1975).

A later legislation, the Civil Service Reform Act of 1978, has limited transfer into education, too, in that only three categories may be used in evaluations--"outstanding," "satisfactory," and "unsatisfactory," and only employees "outstanding" in all aspects of performance can be awarded merit pay. Consequently, few managers try to distinguish among the three and classify ninety-nine percent of their employees as "satisfactory." The General Office of Accounting reported in 1978 that most of the ten performance rating systems, some of them in effect for twenty-five years, reviewed that year were not meeting the intention of the legislation. (Federal Employee Performance Rating Scales Need Fundamental Change, 1978).

Rationale

The only reason to implement a merit-pay program is to improve the quality of education for students in a school district. An essential for reaching this goal is accurate, reliable measurement of instruction. Research has not yet provided educators conclusive, comprehensive criteria of teacher characteristics and behaviors that produce increased student learning. Fundamental to merit-pay programs are the ideas that teachers differ in abilities, that these abilities be identified, that teacher performance can cause student learning, and that teachers be rewarded for the quality of their performance as measured by student learning gains. Also fundamental is the idea that merit pay will improve instruction by stimulating all teachers to conform to criteria established in the program.

This rationale is based upon a contingency approach to teacher management that assumes merit pay will result in increased teacher effectiveness and that increased teacher effectiveness will result in

increased student learning. Six rules related to work motivation from Hamner and Hamner (1976) have significant implications for school merit pay programs:

1. Do not reward all workers the same. (Merit-pay programs must differentiate to reward increased efforts; otherwise, the teacher will perceive his efforts have not been rewarded and act accordingly.)

2. Failure to respond has reinforcing consequences. (Poorer teachers will interpret better teachers not being rewarded as approval of their own poor performance.

3. Workers must be told what they can do to get reinforced. (Teachers must have feedback and opportunities to correct deficiencies in their performances; otherwise they will search randomly for the contingency that rewards.)

4. Workers must be told what they are doing wrong. (Again, feedback is necessary for behavior to change, and administrators must assume teachers want to be effective.)

5. Do not punish in front of others. (Merit-pay proponents should consider the repercussions of publicly announcing names of merit-pay recipients.)

6. The consequences must equal the behavior. (If rewards or lack of rewards are too great, teachers will perceive no relationship between teacher performance and reward.)

If the goal is improved instruction, one body of research suggests rewards other than money should be considered because money may be an inappropriate motivator of teachers. Educational institutions are normative organizations, says Etzioni (1975), whose members are involved because they are intrinsically motivated by the cause of the

organization. Rewards are recognition for service given, esteem, titles, and sense of service, not money. To propose that money motivates teachers changes the power of the organization to motivate intrinsically to that of the utilitarian organization which uses money, the granting or withholding of, to motivate members. A theory applicable to the reward-for-performance idea is that of Herzberg and others (Herzberg, Mausner, Snyderman, 1959) who say the only appropriate foundation for rewarding work is to include the motivational factors of opportunities for achievement, opportunities for professional growth and advancement, and recognition for a job well done. The fifth, included outside the realm of merit pay, is intrinsic interest. Dissatisfaction with a job, they say, is created by interpersonal relationships, company policy, administration, working conditions, status, security, supervision, and salary. Lawler (1973), however, reviewed over fifty studies published after that of Herzberg's and found that pay was ranked higher than Herzberg reported in 1969; Lawler attributed that difference to the self-reporting method Herzberg used.

In a later work Deci (1976) concurs with Herzberg and adds that extrinsic rewards may be dangerous in that they reduce intrinsic motivation necessary to feel competent and self-directed. In his discussion of the equity theory, Deci (1975) says that if a person believes his outcomes-to-inputs ratio is less than that of a colleague, he will be dissatisfied and discomforted and will seek equity; that is, he will modify his behavior to be congruent with the reward. Equity works for both underpayment and overpayment. If the payment is greater than he perceives equitable, the worker may attribute his motivation to work to money and not to his intrinsic motivation. Thus his intrinsic

motivation may diminish and he may see himself as working for money only. This is an unlikely phenomenon in the world of public education, but the reverse, underpayment, also affects performance. Since a worker will give in proportion to that which he receives in order to maintain a stable, harmonious relationship, teachers who perceive themselves as contributing more to a school district than is reflected in their salaries and/or merit pay may diminish their performances to create that equity. Their performances may become less effective. Sergiovanni (1975) also sees the removal of self-direction as a flaw in merit pay, an impersonal means to control workers.

Lortie's (1975) two surveys of teacher motivation support the work-for-self theories in that teachers listed the psychic rewards of teaching six times as often as those associated with outside forces. ". . . teachers consider the classroom in the major arena for the receipt of psychic rewards" (p. 104). All other rewards, he says, ". . . pale in comparison with teachers' exchanges with students and the feeling that students have learned" (p. 106). Roy Edelfelt, Executive Director of the National Commission on Teacher Educational and Professional Standards, (Gudridge, 1980) would have school boards rethink the issue to find alternative rewards to merit pay. He suggests others prized by teachers:

1. More contact with other adults.
2. More recognition from other adults.
3. Invitations to testify on educational matters at school board meetings.
4. Respect from bosses.
5. Classroom visits from school board members and superintendents.

Miller and Swick (1976) add acknowledgment of and compensation for efforts for self-improvement as rewards.

Characteristics Of

Many of the well-published programs, such as Houston's Second Mile, are combinations of two, three or four of the possible pay plans--seniority, career, incentive, and merit. The factors rewarded are those of general performance which encompass experience, classroom effectiveness, personal qualities and attributes, community and professional activities, educational travel, university training and acceptance of extra-curricular responsibilities.

The literature includes several essential components in merit-pay programs if they are to be successful:

1. Broad participation in the program development and evaluation (McDowell, 1971; Krahl, 1977; Texas Association of School Boards, 1983). (Note: Wildavsky and Pressman (1973) found in their study of governmental attempts to implement programs whose goals were developed by those other than the implementors that the employees sabotaged the program either by will or through ignorance, and Giaquinta and Kerlinger (1973) believe the employee has the power to thwart the implementation of any plan.)
2. Specific, multi-faceted, well-articulated, objective evaluation processes performed by several trained evaluators. (Hooker, 1978; Weisentein, 1976).
3. Open participation with meaningful rewards for all teachers who achieve certain specified objectives (Meyer, 1965; McDowell, 1971; Lawler, 1973).
4. Committed leadership (Hart, 1973; McKenna, 1973; Texas Association of School Boards, 1983).

From the literature, one may note that teachers have six major areas of concern. They believe an acceptable plan for merit pay should include the following:

Evaluation on frequent occasion by more than one qualified person.

Teachers' participation in determining merit-pay recipients.

More than one method of advancement available.

Attractive levels of pay.

Provisions made for review and appeal.

Opportunities to be recognized yearly (Rhodes, 1973).

Part of the failure in merit pay programs is caused by the organization of the school itself says Comer (1983).

Merit pay works best in well-managed organizations with good planning, accepted production methods and easily measured personnel and product performance standards. The nature of teaching and learning does not lend itself to precise personnel or student performance measurements. Through little fault of practicing educators, management is the weakest aspect of the primary and secondary educational process. Schools, to be successful, must have cooperative staff planning, mutual respect among staff members and fair play. A merit-pay program in schools and similar organizations too often leads to staff politics, unfair practices and conflicts without addressing the real program (p. 8).

Evaluation

The evaluation procedure is one of the most written and talked about processes in education. Most articles are not-to's or descriptions of existing evaluation plans. Few give research-supported answers to the questions: Why evaluate? What criteria should be used? Who should be the evaluator? Only a few among the myriad that could be asked, these questions haunt educators in their search for workable

merit-pay programs as well as for the necessary evaluation purposes of tenuring and rehiring.

The most frequent purpose for the evaluation of teacher performance in a survey of 375 school districts by ERS (Kowalski, 1978) was "To help teachers improve their teaching performance," (96.1) percent); the second most frequent, "To decide on renewed appointment of probationary teachers," (90.4 percent). The others very frequently mentioned were "To recommend probationary teachers for tenure or continuing contract status" (89.8) percent), and "To recommend dismissal of unsatisfactory tenured or continuing contract teachers" (87.3 percent) (pp. 28-30). This 96.1 percent interest in helping teachers improve their teaching performance contradicts the practices found by Hickcox and Rooney (1966), who found the eleven school districts they studied had three commonalities in evaluation procedures: infrequent evaluations, especially of tenured teachers; one-person evaluations; and few pre-observation conferences.

Other problems with evaluation, in addition to those mentioned as inherent in the rationale for merit-pay programs, are numerous. The rating itself may undermine the confidence and self-determination of the teacher:

Because it is so essential to know what we are like if we are to have any firm basis for action, and because it is so difficult to arrive at this knowledge, other people's judgments of us matter enormously; indeed, there is probably no more critical and significant source of information about ourselves than other people's views of us. If the process of communication obliges the individual to 'become an object of himself . . . by taking the attitudes of other individuals toward himself,' it is reasonable to think that others' evaluations will affect the individual's evaluation (Rosenberg, 1979, p. 64).

Even if ratings were easily administered and had salient effects upon teachers, the determination of the characteristics of effective teachers must be made. Much research has been conducted regarding teacher-student interaction in the last decade, and significant findings regarding such objective measures as student attendance, time-on-task, and amount of teacher-student talk have been reported. Many administrators, however, are unaware of recent developments in teacher evaluation methods and measurement instruments, and, even if they have stayed current, they must be flexible in their procedures as the literature suggests that characteristics of good teachers vary so widely that a single rating instrument for all teachers in a district would be inappropriate.

Popham's statement in 1974, "Yet to date there has been scant evidence that such ratings are sufficiently well correlated with pupil growth to warrant their widespread use" (Popham, 1974), is still true according to Soar, (Soar, et al., 1983). "Obtaining a record of teaching behaviors in scorable form is crucial" (p. 241). It must be an instrument that does not have the flaws of ones commonly used which 1) lack reliability and validity, 2) lack agreed-upon scoring keys and publicly available norms, 3) inaccurately reflect those aspects of behaviors associated with effective teaching, and 4) allow the halo effect (the overall impressions that a teacher makes on a rater) to taint the rating.

The third major problem is the evaluator. Research shows that in studies of consistency in ratings of an individual teacher wide variation exists (McAfee, 1975). In an examination of 389 summary evaluations by administrators in a school system with a long-lived

merit-pay program, Shaughnessy's (1976) coders found that claims describing "maintenance: helping people assume their social roles in the organization" were most often included in the administrators' evaluations which offered "little detail either as to the sources of evidence or the specific criteria of judgement employed " (n.p.).

In studying opinion regarding the thirty-three competencies identified in the Adequate Program for Education in Georgia needed for certification, Adams, Johnson and others (1978) found principals emphasize managerial and administrative abilities while supervisors and beginning teachers stress instructional competencies. Principals, higher education supervisors, and beginning teachers from various sizes and kinds of schools were asked to rate thirty-three teachers' competencies on a 0 to 3 scale. The competencies were organized into five functions--planning instruction, evaluating learners, managing instruction, providing the learning environment, and being a professional--to determine significant differences among the perceptions of the three groups of subjects regarding competencies essential for state certification. The greater differences occurred in the ratings of principals and beginning teachers regarding eight statements related to managing instruction, providing learning environments and being a professional.

Summary

Teachers reject merit-pay programs because of lack of research validating effective teaching characteristics, lack of knowledge regarding the characteristics that have been proved, and lack of reliability and validity in merit-pay rating procedures and judges. Teaching is an art, they say, not a science; therefore, teacher-

student interactions cannot be reduced to symbols. Too many variables exist that cannot be understood, measured and/or anticipated regarding the desired objective, increased student learning.

Q Methodology

Most research methodologies examine questions from the investigator's point of view. Based upon his view of the world, the investigator chooses the theory, forms the hypotheses, selects the categories and measurements, and analyzes the scores--all external from the subjects involved. Such R methodology requires that explanation be given in terms of original concepts that are built into questionnaires. Since the results of R method do not reflect the subject's will, his feelings remain unknown; he is uninvolved.

The Q technique and methodology differ in that they let the subject speak for himself. His behavior is not defined and measured by the investigator's concept of it but by his own. Because the process is self-referent, it is of particular value in situations where the individual's self is involved, where his opinion and viewpoint are concerned as in psychological, social and political matters. Since no outside standard or operational definitions exist by which the subject's point of view may be measured, no right or wrong exists. This operant subjectivity postulates nothing; it requires no definitions, no constructed effect: "a phenomenon is observed and a concept is attached to it" (Brown, 1980, p. 28).

Because the Q sort allows the subject to call up his experiences, attitudes and ideas, each Q sort is subject to factor analysis and to discovery of unpredicted phenomena. Since no hypotheses exist to be tested, Q sorts are often used in action-oriented research attempting

to learn something about people, such as teachers' perceptions, in order to deal with them, as in developing criteria for evaluation for merit pay. Since teachers' beliefs help determine the success of merit-pay plans, asking them their opinions is integral to formulating program objectives. "If value preferences are at issue, the most sensible and straight forward strategy is to ask a person to provide a synthetic picture of what his value preferences are, and one crude way of doing this is to instruct him to model his preferences in a Q sort" (Brown, 1972, p. 53).

Summary

If the goal of merit-pay programs is to reward teachers who are effective instructors of students and to motivate less effective teachers to change their behavior, then merit-pay programs must include those characteristics teachers consider important. Many teachers reject current merit-pay methods that reward characteristics they consider unrelated to effectiveness or unfair because the evaluation procedures are subjective or measure presage variables. Consequently, determining what teachers will accept can best be done by asking them via an instrument such as the Q sort which forces subjects to rank their preferences. In the present study teachers identify a body of characteristics they consider descriptive of themselves, of effective teachers, and of merit-pay recipients. No one perception alone is adequate as a base for merit-pay awards; all three must be inherent in the evaluation criteria. A Q study reveals those common characteristics and their relative values to teachers.

CHAPTER III

METHOD AND PROCEDURES

The purpose of the present study was to identify and discover relationships among teacher's perceptions regarding possible merit-pay recipients, effective teachers and themselves. This exploratory study had no hypothesis and no pre-determined conclusions to be verified.

Specific research questions to be answered were as follows:

1. Can factors be identified that are descriptive of different types of teacher behaviors?
2. How do teachers' perceptions of effective teacher characteristics reflect those found in research?
3. What differences in perceptions can be distinguished among teachers regarding self, effective teachers, and merit-pay recipients as determined by
 - a. Level taught
 - b. Amount of experience
 - c. Gender
 - d. Locale of school?
4. What characteristics are common to teacher perceptions of
 - a. Self
 - b. Effective teachers
 - c. Merit-pay recipients?

Included in this chapter will be discussions of the design of the study, the collection of statements, the selection of subjects, the administration of the Q sorts, the construction of the sort distribution and the data analysis.

Design of Study

According to Bridgeman (Deci, 1975, p. 6) the "proper definition of a concept is not in terms of its properties but in terms of actual operations." Q sorts allow the operation of the individual's interpretation and valuing of personality descriptors. Since every individual's relationship with his words is unique from everyone else's (Wittgenstein, 1971), his behavior is subjective and operant, subjective in that it is his viewpoint, operant in that it exists within a particular setting (Skinner, 1953). "The thrust of Q methodology is therefore not one of predicting what a person will say, but in getting him to say it in the first place [i.e., by representing it as a Q sort] in hopes that we may be able to discover something about what he means when he says what he says" (Brown, 1972, p. 46).

Consequently, Q methodology deals with singular propositions, specific operations from within the individual. In discussing the theoretical framework for Q, Stephenson (1980) says Level I, the general proposition, can never be proved or tested directly and consists of all the facts or statements in the universe of teachers' perceptions with no questions as to their meaning or significance. Level II, the singular proposition, puts to test the statements in Level I as the individual reacts to the conditions of the Q sort. The third level, induced propositions, are available only after individuals have modeled their preferences in a sort. They are objective and cannot be identified a priori.

Even though assertions may emanate from Level III that were not contained in Level I, each level prepares for the next to occur. The

general establishes the concourse; the singular tests it; the induced interprets it; all three are needed for verification of theory. (See Table I).

Statement Collection

Every statement of opinion, attitude, belief and value of a teacher, expressed or unexpressed, comprises what Stephenson calls the concourse (1981); from this concourse, or population, a Q sample is taken which may consist of personality traits, pictures, art objects, etc. The collection of statements, or samples, for a Q sort must be as representative as possible of the main effects (Brown and Ungs, 1970) with no a priori value existing for a statement until the sorter attaches meaning to it in his model of preference. The concourse of the present study--teachers' perceptions--is represented by statements of opinion from experts, teachers, students and administrators.

The number of statements used in a Q sort may be as large as the investigator pleases (Stephenson, 1953) with most researchers concerned with statements that put variability of meaning among the items so that extreme positions do not dominate the sort. Kerlinger (1972) says that sorters can handle up to 90 or 100 statements and recommends between 60 and 100. The more complex, he says, the fewer statements should be used. Stephenson (1953) emphasizes the need for a large number of neutral statements to reflect the absolute zero necessary for the ratio data used in standardized scores.

The concourse of phenomena represented in Figure I, Teachers' Perceptions, has in it three subsets: teacher self-perception, teacher perception of effective teachers, and teacher perception of merit-pay

TABLE I

Q METHODOLOGY AS A THEORETICAL FRAMEWORK OF STUDY

Theoretical Type	Proposition Type	Question	Procedure	Q Term
Level I	General	What characteristics of teachers exist in the literature and in research?	*Manatt's SIM Traits *Pruitt's Merit Pay Elements *Hidlebaugh's Low Effectiveness Traits General	Q Sample
Level II	Singular	What is the nature of the teacher's self-concept? What is the nature of the teacher's concept of effectiveness? What is the nature of the teacher's concept of merit pay recipients?	Q Sort	Q Technique
Level III	Induced	How will teachers define effective teachers based upon their concept of self? How will teachers define merit-pay recipients based upon their concepts of self? How will teachers define merit-pay recipients based upon their concepts of self and of effective teachers?	Factor Analysis	Q Methodology

*See Bibliography for sources.

recipients. Therefore, items representative of each subset have been included in this 1 x 4 design with four rubrics generally found in the literature and commonly used by investigators and educators to distinguish types of teacher behaviors. Items originated from research and from observations. The number of forty-eight was chosen as being large enough to represent the four teacher types yet small enough to manage by subjects doing three sorts in one hour.

TABLE II
BALANCED DESIGN OF Q STATEMENTS

Types	Classroom Manager	Teacher	Humanist	Professional
Number of Statements	12	12	12	12

Effective teacher characteristics are those verified as supported in research by Dr. Richard P. Manatt (1984) and his team of researchers working on the School Improvement Model at Iowa State University after fifteen years of study and work with educators. First compiled in 1972, the original list of 360 performance indicators has been reduced to 25 to be published fall, 1984, all supported by empirical studies. Seventeen items which were nonrepetitive and rated as indicative of highly effective teachers were included to represent the phenomenon of the effective teachers and are coded SIM HI.

Twelve descriptors of merit-pay recipients were included from the forty elements administrators and teachers agreed should be significant in formulating merit pay plans as determined in a study by Dr. Sid C. Pruitt (1982) at North Texas State University. From the original 24 that had a mean point rank of 2.6 or higher on a 4-point scale, twelve statements or combinations of statements were included to represent the merit-pay recipient phenomenon. These twelve are not repetitive of the Iowa State descriptors and are coded PRUITT.

Eleven items were taken from Dr. James E. Hidlebaugh's (1973) work with the same 360 performance indicators used by the Iowa State team. These eleven were among the items scored low by students, teachers and administrators as appropriate and suitable discriminating indicators of effective teacher performance. Chosen as opposing viewpoints to those characteristics in the Pruitt study and to help complete the concourse, these are coded SIM LO.

In addition, eight statements from current supplemental pay plans and common evaluation schemes have been included to represent traditional elements in merit-pay plans (Merit Pay Plans for Teachers: Status and Descriptions, 1983). (See Table III.)

No statement is unique to its source; many are identified by other researchers. All can be supported by some kind of research as linked to effective teaching. The Iowa State research was used as a foundation for the study because it is as comprehensive of a teacher's concourse as any study available (360 descriptors), involves many participants (1,603 students, teachers and administrators) (Hidlebaugh, 1972), and is as current as any released study (Manatt, 1984).

TABLE III
SOURCE OF Q STATEMENTS

Origin (Code)	Classroom Manager	Teacher	Humanist	Professional
School Improvement Model (SIM HI)	4	5	5	3
Pruitt Merit Pay (PRUITT)	2	5	2	3
Hidlebaugh Study (SIM LO)	2	2	4	3
General (GEN'L)	4	0	1	3

All forty-eight statements in the present study adhere to the criteria for preparing statements established by Brown (1980) and Kerlinger (1973):

1. Relative lack of ambiguity
2. Non-redundancy
3. Behavior relevance
4. Apparent validity as revealed by review of current literature
5. Representative sampling of teacher trait domain.

Since each statement takes meaning only as the subject attaches meaning to it during the Q sort, Stephenson feels that any sample of statements that has conciseness, clarity, representativeness and "the like" is acceptable for the design (Stephenson, 1953, 76). (See Table IV.)

Subject Selection

Practicality becomes a question in selecting the number of sorters to include in a Q study. Freeman (1974) suggests populations of fewer

TABLE IV
STATEMENTS FOR Q-SORT

Item Number	Item Description	Rubric Code	Source Code
1.	Sets high standards for student behavior	M	SIM HI
2.	Uses a variety of teaching techniques	M	GEN'L
3.	Organizes students for effective instruction	M	SIM HI
4.	Keeps room attractive	M	GEN'L
5.	Demonstrates flexibility in changing situations	M	SIM LO
6.	Provides materials and supplies for students	M	GEN'L
7.	Directs students to sources of vocational and career information	M	SIM LO
8.	Exhibits promptness in meeting deadlines	M	GEN'L
9.	Takes precautions to protect health and safety of students	M	PRUITT
10.	Utilizes educational resources within community	M	PRUITT
11.	Uses available materials and resources within school	M	SIM HI
12.	Demonstrates evidence of personal organization	M	SIM HI
13.	Develops and implements lesson plans	T	SIM HI
14.	Ensures adequate student time on task	T	SIM HI
15.	Collects and studies information about students	T	PRUITT
16.	Sets high expectation for student achievement	T	SIM HI
17.	Provides students with specific evaluation	T	SIM HI
18.	Prepares appropriate evaluation activities	T	SIM HI
19.	Establishes short- and long-range goals	T	PRUITT
20.	Identifies and plans for individual learning difficulties of students and seeks help as needed	T	PRUITT
21.	Develops materials for use in the classroom	T	PRUITT
22.	Develops new curriculum	T	PRUITT
23.	Exhibits enthusiasm for subject matter	T	SIM LO

TABLE IV (Continued)

24.	Uses valid testing techniques based on identified objectives	T	SIM LO
25.	Uses reasoning with students to discipline them	H	PRUITT
26.	Promotes positive self concept	H	SIM HI
27.	Demonstrates awareness of needs of students	H	SIM HI
28.	Demonstrates effective interpersonal relationships with others	H	SIM HI
29.	Provides opportunities and encourages each class member to participate	H	PRUITT
30.	Avoids forcing own decisions on the class	H	SIM LO
31.	Volunteers for school-associated activities	H	SIM LO
32.	Directs comments to individual students, not to groups	H	SIM LO
33.	Demonstrates sensitivity in relating to students	H	SIM HI
34.	Promotes self-discipline and responsibility	H	SIM HI
35.	Exhibits a sense of humor	H	SIM LO
36.	Accepts and/or uses ideas of students	H	GEN'L
37.	Participates in in-service activities	P	PRUITT
38.	Assumes responsibilities outside the classroom as they relate to school	P	SIM HI
39.	Supports school regulations and policies	P	SIM HI
40.	Demonstrates willingness to keep curriculum and instructional practices current	P	SIM HI
41.	Belongs to professional organizations	P	SIM LO
42.	Attends and participates in school-called meetings	P	SIM LO
43.	Experienced several years of teaching	P	GEN'L
44.	Seeks formal training beyond a bachelor's degree	P	GEN'L
45.	Avoids discussing other school personnel with students or parents	P	SIM LO
46.	Exerts positive leadership within the faculty for solving problems related to school	P P	PRUITT
47.	Assumes classroom-connected assignments	P	PRUITT
48.	Analyzes professional literature related to classroom experiences	P	GEN'L

than 200 with some researcher foreknowledge of the characteristics of the sorters. Stephenson recommends carefully selected small samples saying he is not concerned about R methodology and its assumptions and rules regarding sampling. ". . . a good theory and faith that there are plenty more were X came from" are all the criteria needed (Stephenson, 1953, 343).

Brown addresses the problem of generalization in terms of specimen and type: "Generalizations are expected to be valid for other persons of the same type, i.e., for those persons whose views would lead them to load highly on factor A" (1972, 67). He maintains that five or six persons loaded significantly on a factor are sufficient to produce reliable scores; thus, no more than forty subjects are required in a Q study (Brown, 1980).

The design of a P-set, or subjects selected, should include, therefore, persons suspected of having viewpoints regarding the issue(s) being studied. A P-set for the present study could include any number of categories of people such as students, parents, and school board members. Since teachers are, however, the subjects of merit-pay programs, the present study was of those individuals in public schools who have classroom teaching assignments. No individuals such as administrators, counselors and media personnel were included.

In a teacher population with varying amounts and degrees of work and teaching experience, age, course of study, training, administrative support and other exigencies which teachers perceive to influence their effectiveness, teachers were studied by gender, level of assignment, locale of school and years of experience. These particular aspects were

included because literature reveals differences can be distinguished on these bases. (See Table V.)

TABLE V
P-SET STRUCTURE FOR Q STUDY

Main Effects*	Levels(Code)	Number
A. Gender	(a) Female (F)	44
	(b) Male (M)	17
B. Level	(c) Elementary (E)	23
	(d) Secondary (S)	38
C. Locale	(e) Rural (R)	31
	(f) Urban (U)	30
D. Experience	(g) 1-6 years (A)	14
	(h) 7-12 years (B)	17
	(i) 13 years and over (C)	30

*ABCD = (2)(2)(2)(3) = 24 Combinations

In his study of 541 educators in Alabama schools to ascertain merit-pay factors acceptable to different groups, Love (1970) found significant differences among teachers' responses based upon the following variables:

1. Elementary versus high school assignment
2. Experience of 13 years and over versus 1-6 and 7-12 years

3. Stratum I systems (15,000 and over) versus Strata II (6,000-14,999) and III (5,999 and under)
4. Male versus female.

Heikkinen (1978) found teachers' perceptions of their teaching styles vary as determined by grade level taught, years of teaching experience and subject matter taught; and Garrett (1977) found differences between male and female teachers regarding their perceptions of causes of student achievement.

Teachers in two different geographic settings were used to determine if differences exist between perceptions of teachers working in a rural school and of those working in an urban one. The rural school is 36 miles from the urban center and requires 45 minutes of travel time via one-lane highways. Even though some townspeople commute to urban areas to work, the atmosphere and setting of the town, population 2,000, and the school, enrollment 779 in grades K-12, are agrarian with most families living on acreages. The school administration was eager to help in the research and offered one staff development point for any of the 42 certificated personnel who wished to volunteer. Sorts of thirty-one rural classroom teachers were analyzed.

The urban teachers work in a city of 340,000 people with a school enrollment of 45,582 in grades K-12 and approximately 2,900 certificated personnel. District administrators referred the request to conduct the study to the local classroom teachers' association and freed volunteer teachers from two hours of post-school-year activities in order to perform the Q sorts. Sorts of thirty urban classroom teachers were analyzed. To honor their requests for anonymity the schools are referred to as rural and urban.

Administration of Q Sort

A field study to audit the administration of the sort was conducted on ten graduate students enrolled in an education course. Administration procedures, conditions of instructions and statement content were tested and re-examined. For discussion purposes condition means instruction; deck refers to a set of shuffled statement cards; and sort is the subject statement arrangement.

Each of the two district faculties studied rank ordered 48 cards on which the statements had been printed in a quasi-normal distribution according to the form board model on a continuum from "most unlike" to "most like" under three conditions: (See Figure 2.)

- C1 - Which characteristics are "most like" and "most unlike" you as a teacher?
- C2 - Which characteristics are "most like" and "most unlike" those of effective teachers?
- C3 - Which characteristics are "most like" and "most unlike" those of teachers who should receive merit pay?

Subjects had pencils, numbered demographics sheets, form boards and three decks of statements before them when the approximately one-hour Q-sort session began. After hearing Condition One, subjects read each statement in one deck and placed it into one of three piles--one of statements which were like them, one which were unlike and one for which they felt indifference. Once the coarse sorting was completed, subjects then followed the pattern of numbers at the top of their form boards, selecting the three statements very most like themselves as teachers and placing them in the far right column. Working back and forth between the "most likes" and "most unlikes," teachers chose the appropriate number of cards for each column. After all cards

MOST UNLIKE		SOMEWHAT UNLIKE		NEUTRAL		SOMEWHAT LIKE		MOST LIKE
3		5		6		6		5
				8				3

Frequency (f)	3		5		6		6		6		5		3
Computational Value (X)	1		2		3		4		5		6		7

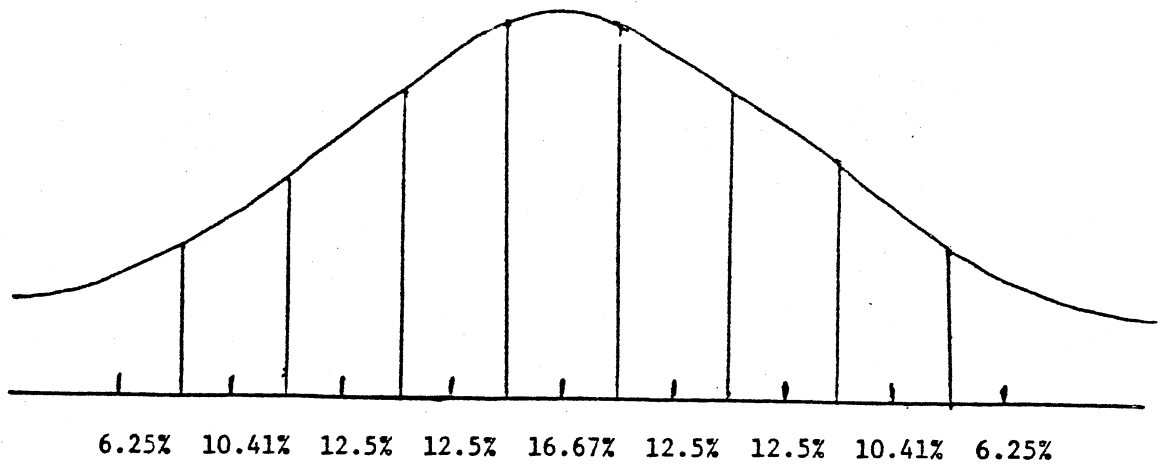
F = 48

FIGURE 2. Q-Sort Form Board

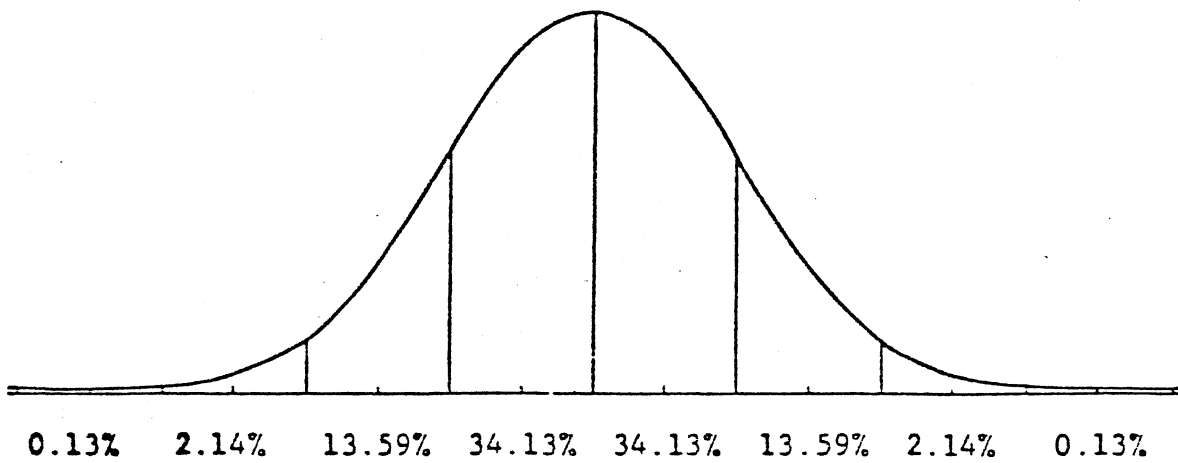
were sorted and teachers encouraged to look over their arrangements, they picked up the far left column of cards, placed it in the palm of one hand, picked up the next column and so on across the board until the last column, "most like," was on top. They then wrote 1 on the top card and banded the pile. Identical instructions were given and procedures were followed for Conditions Two and Three. After all three sorts, subjects wrote their demographics number on the top and banded all three decks together. At the conclusion of the session, teachers were asked to complete the demographics sheet and to react to the study. Comments were recorded at this time for help in interpreting the factors.

Construction of Q-Sort

One area of concern to most researchers about Brown's "synthetic picture" is the forced-choice rank-ordering Q sorts demand of subjects. Jones (1956) feels only free sorts should be done because subjects do not naturally sort in normal distributions or associate equal intervals with the degree of their interactions. Kerlinger rejects these reasons because the sample of statements, kinds of subjects and social desirability of items vary. Even if the distribution is normal, he says, ". . . subjects may not perceive the distribution 'in themselves'" (1972, 17). Block (1961) found the correlation between forced and free Q sorts of personality descriptions to be over .90; his forced sort with a quasi-normal distribution had even greater stability and discrimination. The primary argument for forced sorts is that they provide data in a convenient form for comparison and computation and encourage the sorter to reveal levels of discrimination he might not reveal in a free sort. (See Figure 3.)



Distribution of Q-Sort in This Study



Normal Distribution

FIGURE 3. Distribution of Q Sort Compared to Normal Distribution

Data Analysis

Stephenson's goal is "to bring the method of physics into the realm of personality measurement" (1935, 299). This requires a change of thought, a paradigm shift, for Q means active, not passive; subjective impression, not objective expression; and process, not occurrence. The unit of measurement is the significance each Q-sorter gives to the statements which received the most weight compared with others for a given factor. High positive scores indicate sorters felt strongly about the statement; high negative scores indicate strong negative responses; and near-zero scores indicate ambiguous, neutral responses. Several sorters may load on a particular factor because their responses to the statements have been identical. Other factor loadings, however, will differ. Therefore, the use of statistics helps determine significantly different arrangements for each factor.

All viewpoints of the Q sample are equal until they have been modeled in a Q sort. Even though the placement of each Q statement is the result of an indefinite number of interactions within the sorter, the number of factors that will emerge is limited (Keynes, 1921). No more than five patterns, in fact, usually emerge (Brown, 1980). Therefore, only a few individuals loaded significantly on a factor are needed. No guarantee is given that every factor in the concourse will be identified, only that those identified do exist (Stephenson, 1953; Thompson, 1966; Brown, 1980).

In the present study the Q-sort data were coded, correlated and factor analyzed using the QUANAL (Van Tubergen, 1980) program in order to interpret the factors. The QUANAL computer analysis is a principal-

factor method which first established a correlation matrix, then determined principal axes to create a factor matrix. In the third step, Varimax (orthogonal) rotation produced a rotated factor matrix for each condition, One and Three, and Oblimax (oblique) rotation produced a rotated factor matrix for Condition Two. From these, factor scores were derived for the final step, factor interpretation.

CHAPTER IV
ANALYSIS OF DATA AND RESULTS

The purpose of the present study was to investigate teachers' perceptions regarding three sets of teacher behaviors--those of self, of effective teachers and of merit-pay recipients. The goal was to answer four research questions, the answers to which may advance educators' knowledge of those characteristics teachers perceive to be common to all three personalities. Data from 61 teachers of both genders and levels and of various degrees of experience from two geographical areas were analyzed from their ranking of characteristics "most like" to "most unlike" in three Q sorts.

Even though the Q-sort technique is a modified rank ordering, the number of varied Q sorts within a study may be quite large. The constraints of a forced distribution design do limit the amount of variance among individual preferences but not the number of opportunities for individual differences. Therefore, the immense task of manipulating Q-sort data for analyzation is best accomplished by computer. QUANAL, a program devised by Dr. Norman Van Tubergen in 1965 and updated in 1975 and 1980, was used to analyze a total of 61 subjects each completing three Q sorts and provided the data to inspect the relationship of factors emerging from the three conditions and the factors within each condition.

After formatting preliminaries, QUANAL output gives means and standard deviations for each variable followed by a matrix of

correlations and covariances. Before listing the principal factors extracted the program gives approximate t values, communalities, eigenvalues, variance distribution, trace and suggestions regarding the number of retained factors using the Scree test, the common variance test, and Humphrey's criterion. A principal factors matrix is followed by the extended vector matrix and the results of the rotation. The final structure matrix is printed in reordered form. The final phase, called WRAP, provides z -(factor) scores.

Inherent in the forced choice distribution are a mean and a standard deviation that are the same for all sorts. With a $\bar{X} = 0$ and a standard deviation of 1.0, the forced-choice distribution has the "same unit for all Q-sorts, for everyone, for all conditions of instruction" (Stephenson, 1980, 117). For computer entry convenience and elimination of negative values for statistical analysis, the scoring continuum +1 to +9 with a $\bar{X} = 5$ and a standard deviation of 2.2638 were used.

After the raw data scores were entered, the mean and the standard deviation for each individual sort were computed. Then, the correlation coefficient for each Q sort to every other Q sort was determined under each condition. The correlation coefficients were factor analyzed by the principal axis method followed by Varimax (orthogonal) rotation for Conditions One and Three and an Oblimax (oblique) rotation for Condition Two. These rotations provided the factor loadings with a range of 5 to 13 iterations performed. Dr. Norman Van Tubergen, the Q methodologist who manipulated the original data, believes that oblique relationships are more common in human nature and, thus, looks for typologies that are inter-related rather than independent. If an oblique solution

cannot be found, he looks for an orthogonal one. Consequently, both solutions were sought and the one contained in his philosophy and the data was selected. Thus using his experience and subjective judgment, a three-factor solution was chosen for Decks One and Two and a two-factor solution for Deck Three. Each Q sort was assigned to the factor on which the sort loaded highest for each of the three conditions.

Analysis of Condition One Statistics

Of the 61 sorts of Condition One, "Which characteristics are most like and most unlike you?", 25 loaded on Factor One, 17 on Factor Two and 19 on Factor Three. (See Table VI.) The chosen eigenvalue for the first centroid estimate in Condition One, Factor One was 11.09; for Factor Two, 4.24; and for Factor Three, 3.43. The percentage of total variance for each factor was 18.19 percent for Factor One, 6.95 percent for Factor Two and 5.63 percent for Factor Three. The variance within the three-factor solution totaled 100 percent with 59.1 percent in Factor One, 22.59 percent in Factor Two, and 18.29 percent in Factor Three.

Noticeable among the loadings were differences in demographic data. Gender preferences are observable with the 41.17 percent of the 17 males loading on Factor One, 41.17 percent on Factor Two and 17.65 percent on Factor Three. Of the 44 females, 40.90 percent loaded on Factor One, 22.72 percent on Factor Two and 36.36 percent on Factor Three.

Secondary teachers had the highest single loading of all. Of the 38, 50.0 percent loaded on Factor One, 31.5 percent on Factor Two, and 18.42 percent on Factor Three. Elementary teachers preferred another

TABLE VI
 CONDITION ONE: VARIABLE ASSIGNMENTS WITH FACTOR WEIGHTS

Variable	Demographic Code ^a	Factor One (N= 25)	Factor Two (N= 17)	Factor Three (N= 19)
43	F S U C	1.6041		
40	F E U C	1.3073		
45	M S U C	1.1726		
57	F S U C	0.9985		
59	F E U C	0.9493		
13	F S R C	0.8788		
61	F S U A	0.8417		
36	F S U C	0.8361		
49	F E U B	0.8155		
48	M S U C	0.7109		
56	F S U A	0.6605		
50	M S U C	0.6585		
38	F E U B	0.6265		
2	M S R A	0.6251		
52	M S U C	0.6036		
51	F S U C	0.6019		
41	F S U C	0.5353		
25	F S R C	0.4962		
54	M S U B	0.4483		
37	F E U B	0.4281		
39	F S U B	0.3888		
34	F S U C	0.3558		
35	F S U C	0.3500		
44	F E U B	0.2806		
42	M S U C	0.2003		
18	M S R C		1.1873	
22	F E R A		0.9909	
26	M S R C		0.9900	
53	M S U B		0.7977	
30	M S R C		0.6448	
31	F E R C		0.6193	
55	F S U B		0.5849	

TABLE VI (Continued)

23	F S R B	0.5025	
14	M E R A	0.4465	
27	F S R C	0.3882	
15	F S R C	0.3844	
10	M S R C	0.3738	
19	F S R C	0.3474	
47	M S U C	0.2948	
28	F E R A	0.2791	
11	F E R C	0.2704	
12	F S R C	0.1653	
1	M E R A		0.9570
33	F E U C		0.9587
6	F E R A		0.8183
7	F E R A		0.7634
29	F S R B		0.7588
60	F S U C		0.7230
9	F E R A		0.6347
32	M E U B		0.6163
20	F S R A		0.5950
5	F E R A		0.5837
16	F E R A		0.5494
3	F E R C		0.5368
8	F E R A		0.4999
4	F E R A		0.4920
24	F S R B		0.4725
17	F S R A		0.4175
21	F E R B		0.4146
58	F S U B		0.3041
46	M S U C		0.1548

^aSee Table V. for applicable coding format.

factor, loading heaviest on Factor Three with 52.17 percent. Loadings were equal on the remaining factors.

Perhaps the greatest discrimination can be made in locale. Of the 61 subjects, 3 (9.68 percent) rural teachers and 22 (73.33 percent) urban teachers loaded on Factor One; 14 (45.16 percent) rural and 3 (10.0 percent) urban loaded on Factor Two; and 14 (45.16 percent) rural and 5 (16.66 percent) urban loaded on Factor Three. Factor One produced a clear difference in preference for statements regarding self.

Experience differences were revealed in inexperienced teachers who loaded on Factor Three with 62.50 percent. They split on the remaining factors as did teachers in the other groups, 7-13 years experience and over 13. (See Table VII.)

From the factor loadings z-scores were derived with item descriptions. Arrayed in descending order, z-scores ranged from +2.362 to -2.05 for Factor One. For Factor Two, z-scores ranged from +1.840 to -2.294; for Factor Three, from =1.955 to -2.102. These data were used to interpret the factors. (See Table VI.)

The correlation coefficient between factors shows how distinctly different the factors are. Factor One correlated with Factor Two with a slight correlation. Factors One and Three correlate more closely with a .53 correlation, and Factor Three correlation to Factor Two is the most different at .22. Factors One and Two are different, and Factors Three and Two are different, but One and Three are more closely associated. (See Table VIII.)

Other features of the QUANAL program allow for extensive item analysis by providing item descriptions with differences between factors,

TABLE VII
 CONDITION ONE: LOADINGS BY DEMOGRAPHIC PERCENTAGES

Characteristic	Factor One	Factor Two	Factor Three
Gender: Male	41.17%	41.17%	17.65%
Female	40.90%	22.72%	36.36%
Experience: 1-6	18.75%	18.75%	62.50%
7-13	42.85%	21.43%	35.71%
13+	51.61%	34.48%	12.90%
Level: Elementary	26.09%	21.73%	52.17%
Secondary	50.00%	31.57%	18.42%
Locale: Rural	9.68%	45.16%	45.16%
Urban	73.33%	10.00%	16.67%

TABLE VIII
 CONDITION ONE: CORRELATIONS BETWEEN FACTORS

Factor	Factor One	Factor Two	Factor Three
One	1.000	0.323	0.530
Two	0.323	1.000	0.215
Three	0.530	0.215	1.000

item descriptions with z's greater than and less than other z's and consensus items. All such data were used to interpret the factors.

Analysis of Condition One Factor Scores

Examining the factor structure for Condition One, several observations are apparent. The most obvious is the division between the rural and the urban teachers. Rurals tend to load on Factors Two and Three, and urbans show a strong tendency to load on Factor One. Inexperienced teachers also load on Factor Three. Most (defined as 50 percent or more) of the secondary teachers loaded on Factor One; most of the elementary, on Factor Three. Males and females loaded rather evenly on all factors with females preferring Factor Two least.

Condition One: Factor One

Factor loadings are interpreted by examining the highest positive and negative z-scores which reflect the extreme opinions of the subjects who loaded on that factor. On Factor One the highest positive z-scores denote a classroom manager who is concerned about student control and teaching techniques. For discussion purposes, this type will be called Classroom Manager and z-scores of ± 1.0 will be included to indicate preference for behaviors.

	<u>Z-Score</u>
16. Sets high expectations for student achievement	2.362
10. Utilizes educational resources within community	2.058
3. Organizes students for effective instruction	1.775
25. Uses reasoning with students to discipline them	1.623
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.339
2. Uses a variety of teaching techniques	1.290
9. Takes precautions to protect health and safety of students	1.007
11. Uses available materials and resources within the school	.099

These z-scores represent the two extreme categories of "most like" the Classroom Manager's perception of himself.

The highest negative scores, or "most unlike," reveal extreme reactions to activities associated in the literature with the professional teacher. A natural break occurs assuring extreme opinion reflected in the items.

	<u>Z-Score</u>
37. Participates in in-service activities	-2.049
44. Seeks formal training beyond bachelor's degree	-1.454
4. Keeps room attractive	-1.340
1. Sets high standards for student behavior	-1.248
38. Assumes responsibilities outside the classroom as they relate to school	-1.183
45. Avoids discussing other school personnel with students or parents	-1.151
41. Belongs to professional organizations	-1.107
43. Experienced several years of teaching	-1.089

Therefore, the individuals who loaded on Factor One see themselves in control of their classrooms and not involved in the activities others ascribe to career teachers.

Condition One: Factor Two

Teachers who loaded on Condition One, Factor Two, perceive themselves as participating in and supporting school activities, meetings, regulations and policies. They tend to volunteer and support established school practices; they are, therefore, Conformists. In this context, considering the other items clustered with it at the positive end, Item 26 can be thought of as promoting teacher, not student, self-concept.

16. Sets high expectation for student achievement	-1.840
47. Assumes classroom-connected assignments	-1.831
42. Attends and participates in school-called meetings	-1.727
39. Supports school regulations and policies	-1.553
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	-1.253

	<u>Z-Score</u>
31. Volunteers for school-associated activities	-1.146
26. Promotes positive self concept	-1.011
38. Assumes responsibilities outside the classroom as they relate to school	-1.002

In the extreme negative z-scores two general characteristics emerge. One reveals a type of person who lacks a theoretical approach to curriculum development or the belief that teaching is a science. The data for this characteristic can be seen in the following statements:

18. Prepares appropriate evaluation activities	-1.902
21. Develops materials for use in the classroom	-1.168
6. Provides materials and supplies for students	-1.054
24. Uses valid testing techniques based on identified objectives	-1.038
17. Provides students with specific evaluation feedback	-1.009

The second general category of characteristics that teachers loaded on Factor Two considered least like themselves relates to initiative and enthusiasm inside and outside the classroom. This is revealed by their placement of the following statements:

28. Exhibits promptness in meeting deadlines	-2.294
23. Exhibits enthusiasm for subject matter	-1.705
37. Participates in in-service activities	-1.552
4. Keeps room attractive	-1.177

Condition One: Factor Three

Teachers who have high positive z-scores on Factor Three tend to value the effective aspect of student learning as depicted in the following items and scores:

27. Demonstrates awareness of needs of students	1.955
28. Demonstrates effective interpersonal relationships with others	1.528
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.508
36. Accepts and/or uses ideas of students	1.505

Item 2, "Uses a variety of teaching techniques" ($z = 1.728$), can be interpreted within this cluster as helping meet the needs of students.

In addition, their concern about students is manifested in other items:

	<u>Z-Score</u>
24. Uses valid testing techniques based on identified objectives	1.183
25. Exhibits enthusiasm for subject matter	1.137
24. Sets high expectation for student achievement	1.096

Even though the next highest z-score is .925, this item regarding self-concept may be interpreted to be that of student self-concept.

The extreme negative z-scores for Factor Three type persons reveal an individualistic attitude about themselves, creating the title of Student-Oriented Individualist. They are not concerned with what happens outside the classroom.

38. Assumes responsibilities outside the classroom as they relate to school	-1.694
11. Uses available materials and resources within school	-1.678
46. Exerts positive leadership within the faculty for solving problems	-1.330
37. Participates in in-service activities	-1.258
42. Attends and participates in school-called meetings	-1.217

They also place little importance on keeping their room attractive; they force their own decisions on students; and they address groups of students, not individual students.

4. Keeps room attractive	-2.102
30. Avoids forcing own decisions on the class	-1.426
32. Directs comments to individual students, not to groups	-1.258

Analysis of Condition Two Statistics

For the second set of data, sorted under Condition Two, "Which characteristics are most like and most unlike those of effective teachers," Van Tubergen found a three-factor solution via Oblimax rotation. Of the 61 sorts, 25 loaded on Factor One, 16 loaded on Factor Two, and 20 loaded on Factor Three. (See Table IX.) The chosen eigenvalue for the

TABLE IX

CONDITION TWO: VARIABLE ASSIGNMENT WITH FACTOR WEIGHTS

Variable	Demographic Code ^a	Factor One (N= 41)	Factor Two (N=18)
6	F E R A	2.1496	
24	F S R B	1.9133	
23	F S R B	1.8314	
15	F S R C	1.7772	
13	F S R C	1.5371	
57	F S U C	1.4735	
49	F E U B	1.4651	
43	F S U C	1.4631	
59	F E U C	1.4379	
7	F E R A	1.4264	
54	M S U B	1.3580	
20	F S R A	1.3239	
55	F S U B	1.2936	
32	M E U B	1.2483	
61	F S U A	1.2447	
50	M S U C	1.2341	
60	F S U C	1.1480	
4	F E R A	1.1395	
31	F E R C	1.1231	
12	F S R C	1.0987	
2	M S R A	1.0410	
44	F E U B	1.0596	
58	F S U B	1.0344	
48	M S U C	1.0045	
5	F E R A	0.9483	
30	M S R C	0.8783	
9	F E R A	0.8671	
52	M S U C	0.8143	
28	F E R A	0.7792	
1	M E R A	0.7285	
19	F S R C	0.7234	

TABLE IX (Continued)

41	F S U C	0.7124	
34	F S U C	0.6642	
29	F S R B	0.6486	
14	M E R A	0.6432	
11	F E R C	0.6185	
26	M S R C	0.5941	
21	F E R B	0.5081	
22	F E R A	0.4824	
8	F E R A	0.4210	
27	F S R C	0.3472	
47	M S U C		1.5312
33	F E U C		1.4016
45	M S U C		1.2391
40	F E U C		1.1531
36	F S U C		0.9072
35	F S U C		0.8722
42	M S U C		0.8421
39	F S U B		0.8158
37	F E U B		0.7862
16	F E R A		0.7177
56	F S U A		0.6751
3	F E R C		0.6579
51	F S U C		0.6243
10	M S R C		0.5776
38	F E U B		0.4721
46	M S U C		0.3173
18	M S R C		0.2231
17	F S R A		0.1973

^aSee Table V. for applicable coding format.

first centroid estimate in Condition Two, Factor One was 21.09; for Factor Two, 3.37; and for Factor Three, 2.67. The percentage of total variance for each factor was 34.58 percent for Factor One; 5.54 percent for Factor Two; and 4.38 percent for Factor Three. The variance within the three-factor solution totaled 100 percent with 77.72 percent in Factor One, 12.43 percent in Factor Two, and 7.79 percent in Three.

Of the 17 males sorting for Condition Two, 4 (23.53 percent) loaded on Factor One; 7 (41.18 percent) loaded on Factor Two; and 6 (35.29 percent) on Factor Three. Of the 44 females, 21 (47.73 percent) loaded on Factor One; 9 (20.45 percent) loaded on Factor Two; and 14 (31.81 percent) loaded on Factor Three. Elementary teachers loaded 43.48 percent on Factor One, 17.39 percent on Factor Two, and 39.13 percent on Factor Three. Secondary teachers were evenly loaded across the three factors. Very uniform loadings occurred, too, within the locale effect. Of the 61 subjects sorting, the greatest difference was on Factor Two with 16.13 percent of the rural teachers and 36.67 percent of the urban teachers. The highest percentage of all three experience groups occurred in Factor Three with a loading of 50 percent of the teachers having six or fewer years; only 12.5 percent of the novices loaded on Factor Two. (See Table X.)

Z-scores from the factor loadings ranged from +1.857 to -1.477 for Factor One, +2.011 to -1.615 for Factor Two, and +1.961 to -2.119 for Factor Three. The correlation coefficient between factors is high among all three (See Table XI.)

Analysis of Condition Two Factor Scores

Examining the factor structure for Condition Two, several general

TABLE X

CONDITION TWO: LOADINGS BY DEMOGRAPHIC PERCENTAGES

Characteristic	Factor One	Factor Two	Factor Three
Gender: Male	23.53%	41.18%	35.29%
Female	47.74%	20.45%	31.81%
Experience: 1-6	37.50%	12.50%	50.00%
7-13	40.00%	26.67%	33.33%
13+	43.33%	33.33%	23.33%
Level: Elementary	43.48%	17.39%	39.13%
Secondary	39.47%	31.58%	28.95%
Locale: Rural	45.16%	16.13%	38.71%
Urban	36.67%	36.67%	26.67%

TABLE XI

CONDITION TWO: CORRELATIONS BETWEEN FACTORS

Factor	Factor One	Factor Two	Factor Three
One	1.000	0.677	0.596
Two	0.677	1.000	0.503
Three	0.596	0.503	1.000

remarks can be made. A rural-urban demarcation exists only on Factor Two. Almost one half of the females cluster on Factor One and only 20 percent on Factor Two. Male preferences are opposite with 47.73 percent on Factor One and 20.45 percent on Factor Two. Factor Three has a similar percentage of males and females. Secondary and elementary teachers are loaded alike on all three factors except on Factor Two which is preferred by only 17.39 percent of the elementary teachers. Amount of experience is the most distinguishing difference. While all other levels are similarly represented in the factors, inexperienced teachers prefer Factor Three (50 percent) and shun Factor Two (12.50 percent).

Condition Two: Factor One

The teachers who loaded on Factor One interpret effectiveness in terms of being student-oriented as seen in the following item descriptions and z-scores:

	<u>Z-Score</u>
27. Demonstrates awareness of needs of students	1.857
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.747
25. Uses reasoning with students to discipline them	1.739
16. Sets high expectation for student achievement	1.639
36. Accepts and/or uses ideas of students	1.601
26. Promotes positive self concept	1.501
24. Uses valid testing techniques based on identified objectives	1.315

Two additional items that receive z-scores of more than +1.0 also reveal concern for teacher influence upon student:

2. Uses a variety of teaching techniques	1.173
28. Demonstrates effective interpersonal relationships with others	1.006

This generalization is supported further by the negative characteristics attributed to effective teachers by individuals loading on Factor One.

Therefore, this type of effective teacher is the Natural Teacher who believes that conditions external to the teacher's personality do not enhance effectiveness:

	<u>Z-Score</u>
47. Assumes classroom-connected assignments	-1.352
38. Assumes responsibilities outside the classroom as they relate to school	-1.308
40. Demonstrates willingness to keep curriculum and instructional practices current	-1.254
44. Seeks formal training beyond bachelor's degree	-1.205
37. Participates in in-service activities	-1.152
41. Belongs to professional organizations	-1.082
42. Attends and participates in school-called meetings	-0.959
11. Uses available materials and resources within the school	-0.876

Two additional items in the least-like effective teachers portrayal by Factor One types depict a person who does not value group standards or practices:

6. Provides materials and supplies for students	-1.477
1. Sets high standards for student behavior	-1.330

Condition Two: Factor Two

Teachers with high positive z-scores on Condition Two, Factor Two, believe effective teachers have an idealistic, scientific approach to teaching, one that is commonly taught in university education classes. This Idealistic Instructor is evident in the following items and z-scores:

3. Organizes students for effective instruction	2.011
2. Uses a variety of teaching techniques	1.754
16. Sets high expectation for student achievement	1.730
10. Utilizes educational resources within community	1.573
15. Collects and studies information about students	1.469
13. Develops and implements lesson plans	1.408
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.350
5. Demonstrates flexibility in changing situations	1.343
17. Provides students with specific evaluation feedback	1.024
14. Ensures adequate student time on task	0.827

This is the only factor of the eight in the present study that gives any significance to Item 14, the most important condition necessary for student achievement other than socio-economic status and intelligence in the Effective Schools research (Squires and others, 1983).

	<u>Z-Score</u>
37. Participates in in-service activities	-1.615
44. Seeks formal training beyond bachelor's degree	-1.567
47. Assumes classroom-connected assignments	-1.424
43. Experienced several years of teaching	-1.375
38. Assumes responsibilities outside the classroom as they relate to school	-1.227
41. Belongs to professional organizations	-1.167
39. Supports school regulations and policies	-0.957

Condition Two: Factor Three

Teachers loading with high positive z-scores on Factor Three regard the effective teacher as a Casual Humanist. Most evident are those characteristics related to a humanistic philosophy of students as seen in the following items and their z-scores:

27. Demonstrates awareness of needs of students	1.412
26. Promotes positive self concept	1.384
36. Accepts and/or uses ideas of students	1.333
25. Uses reasoning with students to discipline them	1.328
28. Demonstrates effective interpersonal relationships with others	1.076

Other characteristics that define this perception of the effective teachers puts responsibility for learning upon the students, thus minimizing teacher effort:

10. Utilizes educational resources within community	1.961
16. Sets high expectation for student achievement	1.809
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.694
3. Organizes students for effective instruction	1.680

Items 2 and 10, perhaps, are related to using other resources for instruction and avoiding personal cognitive relationships. Additional data to

support these characteristics are found in the high negative z-scores:

	<u>Z-Score</u>
4. Keeps room attractive	-2.119
37. Participates in in-service activities	-1.794
19. Exhibits promptness in meeting deadlines	-1.463
22. Develops new curriculum	-1.359
18. Prepares appropriate evaluation activities	-1.356
40. Demonstrates willingness to keep curriculum and instructional practices current	-1.214
21. Develops material for use in the classroom	-0.934

This was the only factor that valued Item 35, "Exhibits a sense of humor" ($z = 0.821$). The Casual Humanist is a relaxed, cheerful teacher.

Analysis of Condition Three Statistics

A two-factor solution by Varimax rotation emerged from the Deck Three data sorted under Condition Three: "Which characteristics are most like and most unlike those of teachers who should receive merit pay?" Of the 59 sorts analyzed, 41 loaded on Factor One; 18 loaded on Factor Two. (See Table XII.) Two sorts had incomplete data (Variables 25 and 53). The chosen eigenvalue for Factor One was 21.7022; for Factor Two, 3.7338. The percentage of total variance for each factor was 36.17 percent for Factor One and 6.22 percent for Factor Two. The variance within the two-factor solution totaled 100 percent with 85.3 percent in Factor One and 14.68 percent in Factor Two.

Demographic distinctions could be made among the sorts. Both males and females loaded highly on Factor One with 10 (62.50 percent) of the males loaded on Factor One and 6 (37.50 percent) on Factor Two. Of the 43 females, 31 (72.09 percent) loaded on Factor One and 12 (27.91 percent) loaded on Factor Two. Of the 23 elementary teachers analyzed, 73.91 percent loaded on Factor One and 26.09 percent on Factor Two. In addition, secondary teachers had a pronounced difference with

TABLE XII

CONDITION THREE: VARIABLE ASSIGNMENT WITH FACTOR WEIGHTS

Variable	Demographic Code ^a	Factor One (N= 41)	Factor Two (N=18)
6	F E R A	2.1496	
24	F S R B	1.9133	
23	F S R B	1.8314	
15	F S R C	1.7772	
13	F S R C	1.5371	
57	F S U C	1.4735	
49	F E U B	1.4651	
43	F S U C	1.4631	
59	F E U C	1.4379	
7	F E R A	1.4264	
54	M S U B	1.3580	
20	F S R A	1.3239	
55	F S U B	1.2936	
32	M E U B	1.2483	
61	F S U A	1.2447	
50	M S U C	1.2341	
60	F S U C	1.1480	
4	F E R A	1.1395	
31	F E R C	1.1231	
12	F S R C	1.0987	
2	M S R A	1.0410	
44	F E U B	1.0596	
58	F S U B	1.0344	
48	M S U C	1.0045	
5	F E R A	0.9483	
30	M S R C	0.8783	
9	F E R A	0.8671	
52	M S U C	0.8143	
28	F E R A	0.7792	
1	M E R A	0.7285	
19	F S R C	0.7234	

TABLE XII (Continued)

41	F S U C	0.7124	
34	F S U C	0.6642	
29	F S R B	0.6486	
14	M E R A	0.6432	
11	F E R C	0.6185	
26	M S R C	0.5941	
21	F E R B	0.5081	
22	F E R A	0.4824	
8	F E R A	0.4210	
27	F S R C	0.3472	
47	M S U C		1.5312
33	F E U C		1.4016
45	M S U C		1.2391
40	F E U C		1.1531
36	F S U C		0.9072
35	F S U C		0.8722
42	M S U C		0.8421
39	F S U B		0.8158
37	F E U B		0.7862
16	F E R A		0.7177
56	F S U A		0.6751
3	F E R C		0.6579
51	F S U C		0.6243
10	M S R C		0.5776
38	F E U B		0.4721
46	M S U C		0.3173
18	M S R C		0.2231
17	F S R A		0.1973

^aSee Table V. for applicable coding format.

66.66 percent loaded on Factor One and 33.33 percent on Factor Two. Of the 59 subjects, 25 (83.33 percent) rural and 16 (55.17 percent) loaded on Factor One; only 5 (16.67 percent) of the rural and 13 (44.83 percent) of the urban loaded on Factor Two. (See Table XIII.)

TABLE XIII
CONDITION THREE: LOADINGS BY DEMOGRAPHIC PERCENTAGES

Characteristic	Factor One	Factor Two
Gender: Males	62.50%	37.50%
Females	72.09%	27.91%
Experience: 1-6	81.25%	18.75%
7-13	76.92%	23.08%
13+	60.00%	40.00%
Level: Elementary	73.91%	26.09%
Secondary	66.66%	33.33%
Locale: Rural	83.33%	16.67%
Urban	55.17%	44.83%

Teachers of six or fewer years of experience loaded more heavily on Factor One than any other experience group (81.25 percent). The most evenly loaded were the teachers with 13 or more years with 60.0 percent and 40.0 percent respectively.

The factor loadings were used to derive z-scores which ranged from +1.867 to -1.831 for Factor One and from +2.126 to -2.2340 for Factor Two. The correlation between Factors One and Two was .571. (See Table XIV.)

TABLE XIV
CONDITION THREE: CORRELATIONS BETWEEN FACTORS

Factor	Factor One	Factor Two
One	1.000	0.571
Two	0.571	1.000

Analysis of Condition Three Factor Scores

Examining the factor structure for Condition Three reveals a major one-factor structure with a minor secondary factor. A large majority of all people loaded on Factor One. The small Factor Two is heavily loaded with urban teachers, two-thirds of whom are females. Of the 6 rural teachers loaded on Factor Two, 5 are females. (See Table XII.)

Condition Three: Factor One

The teacher subjects in the present study think should receive merit pay is the Interactive Controller. Most of the characteristics receiving z-scores of ± 1.2 or more are observable characteristics that, even though they do not have operational definitions as such, can be measured if the criteria have been pre-determined.

	<u>Z-Score</u>
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.742
10. Utilizes educational resources within community	1.467
3. Organizes students for effective instruction	1.362
25. Uses reasoning with students to discipline them	1.359
24. Uses valid testing techniques based on identified objectives	1.280
25. Uses a variety of teaching techniques	1.272

Two characteristics considered important for merit-pay purposes, however, are attitudinal and cannot be measured.

	<u>Z-Score</u>
16. Sets high expectation for student achievement	1.867
27. Demonstrates awareness of needs of students	1.682

Also subject to evaluator's opinion is the definition of "effective" in Item 3.

Characteristics receiving high negative z-scores reveal a person should not be paid for his initiative or for considerations popular in current pay schedules.

40. Demonstrates willingness to keep curriculum and instructional practices current	-1.831
41. Belongs to professional organizations	-1.316
38. Assumes responsibilities outside the classroom as they relate to school	-1.265
44. Seeks formal training beyond bachelor's degree	-1.235
43. Experienced several years of teaching	-1.165
4. Keeps room attractive	-1.106
37. Participates in in-service activities	-1.030

Condition Three: Factor Two

Many of the characteristics perceived to be worthy of merit pay to Factor One type people are included in the high positive z-scores of Factor Two type people, also. Item 16 is even more important, however, and one characteristic beyond the emphasis upon interaction and control of learning emerges in Item 46, teacher leadership among peers. Factor Two, then, describes the Type Y Leader who believes he is responsible for student learning. As seen from the scores on statements at the two extremes, he sees student achievement as his responsibility and student behavior as the student's responsibility.

16. Sets high expectation for student achievement	2.126
10. Utilizes educational resources within community	1.751

	<u>Z-Score</u>
2. Uses a variety of teaching techniques	1.513
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.454
36. Accepts and/or uses ideas of students	1.382
3. Organizes students for effective instruction	1.077
46. Exerts positive leadership within the faculty for solving problems related to school	1.046
26. Promotes positive self concept	1.019
28. Demonstrates effective interpersonal relationships with others	1.016
25. Uses reasoning with students to discipline them	1.013
48. Analyzes professional literature related to classroom experiences	1.003

Teachers should not receive merit pay, according to Factor Two opinion, for management behaviors outside the instructional duties or for career guidance.

1. Sets high standards for student behavior	-2.340
6. Provides materials and supplies for students	-2.193
4. Keeps room attractive	-1.499
18. Prepares appropriate evaluation activities	-1.391
12. Demonstrates evidence of personal organization	-1.357
7. Directs students to sources of vocational and career information	-1.076

Even though Type Y Leaders consider "Identifies and plans for individual learning" (Item 26) and "Demonstrates effective interpersonal relationships with others" (Item 28) important considerations in merit-pay plans, "Demonstrates sensitivity in relating to students" (Item 33) has a negative z-score of -0.999.

Consensus and Discrepancy

Ten items of consensus, receiving z-scores of less than ± 1.0 , emerge in Condition One. Teachers feel the most indifference or ambiguity about Item 14, "Ensures adequate student time on task." In Condition Two, eleven consensus items appear with Item 29 the most insignificant: "Provides opportunities and encourages each class member to participate." The greatest amount of agreement occurs in

Condition Three regarding characteristics that are unimportant for merit-pay purposes. Teachers feel neutral about 22 items of the 48 sorted. Item 11, "Uses available materials and resources within school," is the characteristic least like the teacher who should be considered for merit pay.

Discrepancy among factors, defined as having a z-score of greater than two z's difference, occurs in all three conditions. Condition One, Factor One teachers differed from Factors Two and Three regarding "Organizes students for effective instruction" with a 2.104 z-score difference. Factor Two teachers differed in opinion from Factors One and Three greater than two positive z-scores on five items:

	<u>Z-Score</u>	<u>Average Z</u>	<u>Difference</u>
38. Assumes responsibilities outside the classroom as they relate to school	1.002	-1.439	2.440
42. Attends and participates in school-called meetings	1.727	-0.664	2.391
47. Assumes classroom-connected assignments	1.831	-0.352	2.183
23. Exhibits enthusiasm for subject matter	-1.705	0.417	-2.122
2. Uses a variety of teaching techniques	-0.827	1.509	-2.336

The z-score (1.002) for Factor Two on Item 38 differs from the average z-score of all factors (-1.439) by 2.440. People loading on Factor Two see themselves as doing extra-curricular duties but not using a variety of teaching techniques (Item 2) more so than do people on the other two factors.

Factor Three teachers varied most distinctively from Factors One and Two on three items:

23. Exhibits enthusiasm for subject matter	1.137	-1.005	2.142
--	-------	--------	-------

	<u>Z-Score</u>	<u>Average Z</u>	<u>Difference</u>
42. Attends and participates in school-called meetings	-1.217	0.808	-2.025
11. Uses available materials and resources within school	-1.678	0.497	-2.175

As reflected in the correlation coefficients for the three factors in Condition Two, less heterogeneity exists among the various z-scores. The greatest extreme is that expressed by teachers loading on Factor Two, the Idealistic Instructor. They believe the effective teacher negatively values Item 19 more than teachers loading on Factors One and Three.

	<u>Z-Score</u>	<u>Average Z</u>	<u>Difference</u>
19. Establishes short- and long-range goals	-1.394	0.680	-2.074

When Condition Three, perceptions of merit-pay recipients, evoked the greatest number of consensus items, it also produced the greatest contrasts in opinion. Thirteen sorts have z-score differences less than 1.0, and two have z-score differences greater than 2.0 as seen in the following items with the z-scores for each factor:

	<u>Factor One</u>	<u>Factor Two</u>	<u>Difference</u>
46. Exerts positive leadership within the faculty for solving problems related to school	-0.981	1.046	-2.027
40. Demonstrates willingness to keep curriculum and instructional practices current	-1.831	0.560	-2.390

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

The purpose of this study was to explore teachers' attitudes, beliefs and values by investigating three perceptions. Subjects' views of themselves, of effective teachers and of merit-pay recipients were examined. The strategy for discovering these perceptions is outlined by the procedures of Q methodology. Members of two different faculties performed three Q sorts with statements adapted from research and from current pay schedules. The data were correlated, factor analyzed by the principal axis method, rotated by Varimax or Oblimax, and factor arrayed by the QUANAL computer program under the direction of Dr. Norman Van Tubergen, of the University of Kentucky.

Factors

The resulting eight factors which emerged from the data can be used to describe types of teachers in each of the three conditions and are designated by descriptive phrases for discussion purposes. (See Table XV.)

Condition One

Teachers perceived themselves to be one of three types. The Classroom Manager is represented by an experienced secondary teacher of either gender in the urban school. He attends to the activities

TABLE XV
TEACHER TYPES AS REVEALED IN Q-SORTS

Condition	Factor - Descriptor
One - Self	One - Classroom Manager Two - Conformist Three - Student-Oriented Individualist
Two - Effective Teacher	One - Natural Teacher Two - Idealistic Instructor Three - Casual Humanist
Three - Merit-pay Recipient	One - Interactive Controller Two - Type Y Leader

within his classroom, particularly to those concerning students, but not to activities usually attributed to professional teachers. The Conformist, on the other hand, is the professional teacher, a school team member. Shunning the more scientific, theoretical approach to teaching, this teacher, typically an experienced male in the rural secondary school, sees himself as an authority-pleaser. The third type of teacher, the Student-Oriented Individualist, cares about his students and himself. Most usually an inexperienced female in the elementary rural school, this teacher values the activities s/he initiates in the classroom, but, like the Classroom Manager, not those for professional development.

Condition Two

Three types also emerge when teachers modeled their perceptions of effective teachers. The Natural Teacher is one who is focused on individual student needs and activities innately. This ideal was depicted

by females of all experiences at both levels most often in the rural school. Training does not contribute to his effectiveness nor does performing or participating in activities outside his classroom. The Instructor, as portrayed by experienced males at the secondary level in the urban setting, is self-sufficient in his knowledge about teaching and emphasizes a methodical approach. His professional confidence is greater than all other types as seen in his strong rejection of staff development activities. The Casual Humanist sees self-teaching by the student important with his role being the effective encourager. The characteristics he views as least like himself are those often associated by research with effective teachers. This view of the effective teacher emerged from the data of both genders, inexperienced, rural elementary teachers. This factor was unique in its value of a sense of humor, an attribute Goodlad found missing in his A Place Called School (1983).

Condition Three

Both types of teachers who should receive merit pay, according to the subjects, set high expectations for their students. Both, too, control the learning environment by interacting with their students. So many characteristics are shared, in fact, that the most distinguishing one is that of leadership. Interactive Controller does not value "Positive leadership within the faculty" so highly as does Type Y Leader nor is he willing to accept professional help. On the other hand, Type Y Leader, McGregor's (1960) leader who encourages self direction, does not want to be paid for characteristics that reflect his personal management skills. His is, however, the only factor that considered Item 48, "Analyzes professional literature related to classroom

experiences," as a valuable characteristic ($Z = +1.003$). The great similarity of all subjects' sorts regarding merit pay suggests a plan could be devised that would include characteristics most teachers value as being worthy of receiving merit pay.

Research Questions

Four questions were asked at the outset of this study. The specific questions raised and answers provided by this study are as follows:

Questions One: Can factors be identified that are descriptive of different types of behaviors?

Yes, distinct differences among teachers' perceptions under each condition can be determined and identified in the factor loadings. Each condition evoked modeled preferences that differed from every other condition, and each factor within a condition was unique. The greatest similarities in and within factors occurred in Condition Three, Merit Pay.

Question Two: How do teachers' perceptions of effective teacher characteristics reflect those found in research?

In each of the three factors emerging from Condition Two, "Which characteristics are most like and most unlike those of effective teachers?" 50 percent or more of the items with high positive z-scores are supported by empirical research. Of the highest 8 Natural Teacher z-scores, 4 are supported by one or more studies as having significant correlations with student achievement, and these appear in Manatt's Iowa State University (1984) research. Of the highest 8 z-scores in the Idealistic Instructor factor, 5 are supported by research. Three of these appear in the Iowa State descriptors. Within the 12 highest z-scores, 7 are from Manatt's study. The Casual Humanist, too, reflects

effective teaching as research defines it. Six of the highest 8 z-scores have empirical support; 4 appear in Manatt's study. Subjects did have an almost 50/50 chance of sorting one of the research-supported statements into either extreme, most like or most unlike, but the teachers loading on the Idealistic Instructor factor were the most cognizant of effective teacher behaviors with 9 of the highest positive z-scores ranked as most like and only 2 of the highest negative z-scores ranked as most unlike.

Question Three: What differences in perceptions can be distinguished between teachers regarding self, effective teachers and merit-pay recipients as determined by a) gender, b) level, c) locale of school, and d) experience?

Gender was not a distinguishing effect in Condition One with both males and females loading equally among the three factors. More females loaded on Factor Three, Student-Oriented Individualist, a loading consistent with the elementary-teacher perspective. In Condition Two, only 11.78 percent of the males loaded on the Natural Teacher as being the effective teacher, but 44 percent of the females did. The males loaded heavily (52.94 percent) on Factor Two, the Idealistic Instructor. This would indicate the males have the perception most congruent with research regarding the characteristics of an effective teacher. Both females and males loaded highly on Factor One of Condition Three.

In Condition One over one-half of the elementary teachers loaded on Factor Three, the Student-Oriented Individualist, and 50 percent of the secondary teachers loaded on Factor One, Classroom Manager. The prevailing philosophy in teacher training parallels this finding with emphasis upon students in elementary grades and upon subjects in

secondary. In Condition Two, almost 40 percent of the elementary teachers loaded on Factor One, the Natural Teacher, and secondary teachers were almost equally divided among the three types. This loading suggests that elementary teachers have more uniformity in their expectations of the ideal, "effective," teacher whereas secondary teachers do not perceive one distinct style or personality as being most effective. In Condition Three 73.91 percent of the elementary teachers loaded on Factor One with 66.66 percent of the secondary teachers. An overwhelming majority from both levels valued the Interactive Controller characteristics.

Differences existed between rurals and urbans in every condition. Rural teachers saw themselves as Conformists and Student-Oriented Individualists in Condition One whereas urban teachers saw themselves as Classroom Managers. In Condition Two, the differences were less dramatic with the rural favoring slightly the Natural Teacher and the Casual Humanist as the effective teacher models. In Condition Three, differences occur again with the rural teachers loaded heavily on Factor One, the Interactive Controller; only 5 loaded on Factor Two, Type Y Leader.

In Condition One experience dictates factor loadings less than the level. Pronounced differences are evident, however, in the three levels and between rural and urbans. Eleven of the 16 teachers with fewer than six years experience teaching in the rural school loaded on Factor Three, Student-Oriented Individualist, like the elementary teachers. Even two of the three secondary teachers loaded on this factor. On the other hand, the two urban teachers with little experience loaded on Factor One, the Classroom Manager. Perhaps the threat often experienced by the

beginning teacher is more pronounced in urban schools than in rural. The one male rural secondary teacher loaded on this factor also; his two female colleagues loaded on Factor Three. Teachers with more than 13 years of experience split their preferences between the Classroom Manager and Conformist; only four saw themselves as the Student-Oriented Individualist. Unlike the beginning teacher, experienced teachers were less student-oriented.

In Condition Two, the effective teacher perception, beginning teachers are split between Factors One and Three, between the Natural Teacher and the Casual Humanist; only three of the 16 loaded on the Idealistic Instructor. Teachers who have taught from 7 to 12 years divide their loadings equally among all three factors. Fifty percent of the most experienced teachers view effectiveness as the Idealistic Instructor, suggesting they do recognize effective teaching. If the goal of merit pay is to increase student learning and the Idealistic Instructor is the one who knows which characteristics do correlate to research regarding student achievement and if experienced teachers, the largest percentage of the current teaching force, view the Idealistic Instructor as the effective teacher, merit-pay plans based upon these characteristics might be the most acceptable, worthwhile ones for experienced teachers. Since all teachers dislike traditional professional development activities, though, avenues for training those teachers who know little about effective teaching must be discovered. All levels of experience loaded on Factor One, as did a majority of all teachers, suggesting that merit-pay plans could be made acceptable to teachers.

Question Four: What characteristics are common to teachers regarding their perceptions of self? of effective teachers? of merit-pay recipients?

Two characteristics are common in the high positive z-scores of every condition, every factor, Items 16 and 20. Three others, Items 10, 3, and 2, are found in fifty percent or more of the factor arrays for high positive z-scores. Teachers see themselves, effective teachers and merit-pay recipients as setting high goals for student achievement and helping students attain those goals by providing opportunities and utilizing appropriate teaching techniques. (See Table XVI.)

Average Z-Score
Across the Factors

16. Sets high expectations for student achievement	1.730
10. Utilizes educational resources within community	1.542
20. Identifies and plans for individual learning difficulties of students and seeks help as needed	1.471
2. Uses a variety of teaching techniques	1.440
3. Organizes students for effective instruction	1.064

TABLE XVI

ITEMS FOUND IN HIGH POSITIVE Z-SCORES

Condition	One: Self			Two: Effective Teacher			Three: Merit Pay	
	One	Two	Three	One	Two	Three	One	Two
Item	16	16	27	27	3	10	16	16
	10	47	2	20	2	16	20	10
	3	42	28	25	16	20	27	2
	25	39	20	16	10	3	10	20
	20	20	36	36	15	27	3	36
	2	31	24	26	13	26	5	3
	9	26	23	24	20	36	24	46
	11	28	16	10	5	25	2	26

Less congruency appears among the characteristics loaded on high negative z-scores. As in Table XVII, only one item is ranked in all conditions, all factors, Item 37. Four other items occur in 50 percent or more of the rankings.

	<u>Average Z-Score Across the Factors</u>
37. Participates in in-service activities	-1.353
4. Keeps room attractive	-1.150
32. Directs comments to individual students, not to groups	-1.145
44. Seeks formal training beyond bachelor's degree	-0.980
38. Assumes responsibilities outside the classroom as they relate to school	-0.712

The teachers studied do believe merit pay should be for work within the classroom with students. All other activities are not valued as a criterion for evaluation. Especially disfavored in all factors are staff development, institutionalized activities and characteristics

TABLE XVII

ITEMS FOUND IN HIGH NEGATIVE Z-SCORES

Condition	One: Self			Two: Effective Teacher			Three: Merit Pay	
	One	Two	Three	One	Two	Three	One	Two
Factor	One	Two	Three	One	Two	Three	One	Two
Item	37	24	42	37	41	21	37	33
	44	6	37	44	38	40	4	7
	4	21	32	32	45	18	43	32
	1	4	46	40	32	22	44	12
	38	37	30	38	43	19	38	18
	45	23	11	1	47	8	41	4
	41	18	38	47	44	37	32	6
	43	8	4	6	37	4	40	1

attributed to them. Such items are included in pay plans in some states which reward assuming duties other than teaching students.

Teachers do not depict student behavior as significant in their views. Item 1, "Sets high standards for student behavior," received little attention, falling outside a z-score of 1.0 only in Factors Two, Effective Teacher, with $z = -1.330$ and One, Self, with $z = -1.248$, both being most unlike.

Limitations

One of the limitations that enters into any research is the influence of the investigator. As an educator, the present investigator brought his biases to the study in the selection of statements and interpretations of the factors. These biases occur also in the subjective decisions made by the program manipulator who must determine the type of rotation used and define the parameters in which a factor is determined.

Also, the lack of structured interviews with each subject limits the investigator's knowledge in interpreting the factors. No response, for example, was given when comments were requested regarding Item 32, a statement that received mixed z-scores throughout the factors, thus creating some doubt regarding the significance subjects gave it. Knowledge gained during the preliminary and follow-up sessions has no place in the measurement for expression. For example, not one of the rural teachers was enrolled for summer college classes; one-third of the urban ones were. The significance is unknown since urban teachers, unlike rural ones, can receive discounted tuition to three local universities. Also, the relationship between the urban faculty's 99-percent membership in the local teachers' association to their loading on Condition Three, Factor Two, Type Y Leader, is uncertain.

The generalizability is limited to the demographics of the two faculties studied. The strong differences between the rural and the urban teachers may not be true in faculties working in less polarized environments. Also, the extreme negative reactions to in-service activities may not be common among teachers in states with no mandated staff development programs.

Recommendations

Further research could be conducted with the administrator and boards of education of the two faculties studied to compare and contrast perceptions of teachers to perceptions of school policy makers.

Reducing the number of subjects would increase the feasibility of conducting structured interviews with subjects and thereby enhance the investigator's knowledge for factor interpretation.

Studying only one question with faculties of similar locales would determine if perceptions were contingent upon locale. Differences between rural and urban were the most obvious in the present study.

Using statements derived from teachers in the concourse might create different factors.

Conducting the third sort with the word would replacing should might evoke more of the ideal.

Using the same items and the same subjects but conducting only one sort might yield an interesting comparison of z-scores.

Discussion

Although devising a merit-pay plan acceptable to all teachers should never be considered a simple task, it should not be considered

an impossible one. Since so many perceptions of self, effective teachers and merit-pay recipients contain the same or similar characteristics, a merit-pay plan could be developed that rewarded classroom teachers for their effectiveness. Teachers do, for the most part, agree about the characteristics of the merit-pay recipient. If teachers from such diverse amounts of experience, contrasting work environments and different grade levels perceive as many commonalities as the present study indicates, then teachers can concur within a district, a county, or, perhaps, even a state regarding the characteristics for which merit pay should be given.

Teachers cannot be stereotyped. The Casual Humanists were not the "good old boys" often associated with that personality, and the Idealistic Instructors were not the novices, fresh from college ready to implement new theories and techniques. Therefore, no one best existing type can be the model for administrators and school board members considering merit-pay programs. Each faculty should be assessed regarding its members' perceptions. Because every teacher's perception is unique, merit-pay plans must be flexible as well as comprehensive in order that each teacher be rewarded as he would consider appropriate.

Professional development activities within the school-environment context are not well received by teachers. This suggests that money and time are wasted by districts and states using these to update and improve teachers' teaching techniques and knowledges. If teachers do not value such activities, little benefit comes from them. Since teachers also do not value formal training or professional literature, other ways must be devised to help teachers improve their skills.

The negative perceptions teachers have about assuming assignments related to the classroom, school-associated activities and volunteer services suggest that teachers would not esteem a merit-pay plan propoerting to reward effectiveness but using the above-mentioned activities as criteria. Merit pay, defined as "better pay for better work," must be awarded for a better performance in the same job description.

Teachers do not see themselves as responsible for developing new curricula or for developing and implementing lesson plans. Therefore districts that do not have curriculum coordinators and teacher supervisors may be relying upon textbook publishers to dictate the course content for their students. Unless such districts make concerted efforts to select the most current textbooks appropriate to their students' needs with adequate supplementary materials and motivate their teachers to become active in curriculum development, they may be cheating their students. Because teachers do not feel responsible for such activities does not mean they feel they may teach whatever they please, only that what they do teach must be provided for them.

Career and vocational education are areas about which teachers feel indifferent. Helping students find information regarding these is not valued by teachers, but it is by the American public. In fact, 56 percent of the 1,515 adults surveyed in May, 1984, ranked "To develop an understanding about different kinds of jobs and careers, including their requirements and rewards "as the third most important goal of education (Gallup, 1984).

Student discipline and room appearance are insignificant or negatively perceived by teachers. The quiet, well-ordered classroom many

administrator-evaluators equate with good teaching is not a concern of teachers in the present study. If these perceptions do, indeed, represent those of all teachers, current evaluation checklists are inappropriate to measure the teacher who values individualizing for students, reasoning as a disciplinary tool, testing for pre-determined objectives and using community resources. This teacher, the merit-pay recipient, must also be determined by his expectation for student achievement and awareness of student needs, two characteristics that can be determined only after one-to-one interaction and much observation, two activities seldom included in the administrator-evaluator's evaluation scheme. Much work remains in developing evaluation procedures that can be used by evaluators and that do reflect the behaviors for which teachers think they should receive merit pay.

Because Q methodology relies upon a correlation coefficient from within the individual and not one among subjects, it is an appropriate tool for comparing relations within groups of people. Forcing teachers to choose from among 48 behavioral characteristics revealed relationships among sets of preferences that a rating scale or similar R device could not. Fine discriminations must be made as a subject models his perceptions in a Q sort; consequently, his attitudes, beliefs, and opinions can be seen as he assigns a value to each statement. This process of sorting forces the subject to "type" himself; therefore, his sort can be viewed as it relates to that of another subject. Where R methodology shows the fragments of an individual, Q reveals the whole person. Since the study was of teachers, not aspects of them, and their perceptions common to three types, a Q-sort was the right

selection for a test instrument. Because teachers do have viewpoints about teaching and merit pay that highly involve self, the best way to discern their perception is to ask them what they think.

BIBLIOGRAPHY

- Adams, P. and C. Johnson. Principals, Supervisors and Beginning Teachers: Their Opinions Regarding Competencies for the Professional Certification of Teachers. Toronto: Paper for the American Educational Research Association, March, 1978.
- Anderson, L. "An Experimental Study of Effective Teaching in First-Grade Reading Groups." Elementary School Journal, 79: 4 (1979), 193-222.
- Anderson, L. "Dimensions in Classroom Management Derived From Recent Research." Journal of Curriculum Studies, 12:4 (1980), 343-356.
- Arlin, M. "Teacher Transitions Can Disrupt Time Flow in Classrooms." American Educational Research Journal, 16:4 (1979), 42-56.
- Armor, D. Analysis of the School Preferred Reading Program in Selected Los Angeles Minority Schools. Santa Monica: Rand Corporation, 1976.
- Barber, L. and K. Klein. "Merit Pay and Teacher Evaluation." Phi Delta Kappan, 64:16 (December, 1983), 247-251.
- Bain, H. "Comment." Phi Delta Kappan, 51:8 (April, 1971), 413.
- Banfield, E. The Unheavenly City. 2nd. Ed. Boston: Little, Brown, 1974.
- Barr, A. "The Validity of Certain Instruments Employed in the Measurement of Teaching Ability." The Measurement of Teaching Efficiency. Ed. H. Walker. New York: Macmillan, 1935, 71-141.
- Barr, A. "Measurement of Teaching Characteristics and Prediction of Teacher Efficiency." Review of Educational Research. 22 (1952), 171-172.
- Becker, W. "Teaching Reading and Language to Disadvantaged-- What We Have Learned From Field Research." Harvard Educational Review, 47 (1977), 518-543.

- Becker, W. and D. Carnine. "Direct Instruction: An Effective Approach for Educational Intervention with the Disadvantaged and Low Performers." Advances in Clinical Child Psychology. Ed. B. Lahey and A. Kazdin. New York: Plenum Press, 1980.
- Berliner, D. "A Status Report on the Study of Teacher Effectiveness." Journal of Research in Science Teaching, 13:4 (1976), 369-382.
- Berliner, D. "Tempus Educare." Research in Teaching. Ed. P. Peterson and H. Walberg. Berkeley: McCutchan Publishing Company, 1979.
- Bhaerman, R. "Merit Pay? No!" National Elementary Principal, 52:5 (1973), 631-639.
- Block, J. The Q-sort Method in Personality Assessment and Psychiatric Research. Springfield: Charles C. Thomas, 1961.
- Bloom, B. "Time and Learning." American Psychologist, 29:2 (1974), 682-688.
- Bloom, B. Human Characteristics and Student Learning. New York: McGraw-Hill, 1976.
- Bloom, B. All Our Children Learning. New York: McGraw-Hill, 1980.
- Boyce, A. "Methods for Measuring Teachers' Efficiency." Fourteenth Yearbook of the National Society for the Study of Education. Part II. Bloomington: Public School Publishing Company, 1915.
- Brinks, J. "Is There Merit in Merit Increases?" The Personnel Administrator, 25:5 (May, 1980), 59-64.
- Brookover, W. School Social Systems and Student Achievement: Schools Can Make a Difference. New York: Praeger Publishers, 1979.
- Brookover, W. Effective Secondary Schools. Philadelphia: Research for Better Schools, Inc., 1981.
- Brophy, J. "Stability of Teacher Effectiveness." American Educational Research Journal, 10 (1973), 245-252.
- Brophy, J. and C. Evertson. Learning from Teaching: A Developmental Perspective. Boston: Allyn and Bacon, Inc., 1976.
- Brophy, J. "Teacher Behavior and Its Effect." Journal of Educational Psychology, 71:6 (1979), 733-750.
- Brophy, J. Teaching Praise: A Functional Analysis. East Lansing: The Institute for Research on Teaching, 1980.

- Brown, S. and D. Brenner (Eds.). Science, Psychology and Communications: Essays Honoring William Stephenson. Columbia: Teachers' College Press, 1972
- Brown, S. Political Subjectivity: Applications of Q Methodology in Political Science. New Haven: Yale University Press, 1980.
- Brown, S. Operant Subjectivity, A Q Newsletter, 1:1-7:2, (1977-1984).
- Brown, S. and T. Ungs. "Representativeness and the Study of Political Behavior: An Application of Q-technique to Reactions to the Kent State Incident." Social Science Quarterly, 51 (1970), 514-526.
- Burke, B. "Merit Pay for Teachers: Round Valley May Have the Answer." Phi Delta Kappan (December, 1982), 265-266.
- "Business Favors Merit Pay." Education Week, September 7, 1983, 3.
- Combs, A. and D. Snygg. Individual Behavior. New York: Harper, 1959.
- Combs, A. Educational Accountability: Beyond Behavioral Objectives. Washington, D.C.: Association for Supervision and Curriculum Development, 1972.
- Combs, A., A. Blume, A. Newman and H. Wass. The Professional Education of Teachers: A Humanistic Approach to Teacher Preparation. Boston: Allyn and Bacon, 1974.
- Combs, A., A. Richard and F. Richard. Perceptual Psychology: A Humanistic Approach to the Study of Persons. New York: Harper and Row, Publishers, 1976.
- Comer, J. "Teachers' Merit Pay: 1. Narrow." The New York Times, July 1, 1983, A23.
- Cramer, J. "Merit Pay: Challenge of the Decade." Curriculum Review, 22:1 (1983), 7-10.
- Daugherty, G. and G. Dronberger. "A Merit Pay Program That Works: The Seiling, Oklahoma, Experience." Spectrum, Journal of School Research and Information, 1 (Summer, 1983), 3.
- DeCharms, R. Personal Causation: The Original Affective Determinants of Behavior. New York: Academic Press, 1968.
- Deci, E. Intrinsic Motivation. New York: Plenum Press, 1975.
- Deci, E. "The Hidden Costs of Rewards." Organizational Dynamics, 4 (1976), 61-72.

- Dembo, M. and L. Jennings. Who Is the Experienced Teacher? New Orleans: Paper for American Educational Research Association, 1973.
- Deterline, W. "Applied Accountability." Educational Technology, 11:1 (1971), 15-20.
- Doris, J. and S. Sarason. "Test Anxiety and Blame Assignment in a Failure Situation." Journal of Abnormal and Social Psychology, 50:3 (1955), 335-338.
- Dunkin, M. and B. Biddle. The Study of Teaching. New York: Holt, Rinehart and Winston, 1974.
- Education Commission of the States. Action for Excellence. 1983.
- Emmer, E., C. Evertson and L. Anderson. "Effective Management of the Beginning of the School Year." Elementary School Journal, 80:5 (1980), 219-231.
- Emmer, E. Teacher's Manual for the Junior High Classroom Management Improvement Study. Austin: R & D Center for Teacher Education, University of Texas, 1981.
- Emmer, E. Improving Classroom Management: An Experimental Study in Junior High Classrooms. Austin: R & D Center for Teacher Education, University of Texas, 1982.
- Etzioni, A. A Comparative Analysis of Complex Organizations: On Power, Involvement, and Their Correlates. New York: Free Press, 1975.
- Evertson, C. Organizing and Managing the Elementary Classroom. Austin: R & D Center for Teacher Education, University of Texas, 1981.
- Evertson, C. "Differences in Instructional Activities in Higher and Lower Achieving Junior High English and Mathematics Classrooms." Elementary School Journal, 82 (1982), 329-351.
- Farrar, S. Teacher Performance Motivation. Los Angeles: Paper for American Educational Research Association, April, 1981.
- Federal Employee Performance Rating Systems Need Fundamental Changes. Report to the Congress by the Comptroller General of the United States. Washington, D.C.: General Accounting Office, March 3, 1978.
- Feldvelbel, A. "Teacher Evaluation: Ingredients of a Credible Model." The Clearing House, 53:9 (1980), 415-420.
- Fiander, R. Personal Letter. Summit, New Jersey. January 5, 1984.

- Fitzpatrick, K. The Effect of Secondary Classroom Management Training Program on Teacher and Student Behavior. New York: Paper for American Educational Research Association, April, 1982.
- Flanders, N. Analyzing Teaching Behavior. Reading: Addison-Wesley, 1970.
- Folger, R., D. Rosenfield and R. Hays. "Equity and Intrinsic Motivation: The Role of Choice." Journal of Personality and Social Psychology, 36:5 (1978), 557-564.
- Franken, R. Human Motivation. Monterey: Brooks/Cole Publishing Company, 1982.
- Freeman, L. Q-Method 20 Years Later: Its Uses and Abuses in Communications Research. San Diego, CA: Paper for Association for Education in Journalism, 1974.
- "Fashion Merit Pay Plans to Custom Fit Your School." Executive Educator (December, 1983), 9.
- Gage, N. (Ed.) Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Gage, N. The Scientific Basis of the Art of Teaching. Columbia: Teachers' College Press, 1978.
- Gallup, G. "The 16th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools." Phi Delta Kappan, 16:1 (September, 1984), 23-38.
- Garrett, G. "The Effect of Sex as a Variable in Teacher Perception." Research Report, 1977. ED 225 943.
- Getzels, J. and P. Jackson. "The Teachers' Personality and Characteristics." Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Giaquinta, J. "The Process of Organization Change in Schools." Review of Research in Education. Ed. F. Kerlinger. Ithaca: F. E. Peacock, 1973.
- Good, T. "Teacher Effectiveness in the Elementary School: What We Know About It Now." Journal of Teacher Education, 30:2 (1979), 52-64.
- Good, T. and D. Grouws. "Teaching and Mathematics Learning." Educational Leadership, 37:1 (1979), 39-45.
- Goodlad, J. A Place Called School. New York: McGraw-Hill Book Company, 1984.

- Gudridge, B. Teacher Competency, Problems and Solutions. Sacramento: American Association for School Administrators, 1980.
- Hamner, W. and E. Hamner. Organizational Dynamics, Spring (1976), 6-8.
- Hart, J. Teachers and Training. New York: Macmillan, 1936.
- Heikkinen, M. "The Teaching Style Q-sort: A Description of Its Uses in Assessing Teaching Style." (Unpub. Ph.D. dissertation, Library, University of Utah, 1978.)
- Herzberg, F., B. Mausner and B. Snyderman. The Motivation to Work. New York: John Wiley and Sons, 1959.
- Hickcox, E. and T. Rooney. The Shape of Teacher Evaluation: A Survey of Practices in the Capital District of New York. Ithaca: Cornell University, 1966.
- Hidlebaugh, J. "A Model for Development of a Teacher Performance Evaluation System: A Multiple-Appraiser Approach." (Unpub. Ph.D. dissertation, Library, Iowa State University, 1973.)
- Hooker, C. "A Behavior Modification Model for Merit U." Phi Delta Kappan, 59:6 (1978), 481.
- Horrocks, J. and D. Jackson. Self and Role: A Theory of Self- and Role Behavior. Dallas: Houghton Mifflin Company, 1972.
- Hunt, J. Early Psychological Development and Experience. Worcester: Clark University Press, 1978.
- Hunter, B. and J. Usdan. "The Attitude of School Superintendents Toward Merit Pay for Teachers." Spectrum, Journal of School Research and Information, 2:1 (1984).
- Hunter, M. and D. Russell. "Planning for Effective Instruction: Lesson Design." Instructor, 87:2 (1977), 87-88.
- Hunter, M. "Teaching is Decision-Making." Educational Leadership, 37:1 (1979), 62-67.
- Hyman, J. and S. Cohen. "Learning for Mastery: The Conclusions After 15 Years and 3,000 Schools." Educational Leadership, 37:2 (1979), 104-109.
- Jensen, A. "How Much Can We Boost IQ and Scholastic Achievement?" Harvard Educational Review (Winter, 1969), 1-123.

- Jones, A. "Distributions of Traits in Current Q-Sort Methodology." Journal of Abnormal and Social Psychology, 53 (1956), 90-95.
- Joyce, B. and B. Showers. "Improving In-service Training: The Messages of Research." Educational Leadership, 37:5 (1980), 379-385.
- Keynes, J. A Treatise on Probability. London: Macmillan and Company, Ltd., 1961.
- Kerlinger, F. "Q Methodology in Behavioral Research." Science, Psychology and Communication. Ed. S. Brown and D. Brenner. Columbia: Teachers' College Press, 1972, 3-38.
- Kerlinger, F. Foundations of Behavioral Research. 2nd Ed. New York: Holt, Rinehart and Winston, Inc., 1973.
- Kidwell, W. "An Analysis One Decade Later of Merit Pay Programs Reported in 1958." (Unpub. Ph.D. dissertation, Library, Southern Illinois University, 1968.)
- King, J. "Beyond Classroom Walls." Handbook of Teacher Evaluation Ed. J. Millman. Beverly Hills: SAGE Publications, 1981, 167-179.
- Kounin, J. Discipline and Group Management in Classrooms. Huntington: Robert E. Krieger Publishing Company, 1977.
- Kowalski, J. Evaluating Teacher Performance, ERS Report. Arlington: Educational Research Service, Inc., 1978.
- Krahl, G. Management by Objectives. Oneida: Paper to School Board of Oneida District, 1977.
- Kratz, H. "Characteristics of the Best Teachers as Recognized by Children." Pedagogical Summary, 3 (1896), 413-418.
- Latham, G. and G. Yukl. "A Review of Research on the Application of Goal Setting in Organizations." Academy of Management Journal, 18:4 (1975), 824-845.
- Latimer, L. "Virginia Teachers Oppose Merit Pay Plan." Washington Post, June 22, 1983, C3.
- Lawler, E. Motivation in Work Organizations. New York: Wadsworth, 1973.
- Learning About Merit Pay From Business and Industry. Bloomington: Phi Delta Kappa. April, 1984.
- Levin, T. Effective Instruction. Alexandria: Association for Supervision and Curriculum Development, 1981.

- Levine, D. and J. Stark. Instructional and Organizational Arrangements and Processes for Improving Academic Achievement at Inner City Elementary Schools. Kansas City: University of Missouri, August, 1981.
- Levine, D. "Instructional and Organizational Arrangements That Improve Achievement in Inner City Schools." Educational Leadership, 40:3 (1982), 41-46.
- Lortie, D. Schoolteachers: A Sociological Study. Chicago: University of Chicago Press, 1975.
- Love, H. "An Identification and Evaluation of Merit Pay Factors." (Unpub. Ed.D. dissertation, Library, Auburn University, 1970.)
- McAfee, D. "Evaluation of the Teachers: Do Teachers and Supervisors Agree?" The High School Journal, 58:7 (May, 1975), 336-342.
- McCurdy, J. Education USA. Washington, D.C.: National School Public Relations Association, January 9, 1984.
- McDowell, S. "Accountability of Teachers' Performance Through Merit Salaries and Other Devices." Rewarding Teacher Excellence: Report of Conference Proceedings. Texas Association of School Boards and North Texas State University, June, 1971.
- McGreal, T. Successful Teacher Evaluation. Alexandria: Association for Supervision and Curriculum Development, 1983.
- McGregor, D. The Human Side of Enterprise. New York: McGraw-Hill Book, Company, Inc., 1960.
- McKenna, D. "Merit Pay? Yes!" National Elementary Principal, 52:5 (February, 1973), 69-71.
- McKinley, D. "A Study of Merit Evaluation for Salary Purposes in the Public Schools of the United States." (Unpub. Ed.D. dissertation, Library, Washington State University, 1958.)
- Macdonald, J. and D. Clark. "Critical Value Questions and the Analysis of Objectives and Curricula." Curriculum Leaders: Improving Their Influence. Ed. E. Bartoo, Alexandria: Association for Supervision and Curriculum Development, 1976.
- Maeroff, G. "Merit Pay for Teachers vs. Single Salary Schedule." New York Times, June 17, 1983.
- Manatt, R. Performance Criteria Menu, Occasional Paper 84-1. Ames: Iowa State University, 1984.
- Mandler, G. and S. Sarason. "A Study of Anxiety and Learning." Journal of Abnormal and Social Psychology 47:2 (1952), 166-173.

- Mead, G. Mind, Self and Society. Chicago: University of Chicago Press, 1934.
- Medley, D. Teacher Competence and Teacher Effectiveness. Washington, D.C.: American Association of Colleges for Teacher Education, 1977.
- Medley, D. "The Effectiveness of Teachers." Research on Teaching: Concepts, Findings and Interpretations. Ed. P. Peterson and H. Walberg. Berkeley: McCutchan Publishing Company, 1979.
- Medley, D., H. Coker, J. Coker, J. Lorentz, R. Soar and R. Spaulding. "Assessing Teacher Performance from Observed Competency Indicators Defined by Classroom Teachers." Journal of Educational Research, 74:4 (April, 1981), 197-206.
- Medley, D. "Teacher Effectiveness." Encyclopedia of Educational Research. Ed. H. Mitzel. 5th Ed., 4 (1982), 1894-1903.
- Merit Pay for Teachers, ERS Report. Arlington: Educational Research Service, Inc., 1979.
- Merit Pay Plans for Teachers: Status and Descriptions, ERS Report. Arlington: Educational Research Service, Inc., 1983.
- Merit Pay Task Force Report. Washington, D.C.: U. S. Government Printing Office, 1983.
- Meyer, H., E. Key and J. French. "Split Roles in Performance Appraisal." Harvard Business Review (January-February, 1965), 123-129.
- Meyer, H. "The Pay-For-Performance Dilemma." Organizational Dynamics, 3:3 (Winter, 1975), 39-50.
- Mikalachi, A. "There Is No Merit in Merit Pay!" The Business Quarterly, 41:1 (Spring, 1976), 46-50.
- Miller, L. and J. Swick. "Community Incentives for Teacher Excellence." Education, 96:3 (1976), 235-237.
- Mitzel, H. "Teacher Effectiveness." Encyclopedia of Educational Research. Ed. C. Harris. 3rd Ed., 1960, 1481-1491.
- Moody, A. and R. Bausell. "The Effect of Teacher Experience on Student Achievement, Transfer and Retention." New Orleans: Paper for the American Educational Research Association, 1971.
- National Commission on Excellence in Education. A Nation At Risk: The Imperative for Educational Reform. Washington, D.C.: U.S. Government Printing Office, 1983.

- North, C. and P. Hatt, "Jobs and Occupations: A Popular Evaluation." Class, Status and Power. Ed. R. Bendix and S. Lipset. Glencoe: The Free Press, 1953, 411-426.
- Patz, A. "Performance Appraisal: Useful But Still Resisted." Harvard Business Review (May-June, 1975), 73-80.
- Popham, J. "Teaching Skill Under Scrutiny." Phi Delta Kappan, 52:10, (June, 1971), 599-602.
- Popham, J. "Found: A Practical Procedure to Appraise Teacher Achievement in the Classroom." Accountability for Teachers and School Administrators. Ed. A. Ornstein. Belmont: Fearon, 1973, 25-27.
- Popham, J. "Pitfalls and Pratfalls of Teacher Evaluation." Educational Leadership, 32:2 (1974), 141-146.
- Pruitt, S. "Merit Pay for Classroom Teachers." (Unpub. Ed.D. dissertation, Library, North Texas State University, 1983.)
- Raimy, V. "The Self Concept as a Factor in Counseling and Personality Organization." (Unpub. Ph.D. dissertation, Library, Ohio State University, 1943.)
- Ranbom, S. "Nebraska Panel Issues Plan Calling for Merit Pay." Education Week, October 12, 1983, 11.
- Ranbom, S. "Bell Marks Anniversary of Nation at Risk." Education Week, May 2, 1984, 1.
- Reeder, L., G. Donohue and A. Biblarz. "Concepts of Self and Others." American Journal of Sociology, 66:2 (1960), 153-159.
- Reid, E. "Another Approach to Mastery Learning." Educational Leadership, 38:2 (1980), 170-172.
- Rhodes, E. Merit Pay--Where We Stand. Evaluation and Merit Pay Clinics. Paper to New York School Board Association, Inc., January, 1973.
- Rist, M. "Exclusive Journal Survey: Teachers Wants Merit Pay." The American School Board Journal, 170:9 (September, 1983), 23-25.
- Rockefeller Brothers Fund. The Pursuit of Excellence: Education and the Future of America. Panel Report No. V of the Special Studies Project. New York: Doubleday and Company, Inc., 1958.
- Rosenberg, M. Conceiving the Self. New York: Basic Books, Inc., Publishers, 1979.

- Rosenshine, B. and N. Furst. "Research in Teacher Performance Criteria." Research in Teacher Education: A Symposium. Englewood Cliffs: Prentice-Hall, 1971, 37-72.
- Rosenshine, B. "Content, Time and Direct Instruction." Research on Teaching: Concepts, Findings and Implications. Ed. P. Peterson and J. Walberg. Berkeley: McCutchan Publishing Company, 1979.
- Rosenshine, B. "Teaching Functions in Instructional Programs." Research in Teaching: Implications for Practice. Washington, D.C.: Paper for NIE Conference, 1982.
- Rutter, M. Fifteen Thousand Hours: Secondary Schools and Their Effects on Children. Cambridge: Harvard University Press, 1979.
- Ryans, D. W. Huitt and J. Segars. Characteristics of Teachers. Washington, D.C.: American Council on Teachers, 1960.
- Sanford, J. and C. Evertson. "Classroom Management in a Low SES Junior High: Three Case Studies." Journal of Teacher Education, 32:1 (1981), 34-38.
- Schmuck, R. "Self Confrontation of Teachers." (Unpub. Ed.D. dissertation, Library, University of Oregon, 1971.)
- Sergionvanni, T. "Financial Incentives and Teacher Accountability: Are We Paying for the Wrong Thing?" Education Administration Quarterly, 11:2 (1975), 112-117.
- Shaughnessy, J. "Merit Pay: A Functional Analysis of Teacher Evaluation Written by Administrators." (Unpub. Ed.D. dissertation, Library, Columbia University Teachers' College, 1976.)
- Silverman, B. "Why the Merit Pay Systems Failed in the Federal Government." Personnel Journal (April, 1983), 294-302.
- Simmons, R. and M. Rosenberg. "Functions of Children's Perceptions of the Stratification System." American Sociological Review, 36:2 (1971), 235-249.
- Skinner, B. Science and Human Behavior. New York: Macmillan, 1953.
- Smilansky, M. Priorities in Education: Pre-school Evidence and Conclusions. Washington, D.C.: World Bank, 1979.
- Soar, R., D. Medley and H. Coker. "Teacher Evaluation: A Critique of Currently Used Methods." Phi Delta Kappan, 64:16 (December, 1983), 239-246.
- Squires, D., W. Hitt and J. Segars. Effective Schools and Classrooms: A Research-Based Report. Alexandria: Association for Supervision and Curriculum Development, 1983.

- Stallings, J. "Allocated Academic Learning Time Revisited, or Beyond Time on Task." Educational Researcher, 9 (1980), 11-16.
- Stephenson, W. "Technique of Factor Analysis." Nature, 136 (1935), 297.
- Stephenson, W. The Study of Behavior: Q-Technique and Its Methodology. Chicago: The University of Chicago Press, 1953.
- Stephenson, W. "Factors as Operant Subjectivity." Operant Subjectivity, 1:1 (October, 1977), 3-15.
- Stephenson, W. "Applications of Communication Theory: V. Play-Theoretical Aspects of Science." Operant Subjectivity, 4:1 (October, 1980), 2-16.
- Stephenson, W. "Principles for the Study of Subjectivity." Operant Subjectivity. 4:2 (January, 1981), 37-53.
- Swain, L. "Merit Pay: Merit Pay Ratings for Teachers." (Unpub. Ed.D. dissertation, Library, Stanford University, 1960.)
- Taddeo, I. "Do Teacher Attitudes Affect Learning?" National Association for Secondary School Principals Bulletin, 61:7 (1977), 7-13.
- Texas School Board Association. Rewarding Teaching Excellence: Report of Conference Proceedings. Austin: June 27, 1983.
- "The Merits of Merit Pay." Newsweek (June 27, 1983), 61-62.
- The Government Union Critique. Public Service Research Foundation. 5:18 (1983), 1-2.
- The School District of the City of Ladue. Report of the Committee on Teacher Evaluation and Salary Program. St. Louis. May, 1976.
- The Twentieth Century Fund. Making the Grade: Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy. 1983.
- Toch, T. "Superintendents Favor Merit Pay, But Few Have Tried It, Poll Finds." Education Week (October 12, 1983), 7.
- Toeph, D. Personal Letter. Lebanon, Connecticut. November 2, 1983.
- Thompson, G. "The Evaluation of Public Opinion." Reading in Public Opinion and Communication. 2nd Ed. New York: Free Press, 1966, 7-12.
- Uzell, L. "Where is the 'Merit' in New Merit-Pay Plans?" Education Week (September 14, 1983), 24.

- Van Tubergen, N. QUANAL User's Guide. Lexington, Kentucky. 1980.
- Walton, S. "Fla. Teachers' Union to Offer Alternate Merit-Pay Plan to Council." Education Week (September 14, 1983), 17.
- Webb, N. "A Process-Outcome Analysis of Learning in Group and Individual Settings." Educational Psychologist, 15 (1980) 69-83.
- Weisenstein, G. "Teacher Evaluation: The Principal's Role." OCCS Bulletin, 20 (November, 1976).
- Wittgenstein, L. Tractatus Logico-Philosophicus. 2nd Ed. New York: Humanities Press, 1971.
- Wildavsky, A. and J. Pressman. Implementation. Berkeley: University of California Press, 1973.
- Wilkinson, S. "The Relationship of Teacher Praise and Student Achievement: A Meta-Analysis of Selected Research." (Unpub. Ed.D. dissertation, Library, University of Florida, 1980.)
- Wilson, E. Sociobiology. Cambridge: Harvard University Press, 1975.

APPENDIX A

Letters



Board of Education
14 Beekman Terrace
Summit, New Jersey 07901
(201) 273-3023

**Summit
Public
Schools**

Richard L. Fiander, Superintendent of Schools

January 5, 1984

Ms. Sue Hoevelman,
Supervisor of Curriculum
and Instruction
Jenks Public Schools
First and B Streets
Jenks, Oklahoma 74037

Dear Ms. Hoevelman,

Attached is a packet of information on Summit's merit pay plan which was negotiated out of existence by teacher initiative about 5 years ago.

The Summit plan's development and implementation had much teacher input. It failed because merit was too easy to attain - or said another way, evaluators were too generous or reluctant to make the tough calls - and the teachers became increasingly uncomfortable with the administration having so much latitude under the plan in determining a teacher's finances.

I hope I've been helpful.

Sincerely,

Richard L. Fiander
Superintendent of Schools

RLF/cib

Jenks Public Schools

First and B Streets - Jenks, Oklahoma 74037
AC (918) 299-4411

FRANK HERALD, Superintendent

BOARD OF EDUCATION:

RAY ENGEL, President
RAY CUNDIFF, Vice-President
DR. LARRY WALKER, Member
CHRISTY JOHNSON, Member
M. W. McLANAHAN, Member

ADMINISTRATIVE ASSISTANTS:

DON DECKER
Financial and Business Affairs
JOE GLOVER
Personnel Director, Federal Programs
JOHN GWARTNEY
Director of Elementary Education, Food Service
JIM MARSHALL
Transportation
ROBERT SHARP
Director of Secondary Education, Building-Grounds

October 25, 1983

Superintendent of Schools
Lebanon Schools
Lebanon, CT 06249

Dear Superintendent,

Jenks Public Schools is studying merit pay plans with the idea of implementing one for our certificated staff of 368 people. I have read about your program and would very much appreciate your sharing information regarding teacher input.

Specifically, what did your teachers think should be considered for merit pay purposes? If you did not use teacher-designated criteria, what did you use?

I would be grateful, also, to receive any other information that would help administrators and board members in making the decisions necessary in such an undertaking.

Sincerely,

Sue Hoevelman
Sue Hoevelman
Supervisor of Curriculum
and Instruction

Sue,
The program was one year old
did not work at all. Teachers did not share. Hard to
evaluate teachers. Some teachers thought weaker teachers
received too much pay & others who should have received
did not. It looked like a good idea on paper, but
it failed.
Dear Sue - Hoepf, Sept

APPENDIX B
QUANAL Computations

TABLE XVIII

CONDITION ONE: PRINCIPAL AXIS (COMPONENTS) FACTOR MATRIX

COMMUNALITY	VAR	FACTOR LOADINGS		
		1	2	3
0.414	1 01 M E R	0.506	0.252	0.307
0.411	2 02 M S R	0.602	-0.216	-0.050
0.342	3 03 F E R	0.554	0.168	0.082
0.336	4 04 F E R	0.514	-0.127	0.236
0.325	5 05 F E R	0.094	-0.008	0.562
0.405	6 06 F E R	0.332	0.476	0.258
0.325	7 07 F E R	0.399	0.059	0.403
0.206	8 08 F E R	0.372	0.186	0.182
0.261	9 09 F E R	0.226	0.072	0.453
0.119	10 10 M S R	0.009	-0.338	0.005
0.133	11 11 F E R	0.313	-0.137	0.128
0.067	12 12 F S R	0.242	-0.085	0.039
0.473	13 13 F S R	0.681	-0.033	-0.092
0.210	14 14 M E R	0.358	-0.275	0.083
0.118	15 15 F S R	0.152	-0.294	0.094
0.299	16 16 F E R	0.207	-0.095	0.497
0.142	17 17 F S R	0.284	0.091	0.231
0.449	18 18 M S R	0.116	-0.628	0.202
0.205	19 19 F S R	0.397	-0.217	-0.020
0.339	20 20 F S R	0.549	0.109	0.159
0.134	21 21 F E R	0.255	0.115	0.237
0.374	22 22 F E R	0.259	-0.476	0.284

TABLE XVIII (Continued)

0.225	23 23 F S R	0.147 -0.312 0.326
0.252	24 24 F S R	0.428 -0.067 0.253
0.346	25 25 F S R	0.582 -0.069 0.052
0.419	26 26 M S R	0.294 -0.577 -0.009
0.143	27 27 F S R	-0.046 -0.349 0.141
0.114	28 28 F E R	0.267 -0.159 0.131
0.423	29 29 F S R	0.572 -0.018 0.310
0.241	30 30 M S R	0.160 -0.454 0.096
0.261	31 31 F E R	0.240 -0.450 -0.028
0.395	32 32 M E U	0.520 0.345 0.069
0.490	33 33 F E U	0.619 0.230 0.234
0.141	34 34 F S U	0.363 0.081 -0.056
0.116	35 35 F S U	0.248 0.150 -0.178
0.443	36 36 F S U	0.590 0.272 -0.144
0.151	37 37 F E U	0.315 -0.084 -0.211
0.322	38 38 F E U	0.513 -0.186 -0.157
0.143	39 39 F S U	0.325 0.145 -0.129
0.483	40 40 F E U	0.472 0.034 -0.509
0.314	41 41 F S U	0.524 0.197 -0.024
0.320	42 42 M S U	-0.007 -0.327 -0.462
0.579	43 43 F S U	0.663 -0.083 -0.364
0.122	44 44 F E U	0.304 0.172 -0.022
0.467	45 45 M S U	0.586 -0.088 -0.340
0.043	46 46 M S U	0.077 -0.063 0.182
0.080	47 47 M S U	0.151 -0.225 0.080

TABLE XVIII (Continued)

0.281	48 48 M S U	0.427	-0.061	-0.308
0.679	49 49 F E U	0.606	0.484	-0.014
0.322	50 50 M S U	0.513	-0.164	-0.178
0.223	51 51 F S U	0.388	-0.000	-0.269
0.311	52 52 M S U	0.519	-0.158	-0.129
0.624	53 53 M S U	0.427	-0.564	-0.353
0.298	54 54 M S U	0.475	-0.262	-0.056
0.502	55 55 F S U	0.638	-0.236	0.199
0.256	56 56 F S U	0.400	0.124	-0.283
0.551	57 57 F S U	0.410	0.451	-0.424
0.149	58 58 F S U	0.290	0.254	0.025
0.508	59 59 F E U	0.704	-0.040	-0.098
0.439	60 60 F S U	0.476	0.446	0.114
0.507	61 61 F S U	0.709	0.056	-0.027

TABLE XIX

CONDITION ONE: SIMPLE STRUCTURE MATRIX

VARIABLE	1	2	3
1 01 M E R	0.217	0.002	0.606
2 02 M S R	0.481	0.366	0.215
3 03 F E R	0.389	0.035	0.435
4 04 F E R	0.239	0.333	0.410
5 05 F E R	-0.282	0.183	0.460
6 06 F E R	0.129	-0.271	0.561
7 07 F E R	0.059	0.171	0.540
8 08 F E R	0.187	-0.011	0.414
9 09 F E R	-0.105	0.121	0.485
10 10 M S R	0.025	0.333	-0.090
11 11 F E R	0.151	0.253	0.215
12 12 F S R	0.156	0.161	0.130
13 13 F S R	0.582	0.211	0.300
14 14 M E R	0.204	0.382	0.153
15 15 F S R	0.036	0.340	0.039
16 16 F E R	-0.160	0.280	0.442
17 17 F S R	0.081	0.062	0.363
18 18 M S R	-0.085	0.664	-0.034
19 19 F S R	0.304	0.313	0.122
20 20 F S R	0.333	0.107	0.466
21 21 F E R	0.056	0.033	0.361
22 22 F E R	-0.015	0.589	0.166
23 23 F S R	-0.115	0.416	0.198
24 24 F S R	0.166	0.256	0.398

TABLE XIX (Continued)

25 25 F S R	0.412	0.252	0.335
26 26 M S R	0.189	0.015	-0.068
27 27 F S R	-0.150	0.343	-0.059
28 28 F E R	0.112	0.260	0.182
29 29 F S R	0.245	0.270	0.539
30 30 M S R	0.029	0.490	-0.018
31 31 F E R	0.169	0.478	-0.003
32 32 M E U	0.384	-0.141	0.470
33 33 F E U	0.348	0.037	0.606
34 34 F S U	0.322	0.020	0.194
35 35 F S U	0.315	-0.110	0.067
36 36 F S U	0.567	-0.110	0.330
37 37 F E U	0.370	0.117	-0.011
38 38 F E U	0.481	0.285	0.099
39 39 F S U	0.343	-0.068	0.144
40 40 F E U	0.688	-0.022	-0.090
41 41 F S U	0.434	-0.029	0.352
42 42 M S U	0.261	0.178	-0.470
43 43 F S U	0.736	0.181	0.071
44 44 F E U	0.261	-0.072	0.221
45 45 M S U	0.661	0.169	0.044
46 46 M S U	-0.060	0.129	0.151
47 47 M S U	0.050	0.273	0.054
48 48 M S U	0.519	0.104	-0.011
49 49 F E U	0.560	-0.247	0.551

TABLE XIX (Continued)

50	50	M	S	U	0.496	0.259	0.092
51	51	F	S	U	0.469	0.047	0.020
52	52	M	S	U	0.470	0.268	0.133
53	53	M	S	U	0.510	0.553	-0.240
54	54	M	S	U	0.383	0.369	0.122
55	55	F	S	U	0.350	0.461	0.409
56	56	F	S	U	0.497	-0.067	0.065
57	57	F	S	U	0.618	-0.401	0.095
58	58	F	S	U	0.227	-0.139	0.280
59	59	F	E	U	0.604	0.224	0.306
60	60	F	S	U	0.329	-0.236	0.524
61	61	F	S	U	0.569	0.155	0.398

TABLE XX

CONDITION ONE: RE-ORDERED FACTOR MATRIX

SEQ.	VARIABLE	ID		1	2	3	COM.	PURE
FACTOR 1								
1	51	51	F S U	0.469	0.047	0.020	0.223	0.988
2	40	40	F E U	0.688	-0.022	-0.096	0.483	0.980
3	56	56	F S U	0.497	-0.067	0.065	0.256	0.966
4	48	48	M S U	0.519	0.104	-0.011	0.281	0.961
5	45	45	M S U	0.661	0.169	0.044	0.467	0.935
6	43	43	F S U	0.736	0.181	0.071	0.579	0.935
7	37	37	F E U	0.370	0.117	-0.011	0.151	0.908
8	35	35	F S U	0.315	-0.110	0.067	0.116	0.857
9	39	39	F S U	0.343	-0.068	0.144	0.143	0.823
10	50	50	M S U	0.496	0.259	0.092	0.322	0.765
11	34	34	F S U	0.322	0.020	0.194	0.141	0.731
12	36	36	F S U	0.567	-0.110	0.330	0.443	0.726
13	38	38	F E U	0.481	0.285	0.099	0.322	0.719
14	59	59	F E U	0.604	0.224	0.306	0.508	0.718
15	13	13	F S R	0.582	0.211	0.300	0.473	0.715
16	52	52	M S U	0.470	0.268	0.133	0.311	0.712
17	57	57	F S U	0.618	-0.401	0.095	0.551	0.692
18	61	61	F S U	0.569	0.155	0.398	0.507	0.639
19	41	41	F S U	0.434	-0.029	0.352	0.314	0.601
20	2	02	M S R	0.481	0.366	0.215	0.411	0.562
21	44	44	F E U	0.261	-0.072	0.221	0.122	0.558
22	54	54	M S U	0.383	0.369	0.122	0.298	0.492
23	25	25	F S R	0.412	0.252	0.335	0.346	0.491
24	49	49	F E U	0.560	-0.247	0.551	0.679	0.462
FACTOR 2								
25	30	30	M S R	0.029	0.490	-0.018	0.241	0.955
26	18	18	M S R	-0.085	0.064	-0.034	0.449	0.981
27	15	15	F S R	0.036	0.340	0.039	0.118	0.976
28	47	47	M S U	0.050	0.273	0.054	0.080	0.931
29	10	10	M S R	0.025	0.333	-0.090	0.119	0.926
30	22	22	F E R	-0.015	0.589	0.166	0.374	0.926
31	26	26	M S R	0.189	0.615	-0.068	0.419	0.903
32	31	31	F E R	0.169	0.478	-0.063	0.261	0.875
33	27	27	F S R	-0.150	0.343	-0.059	0.143	0.818
34	23	23	F S R	-0.115	0.416	0.198	0.225	0.767
35	14	14	M E R	0.204	0.382	0.153	0.210	0.692
36	28	28	F E R	0.112	0.260	0.182	0.114	0.596
37	53	53	M S U	0.510	0.553	-0.240	0.624	0.490
38	11	11	F E R	0.151	0.253	0.215	0.133	0.481
39	19	19	F S R	0.304	0.313	0.122	0.205	0.478
40	55	55	F S U	0.350	0.461	0.409	0.502	0.423
41	12	12	F S R	0.156	0.161	0.130	0.067	0.386

TABLE XX (Continued)

FACTOR		3						
42	21	21	F E R	0.056	0.033	0.361	0.134	0.969
43	17	17	F S R	0.081	0.062	0.363	0.142	0.927
44	9	09	F E R	-0.105	0.121	0.485	0.261	0.902
45	7	07	F E R	0.059	0.171	0.540	0.325	0.899
46	1	01	M E R	0.217	0.002	0.606	0.414	0.886
47	8	08	F E R	0.187	-0.011	0.414	0.206	0.831
48	6	06	F E R	0.129	-0.271	0.561	0.405	0.777
49	33	33	F E U	0.348	0.037	0.606	0.490	0.750
50	42	42	M S U	0.261	0.178	-0.470	0.320	0.689
51	29	29	F S R	0.245	0.270	0.539	0.423	0.686
52	16	16	F E R	-0.160	0.260	0.442	0.299	0.653
53	5	05	F E R	-0.282	0.183	0.460	0.325	0.652
54	20	20	F S R	0.333	0.107	0.466	0.339	0.640
55	24	24	F S R	0.166	0.256	0.398	0.252	0.629
56	60	60	F S U	0.329	-0.236	0.524	0.439	0.626
57	32	32	M E U	0.384	-0.141	0.476	0.395	0.575
58	3	03	F E R	0.389	0.035	0.435	0.342	0.553
59	46	46	M S U	-0.060	0.129	0.151	0.043	0.532
60	58	58	F S U	0.227	-0.139	0.280	0.149	0.525
61	4	04	F E R	0.239	0.333	0.410	0.336	0.499
TOTAL VAR - PER FACTOR				0.1314	0.0788	0.0975	0.3077	
- CUMULATIVE				0.1314	0.2103	0.3077		
COM. VAR. - PER FACTOR				0.4271	0.2562	0.3168	1.0000	
- CUMULATIVE				0.4271	0.6832	1.0000		

TABLE XXI

CONDITION ONE: TYPAL Z-SCORES

ITEM DESCRIPTIONS	N'S FOR EACH TYPE ARE			TYPAL Z'S		
	1	2	3	1	2	3
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	25	17	19			
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.						
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	-1.2	-0.9	0.4			
4. T GEN'L :KEEPS ROOM ATTRACTIVE.	1.3	-0.8	1.7			
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	1.8	-0.5	0.1			
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.3	-1.2	-2.1			
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.8	-0.5	0.2			
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.2	-1.1	-0.5			
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.4	-0.9	0.6			
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	-1.1	-2.3	-1.2			
11. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.0	0.6	-0.7			
12. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.						
13. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	2.1	0.6	0.8			
14. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	1.0	-0.0	-1.7			
15. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.3	0.6	0.1			
16. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.9	-0.2	0.6			
17. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	0.4	-0.3	0.1			
18. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.8	0.4	0.6			
19. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	2.4	1.8	1.1			
20. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.6	-1.0	-0.7			
21. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	-0.7	-1.9	-0.2			
22. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-0.0	-0.6	-0.5			
23. T PRUITT:DEVELOPS NEW CURRICULUM.	1.3	1.3	1.5			
24. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.1	-1.2	0.6			
25. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-1.1	-0.7	-0.5			
26. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	-0.3	-1.7	1.1			
27. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.0	-1.0	1.2			
28. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.6	0.6	0.9			
29. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.0	1.0	0.9			
30. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.7	1.0	2.0			
31. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	0.8	0.6	1.5			
32. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.3	0.5	0.6			
33. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.9	-0.2	-1.4			
34. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	0.9	1.1	0.9			
35. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.6	-0.1	-1.3			
36. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.						
37. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.7	0.3	-0.4			
38. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	-0.7	0.3	-0.5			
39. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-0.2	0.9	0.3			
40. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	0.1	0.8	1.5			
41. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-2.0	-1.6	-1.2			
42. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.2	1.0	-1.7			
43. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-0.6	1.6	0.3			
44. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	0.1	-0.7	-1.2			
45. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.1	0.9	-0.2			
46. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.1	1.7	-1.2			
47. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.1	-0.4	-0.7			
48. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-1.5	0.4	-0.5			
49. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.2	0.8	-0.0			
50. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.5	-0.1	-1.3			
	-0.1	1.8	-0.6			
	-0.7	-0.4	0.7			

TABLE XXII

CONDITION ONE: DESCENDING ARRAYS, FACTOR ONE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 1	
ITEM DESCRIPTION	Z-SCORE
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	2.362
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	2.058
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.775
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.623
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.339
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.290
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	1.007
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.994
26. M SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.979
31. M SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.947
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.923
28. M SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.803
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.767
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.753
27. M SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.655
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.630
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.419
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.251
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	0.121
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.113
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.057
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.021
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.030
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.104
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.110
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.178
35. M SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.217
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.304
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.328
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.423
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.520
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.557
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.648
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.670
34. M SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.717
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.723
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.744
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.854
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.057
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-1.082
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.089
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.107
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.151
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.183
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.248
4. 7 GEN'L :KEEPS ROOM ATTRACTIVE.	-1.340
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.454
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-2.049

TABLE XXIII

CONDITION ONE: DESCENDING ARRAYS, FACTOR TWO

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 2	
ITEM DESCRIPTION	Z-SCORE
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.840
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	1.831
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	1.727
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	1.553
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.253
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	1.146
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.011
38. P PRUITT:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	1.002
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.973
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	0.889
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	0.860
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.773
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.759
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.635
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	0.597
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	0.574
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.562
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.551
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.452
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	0.378
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.363
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.309
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	0.301
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.000
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.089
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.135
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.182
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.220
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.290
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.361
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.416
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	-0.530
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	-0.539
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.623
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-0.676
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.741
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	-0.827
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.892
7. M SIM LO:DIREKTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.919
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-1.009
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-1.038
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.054
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-1.168
4. 7 GEN'L :KEEPS ROOM ATTRACTIVE.	-1.177
37. P SIM HI:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.552
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-1.705
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.902
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-2.294

TABLE XXIV

CONDITION ONE: DESCENDING ARRAYS, FACTOR THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 3		
	ITEM DESCRIPTION	Z-SCORE
27.	H SIM HI: DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.955
2.	M GEN'L : USES A VARIETY OF TEACHING TECHNIQUES.	1.728
28.	H SIM HI: DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.528
20.	T PRUITT: IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.508
36.	H GEN'L : ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.505
24.	T SIM LO: USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.183
23.	T SIM LO: EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	1.137
16.	T SIM HI: SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.096
26.	H SIM HI: PROMOTES POSITIVE SELF CONCEPT.	0.925
31.	H SIM LO: VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.922
25.	H PRUITT: USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.894
10.	M PRUITT: UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	0.755
48.	P GEN'L : ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.721
15.	T PRUITT: COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.643
7.	M SIM LO: DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.636
29.	H PRUITT: PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.630
21.	T PRUITT: DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.586
13.	T SIM HI: DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.558
1.	M SIM HI: SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	0.379
35.	H SIM LO: EXHIBITS A SENSE OF HUMOR.	0.317
39.	P SIM HI: SUPPORTS SCHOOL REGULATIONS AND POLICIES.	0.257
5.	M SIM LO: DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.236
12.	M SIM HI: DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.069
14.	T SIM HI: ENSURES ADEQUATE STUDENT TIME ON TASK.	0.055
3.	M SIM HI: ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.051
45.	P SIM LO: AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.001
18.	T SIM HI: PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.194
41.	P SIM LO: BELONGS TO PROFESSIONAL ORGANIZATIONS.	-0.226
33.	H SIM HI: DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.394
34.	H SIM HI: PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.464
6.	M GEN'L : PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.474
19.	T PRUITT: ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.504
44.	P GEN'L : SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.514
22.	T PRUITT: DEVELOPS NEW CURRICULUM.	-0.518
47.	P PRUITT: ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.599
17.	T SIM HI: PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-0.661
43.	P GEN'L : EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.669
9.	M PRUITT: TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.729
8.	M GEN'L : EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.189
40.	P SIM HI: DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.211
42.	P SIM LO: ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-1.217
37.	P PRUITT: PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.222
32.	H SIM LO: DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.258
46.	P PRUITT: EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-1.330
30.	H SIM LO: AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-1.426
11.	M SIM HI: USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-1.678
38.	P SIM HI: ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.694
4.	7 GEN'L : KEEPS ROOM ATTRACTIVE.	-2.102

TABLE XXV

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 2

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 2			
	1	2	DIFFERENCE
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.775	-0.530	2.305
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.290	-0.827	2.117
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.630	-1.009	1.638
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	2.058	0.597	1.461
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.304	-1.705	1.402
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.767	-0.539	1.305
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.113	-1.168	1.281
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.057	-2.294	1.237
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.670	-1.902	1.232
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.923	-0.182	1.105
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.021	-1.038	1.058
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.994	-0.000	0.995
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.623	0.635	0.988
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.178	-1.054	0.876
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	0.121	-0.741	0.862
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.419	-0.290	0.709
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.030	-0.623	0.593
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	2.362	1.840	0.522
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.423	-0.919	0.496
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	1.007	0.574	0.434
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.753	0.363	0.390
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.803	0.562	0.241
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.339	1.253	0.086
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.979	1.011	-0.032
4. T GEN'L :KEEPS ROOM ATTRACTIVE.	-1.340	-1.177	-0.164
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.947	1.146	-0.199
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.251	0.452	-0.201
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.655	0.973	-0.318
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.744	-0.416	-0.328
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.248	-0.892	-0.356
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.520	-0.135	-0.385
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-1.082	-0.676	-0.405
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.557	-0.089	-0.468
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-2.049	-1.552	-0.497
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.854	-0.220	-0.635
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.057	0.759	-0.702

TABLE XXXV (Continued)

43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.089	-0.361	-0.728
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.328	0.551	-0.879
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.723	0.301	-1.024
34. M SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.717	0.309	-1.026
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.217	0.860	-1.077
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.454	0.378	-1.832
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.110	1.727	-1.837
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.151	0.773	-1.923
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.104	1.831	-1.935
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.107	0.889	-1.996
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.183	1.002	-2.184
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.648	1.553	-2.201

TABLE XXVI

CONDITION ONE: DESCENDING ARRAY OF DIFFERENCES, ONE/THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 3			
	1	3	DIFFERENCE
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.994	-1.678	2.672
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	1.007	-0.729	1.736
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.775	0.051	1.724
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	0.121	-1.211	1.332
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	2.058	0.755	1.303
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.630	-0.661	1.290
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	2.362	1.096	1.266
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.110	-1.217	1.107
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.520	-1.330	0.811
4. T GEN ⁰ L :KEEPS ROOM ATTRACTIVE.	-1.340	-2.102	0.762
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.623	0.894	0.729
32. M SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.557	-1.258	0.700
30. M SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.854	-1.426	0.572
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.767	0.236	0.531
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.183	-1.694	0.512
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.104	-0.599	0.495
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.030	-0.504	0.475
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.419	0.055	0.364
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.923	0.558	0.364
c. M GEN ⁰ L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.178	-0.474	0.296
8. M GEN ⁰ L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.057	-1.189	0.132
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.753	0.643	0.110
26. M SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.979	0.925	0.054
31. M SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.947	0.922	0.025
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.339	1.508	-0.169
34. M SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.717	-0.464	-0.253
33. M SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.723	-0.394	-0.330
29. M PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.251	0.630	-0.379

TABLE XXVI (Continued)

12. M SIM HI: DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.328	0.069	-0.397
43. P GEN'L : EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.089	-0.669	-0.419
2. M GEN'L : USES A VARIETY OF TEACHING TECHNIQUES.	1.290	1.728	-0.438
21. T PRUITT: DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.113	0.586	-0.473
18. T SIM HI: PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.670	-0.194	-0.476
35. H SIM LO: EXHIBITS A SENSE OF HUMOR.	-0.217	0.317	-0.534
22. T PRUITT: DEVELOPS NEW CURRICULUM.	-1.082	-0.518	-0.564
28. H SIM HI: DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.803	1.528	-0.725
37. P PRUITT: PARTICIPATES IN IN-SERVICE ACTIVITIES.	-2.049	-1.222	-0.827
41. P SIM LO: BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.107	-0.226	-0.882
39. P SIM HI: SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.648	0.257	-0.905
44. P GEN'L : SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.454	-0.514	-0.940
7. M SIM LO: DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.423	0.636	-1.059
45. P SIM LO: AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.151	-0.001	-1.149
24. T SIM LO: USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.021	1.183	-1.162
27. H SIM HI: DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.655	1.955	-1.299
23. T SIM LO: EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.304	1.137	-1.441
36. H GEN'L : ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.057	1.505	-1.448
48. P GEN'L : ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.744	0.721	-1.465
1. M SIM HI: SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.248	0.379	-1.627

TABLE XXXVII

CONDITION ONE: DESCENDING ARRAY OF DIFFERENCES, TWO/THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 2 AND 3			
	2	3	DIFFERENCE
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	1.727	-1.217	2.944
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	1.002	-1.694	2.696
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	1.831	-0.599	2.430
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.000	-1.678	1.678
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	0.574	-0.729	1.302
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	1.553	0.257	1.296
30. M SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.220	-1.426	1.206
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.135	-1.330	1.196
32. M SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.089	-1.258	1.168
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	0.889	-0.226	1.114
4. T GEN'L :KEEPS ROOM ATTRACTIVE.	-1.177	-2.102	0.925
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	0.378	-0.514	0.892
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.773	-0.001	0.774
34. M SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.309	-0.464	0.773
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.840	1.096	0.744
33. M SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	0.301	-0.394	0.694
35. M SIM LO:EXHIBITS A SENSE OF HUMOR.	0.860	0.317	0.543
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.551	0.069	0.482
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.741	-1.211	0.470
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.361	-0.669	0.308
31. M SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	1.146	0.922	0.224
26. M SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.011	0.925	0.086
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.623	-0.504	-0.119
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-0.676	-0.518	-0.158
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	0.597	0.755	-0.159
29. M PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.452	0.630	-0.178
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.253	1.508	-0.255

TABLE XXVII (Continued)

25.	H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.635	0.894	-0.258
15.	T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.363	0.643	-0.280
37.	P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.552	-1.222	-0.330
14.	T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.290	0.055	-0.345
17.	T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-1.009	-0.661	-0.348
6.	M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.054	-0.474	-0.580
3.	M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	-0.530	0.051	-0.581
13.	T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.182	0.558	-0.740
30.	H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.759	1.505	-0.746
5.	M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	-0.539	0.236	-0.775
28.	H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.562	1.528	-0.966
27.	H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.973	1.955	-0.981
8.	M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-2.294	-1.189	-1.105
48.	P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.416	0.721	-1.137
1.	M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.892	0.379	-1.271
7.	M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.919	0.636	-1.555
18.	T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.902	-0.194	-1.708
21.	T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-1.168	0.586	-1.754
24.	T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-1.038	1.183	-2.221
2.	M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	-0.827	1.728	-2.555
23.	T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-1.705	1.137	-2.843

TABLE XXVIII

CONDITION ONE: TYPAL Z DIFFERENCES, FACTOR ONE

ITEMS ON WHICH TYPE 1 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.775	-0.239	2.014
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.994	-0.839	1.833
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.630	-0.835	1.464
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	2.058	0.676	1.382
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	0.121	-0.976	1.097
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	1.007	-0.077	1.085
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.767	-0.151	0.918
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	2.362	1.468	0.894
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.623	0.764	0.858
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.923	0.188	0.734
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.057	-1.741	0.685
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.178	-0.764	0.586
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.419	-0.117	0.537
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.030	-0.564	0.534
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.753	0.503	0.250

TABLE XXVIX

CONDITION ONE: TYPAL Z DIFFERENCES, FACTOR ONE

ITEMS ON WHICH TYPE 1 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.251	0.541	-0.290
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-1.082	-0.597	-0.484
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.089	-0.515	-0.573
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.328	0.310	-0.638
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.717	-0.076	-0.640
37. P SIM HI:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-2.049	-1.387	-0.662
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.723	-0.047	-0.677
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.217	0.589	-0.806
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.655	1.464	-0.809
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.744	0.152	-0.897
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.248	-0.257	-0.991
36. H PRUITT:ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.057	1.132	-1.075
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.454	-0.068	-1.386
41. P SIM LU:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.107	0.332	-1.439
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.151	0.386	-1.536
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.648	0.905	-1.553

TABLE XXX

CONDITION ONE: TYPAL Z DIFFERENCES, FACTOR TWO

ITEMS ON WHICH TYPE 2 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S				
	ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
38.	P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	1.002	-1.439	2.440
42.	P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	1.727	-0.664	2.391
47.	P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	1.831	-0.352	2.183
39.	P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	1.553	-0.195	1.748
41.	P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	0.889	-0.666	1.555
44.	P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	0.378	-0.984	1.362
45.	P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.773	-0.576	1.349
30.	H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.220	-1.140	0.920
34.	H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.309	-0.591	0.900
33.	H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	0.301	-0.559	0.859
32.	H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.089	-0.907	0.818
35.	H SIM LO:EXHIBITS A SENSE OF HUMOR.	0.860	0.050	0.810
46.	P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.135	-0.925	0.790
12.	M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.551	-0.130	0.681
7.	GEN'L :KEEPS ROOM ATTRACTIVE.	-1.177	-1.721	0.544
43.	P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.361	-0.879	0.518
31.	H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	1.146	0.934	0.212
26.	H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.011	0.952	0.059

TABLE XXXI

CONDITION ONE: TYPAL Z DIFFERENCES, FACTOR TWO

ITEMS ON WHICH TYPE 2 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.253	1.424	-0.171
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.363	0.698	-0.335
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.623	-0.267	-0.356
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.290	0.237	-0.527
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.562	1.165	-0.604
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.635	1.258	-0.623
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.054	-0.326	-0.728
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	0.597	1.407	-0.810
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.182	0.740	-0.922
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-1.009	-0.015	-0.993
7. M SIM LO:DIKETS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.919	0.106	-1.025
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	-0.539	0.501	-1.040
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-2.294	-1.123	-1.171
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	-0.530	0.913	-1.443
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.902	-0.432	-1.470
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-1.168	0.350	-1.518
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-1.038	0.602	-1.639
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-1.705	0.417	-2.122
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	-0.827	1.509	-2.336

TABLE XXXII

CONDITION ONE: TYPAL Z DIFFERENCES, FACTOR THREE

ITEMS ON WHICH TYPE 3 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	1.137	-1.005	2.142
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.183	-0.509	1.692
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.728	0.232	1.496
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	0.379	-1.070	1.449
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.636	-0.671	1.307
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.721	-0.580	1.301
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.955	0.814	1.140
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.586	-0.527	1.114
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.505	0.408	1.097
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.194	-1.286	1.092
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.526	0.682	0.846
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.222	-1.801	0.579
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-0.518	-0.879	0.361
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.630	0.352	0.278
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.508	1.296	0.212

TABLE XXXIII

CONDITION ONE: TYPAL Z DIFFERENCE, FACTOR THREE

ITEMS ON WHICH TYPE 3 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.925	0.995	-0.070
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.922	1.047	-0.125
4. 7 GEN'L :KEEPS ROOM ATTRACTIVE.	-2.102	-1.258	-0.844
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-1.426	-0.537	-0.889
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.211	-0.310	-0.901
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.258	-0.323	-0.934
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-1.330	-0.327	-1.003
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.096	2.101	-1.005
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.599	0.863	-1.463
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.729	0.790	-1.519
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.694	-0.091	-1.604
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-1.217	0.808	-2.025
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-1.678	0.497	-2.175

TABLE XXXIV

CONDITION ONE: CONSENSUS ITEMS

15 CONSENSUS ITEMS AND AVERAGE Z-SCORES. CRITERION IS 1.000

ITEM DESCRIPTION	AVERAGE Z
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.367
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.051
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	1.005
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.971
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.964
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.586
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.444
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.097
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.061
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-0.386
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.569
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.706
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-0.759
4. 7 GEN'L :KEEPS ROOM ATTRACTIVE.	-1.539
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.608

TABLE XXXV

CONDITION TWO: PRINCIPAL AXIS (COMPONENTS) FACTOR MATRIX

COMMUNALITY	VAR	FACTOR LOADINGS		
		1	2	3
0.294	1 01 M E R	0.506	0.159	-0.115
0.530	2 02 M S R	0.588	0.253	0.346
0.484	3 03 F E R	0.683	0.046	-0.127
0.374	4 04 F E R	0.596	0.127	-0.054
0.316	5 05 F E R	0.123	0.329	-0.439
0.239	6 06 F E R	0.440	0.009	0.214
0.355	7 07 F E R	0.539	0.172	0.187
0.318	8 08 F E R	0.516	0.023	0.227
0.436	9 09 F E R	0.626	0.008	-0.211
0.244	10 10 M S R	0.126	0.338	-0.338
0.055	11 11 F E R	0.131	0.187	-0.052
0.696	12 12 F S R	0.819	0.120	-0.101
0.654	13 13 F S R	0.789	0.161	-0.073
0.387	14 14 M E R	0.473	0.401	-0.054
0.637	15 15 F S R	0.788	-0.073	0.102
0.537	16 16 F E R	0.626	0.234	-0.301
0.149	17 17 F S R	0.349	-0.051	0.156
0.165	18 18 M S R	0.069	0.359	-0.175
0.630	19 19 F S R	0.733	0.160	0.259
0.328	20 20 F S R	0.479	-0.307	-0.067
0.330	21 21 F E R	0.311	0.348	0.335
0.257	22 22 F E R	0.462	0.022	0.207
0.394	23 23 F S R	0.582	-0.228	-0.055

TABLE XXXV (Continued)

0.508	24 24 F S R	0.676	0.129	-0.186
0.563	25 25 F S R	0.677	0.278	-0.167
0.418	26 26 M S R	0.109	0.621	0.142
0.634	27 27 F S R	0.793	0.015	-0.071
0.159	28 28 F E R	-0.155	-0.003	0.367
0.452	29 29 F S R	0.484	0.380	0.270
0.695	30 30 M S R	0.640	-0.519	0.130
0.425	31 31 F E R	0.636	0.109	-0.096
0.748	32 32 M E U	0.791	-0.293	0.190
0.606	33 33 F E U	0.776	-0.072	0.004
0.666	34 34 F S U	0.758	-0.059	-0.298
0.232	35 35 F S U	0.328	0.347	0.059
0.294	36 36 F S U	0.463	0.277	0.048
0.694	37 37 F E U	0.758	-0.101	-0.330
0.339	38 38 F E U	0.318	0.428	0.233
0.327	39 39 F S U	0.532	-0.209	0.012
0.285	40 40 F E U	0.468	-0.170	0.194
0.492	41 41 F S U	0.672	0.042	-0.195
0.364	42 42 M S U	0.557	-0.231	-0.027
0.547	43 43 F S U	0.730	0.052	0.108
0.293	44 44 F E U	0.532	-0.073	-0.062
0.182	45 45 M S U	0.373	-0.188	0.085
0.379	46 46 M S U	0.589	-0.133	-0.122
0.483	47 47 M S U	0.571	-0.381	0.109
0.507	48 48 M S U	0.690	0.004	0.175

TABLE XXXV (Continued)

0.500	49 49 F E U	0.692	0.123	-0.078
0.501	50 50 M S U	0.648	0.139	0.249
0.254	51 51 F S U	0.486	-0.000	-0.132
0.393	52 52 M S U	0.547	0.163	0.258
0.304	53 53 M S U	0.491	0.055	0.246
0.644	54 54 M S U	0.646	-0.315	0.357
0.668	55 55 F S U	0.712	-0.224	-0.333
0.486	56 56 F S U	0.545	-0.166	-0.402
0.719	57 57 F S U	0.758	-0.381	-0.008
0.526	58 58 F S U	0.657	-0.145	-0.270
0.769	59 59 F E U	0.772	-0.353	0.219
0.647	60 60 F S U	0.750	0.135	-0.257
0.631	61 61 F S U	0.744	0.136	0.243

TABLE XXXVI

CONDITION TWO: PRIMARY PATTERN MATRIX

VARIABLE	1	2	3
1 01 M E R	0.572	-0.239	0.194
2 02 M S R	-0.335	0.120	0.893
3 03 F E R	0.646	0.004	0.055
4 04 F E R	0.475	-0.086	0.238
5 05 F E R	1.130	-1.010	-0.030
6 06 F E R	-0.224	0.358	0.358
7 07 F E R	-0.051	0.074	0.578
8 08 F E R	-0.207	0.372	0.408
9 09 F E R	0.782	-0.038	-0.111
10 10 M S R	0.918	-0.917	0.105
11 11 F E R	0.253	-0.343	0.231
12 12 F S R	0.691	-0.053	0.219
13 13 F S R	0.630	-0.104	0.305
14 14 M E R	0.518	-0.608	0.603
15 15 F S R	0.166	0.495	0.178
16 16 F E R	1.061	-0.532	0.104
17 17 F S R	-0.171	0.371	0.186
18 18 M S R	0.549	-0.798	0.317
19 19 F S R	-0.109	0.237	0.686
20 20 F S R	0.275	0.622	-0.418
21 21 F E R	-0.419	-0.149	0.957
22 22 F E R	-0.193	0.335	0.373
23 23 F S R	0.333	0.530	-0.270

TABLE XXXVI (Continued)

24 24 F S R	0.800	-0.206	0.100
25 25 F S R	0.819	-0.447	0.335
26 26 M S R	-0.005	-0.903	1.074
27 27 F S R	0.572	0.156	0.099
28 28 F E R	-0.868	0.351	0.401
29 29 F S R	-0.177	-0.219	0.961
30 30 M S R	-0.144	1.259	-0.452
31 31 F E R	0.579	-0.088	0.172
32 32 M E U	-0.106	0.977	-0.029
33 33 F E U	0.368	0.384	0.062
34 34 F S U	1.009	0.029	-0.282
35 35 F S U	0.180	-0.440	0.631
36 36 F S U	0.246	-0.283	0.546
37 37 F E U	1.062	0.070	-0.381
38 38 F E U	-0.167	-0.398	0.952
39 39 F S U	0.172	0.552	-0.174
40 40 F E U	-0.235	0.659	0.085
41 41 F S U	0.784	-0.065	-0.034
42 42 M S U	0.259	0.558	-0.246
43 43 F S U	0.171	0.262	0.352
44 44 F E U	0.383	0.234	-0.068
45 45 M S U	-0.060	0.543	-0.090
46 46 M S U	0.517	0.295	-0.214
47 47 M S U	-0.082	0.973	-0.295
48 48 M S U	-0.013	0.406	0.357

TABLE XXXVI (Continued)

49 49 F E U	0.577	-0.076	0.224
50 50 M S U	-0.140	0.234	0.628
51 51 F S U	0.537	0.016	-0.058
52 52 M S U	-0.204	0.171	0.652
53 53 M S U	-0.248	0.328	0.472
54 54 M S U	-0.548	1.149	0.109
55 55 F S U	0.997	0.267	-0.569
56 56 F S U	1.080	0.036	-0.603
57 57 F S U	0.266	0.907	-0.396
58 58 F S U	0.866	0.178	-0.393
59 59 F E U	-0.202	1.108	-0.083
60 60 F S U	0.993	-0.269	0.040
61 61 F S U	-0.080	0.266	0.635

TABLE XXXVII

CONDITION TWO: SIMPLE STRUCTURE MATRIX

SIMPLE STRUCTURE MATRIX

VARIABLE	1	2	3
1 01 M E R	0.256	-0.114	0.104
2 02 M S R	-0.150	0.057	0.478
3 03 F E R	0.289	0.002	0.030
4 04 F E R	0.213	-0.041	0.128
5 05 F E R	0.506	-0.484	-0.016
6 06 F E R	-0.100	0.171	0.192
7 07 F E R	-0.023	0.036	0.310
8 08 F E R	-0.093	0.178	0.219
9 09 F E R	0.350	-0.018	-0.059
10 10 M S R	0.411	-0.440	0.056
11 11 F E R	0.113	-0.164	0.124
12 12 F S R	0.309	-0.026	0.117
13 13 F S R	0.282	-0.050	0.163
14 14 M E R	0.232	-0.291	0.323
15 15 F S R	0.074	0.237	0.096
16 16 F E R	0.475	-0.255	0.056
17 17 F S R	-0.077	0.178	0.100
18 18 M S R	0.246	-0.382	0.170
19 19 F S R	-0.049	0.114	0.368
20 20 F S R	0.123	0.298	-0.224
21 21 F E R	-0.187	-0.071	0.513
22 22 F E R	-0.086	0.161	0.200

TABLE XXXVII (Continued)

23 23 F S R	0.149	0.254	-0.145
24 24 F S R	0.358	-0.099	0.054
25 25 F S R	0.366	-0.215	0.179
26 26 M S R	-0.002	-0.433	0.576
27 27 F S R	0.256	0.075	0.053
28 28 F E R	-0.388	0.168	0.215
29 29 F S R	-0.079	-0.105	0.515
30 30 M S R	-0.064	0.604	-0.242
31 31 F E R	0.259	-0.042	0.092
32 32 M E U	-0.047	0.468	-0.015
33 33 F E U	0.165	0.184	0.033
34 34 F S U	0.452	0.014	-0.151
35 35 F S U	0.081	-0.211	0.338
36 36 F S U	0.110	-0.136	0.292
37 37 F E U	0.475	0.034	-0.204
38 38 F E U	-0.075	-0.191	0.510
39 39 F S U	0.077	0.265	-0.093
40 40 F E U	-0.105	0.316	0.046
41 41 F S U	0.351	-0.031	-0.018
42 42 M S U	0.116	0.267	-0.132
43 43 F S U	0.077	0.126	0.189
44 44 F E U	0.171	0.112	-0.037
45 45 M S U	-0.027	0.261	-0.048
46 46 M S U	0.231	0.141	-0.114
47 47 M S U	-0.037	0.466	-0.158

TABLE XXXVII (Continued)

48 48 M S U	-0.006	0.195	0.191
49 49 F E U	0.258	-0.036	0.120
50 50 M S U	-0.063	0.112	0.337
51 51 F S U	0.240	0.008	-0.031
52 52 M S U	-0.091	0.082	0.349
53 53 M S U	-0.111	0.157	0.253
54 54 M S U	-0.245	0.551	0.059
55 55 F S U	0.446	0.128	-0.305
56 56 F S U	0.483	0.017	-0.323
57 57 F S U	0.119	0.435	-0.212
58 58 F S U	0.387	0.085	-0.211
59 59 F E U	-0.091	0.531	-0.044
60 60 F S U	0.444	-0.129	0.022
61 61 F S U	-0.036	0.128	0.341

TABLE XXXVIII

CONDITION TWO: RE-ORDERED FACTOR MATRIX

SEQ.	VARIABLE ID	1	2	3	COM.	PURE
FACTOR 1						
1	41 41 F S U	0.351	-0.031	-0.018	0.124	0.990
2	3 03 F E R	0.289	0.002	0.030	0.084	0.990
3	51 51 F S U	0.240	0.008	-0.031	0.059	0.983
4	9 09 F E R	0.350	-0.018	-0.059	0.126	0.969
5	60 60 F S U	0.444	-0.129	0.022	0.215	0.920
6	24 24 F S R	0.358	-0.099	0.054	0.141	0.910
7	34 34 F S U	0.452	0.014	-0.151	0.227	0.898
8	27 27 F S R	0.256	0.075	0.053	0.074	0.886
9	12 12 F S R	0.309	-0.026	0.117	0.110	0.869
10	31 31 F E R	0.259	-0.042	0.092	0.077	0.868
11	37 37 F E U	0.475	0.034	-0.204	0.269	0.841
12	49 49 F E U	0.258	-0.036	0.120	0.082	0.809
13	16 16 F E R	0.475	-0.255	0.056	0.293	0.768
14	58 58 F S U	0.387	0.085	-0.211	0.202	0.744
15	1 01 M E R	0.256	-0.114	0.104	0.089	0.733
16	13 13 F S R	0.282	-0.050	0.163	0.109	0.731
17	4 04 F E R	0.213	-0.041	0.128	0.063	0.715
18	56 56 F S U	0.483	0.017	-0.323	0.338	0.691
19	44 44 F E U	0.171	0.112	-0.037	0.043	0.679
20	28 28 F E R	-0.388	0.168	0.215	0.225	0.669
21	55 55 F S U	0.446	0.128	-0.305	0.308	0.645
22	25 25 F S R	0.366	-0.215	0.179	0.212	0.632
23	46 46 M S U	0.231	0.141	-0.114	0.087	0.618
24	5 05 F E R	0.506	-0.484	-0.016	0.491	0.521
FACTOR 2						
25	32 32 M E U	-0.047	0.468	-0.015	0.222	0.989
26	59 59 F E U	-0.091	0.531	-0.044	0.293	0.965
27	45 45 M S U	-0.027	0.261	-0.048	0.071	0.957
28	47 47 M S U	-0.037	0.466	-0.158	0.244	0.892
29	40 40 F E U	-0.105	0.316	0.046	0.113	0.883
30	30 30 M S R	-0.064	0.604	-0.242	0.427	0.853
31	39 39 F S U	0.077	0.265	-0.093	0.085	0.827
32	54 54 M S U	-0.245	0.551	0.059	0.367	0.827
33	15 15 F S R	0.074	0.237	0.096	0.071	0.794
34	57 57 F S U	0.119	0.435	-0.212	0.248	0.761
35	42 42 M S U	0.116	0.267	-0.132	0.102	0.699
36	17 17 F S R	-0.077	0.178	0.100	0.047	0.667
37	18 18 M S R	0.246	-0.382	0.170	0.236	0.621
38	23 23 F S R	0.149	0.254	-0.145	0.108	0.600
39	20 20 F S R	0.123	0.298	-0.224	0.154	0.577
40	33 33 F E U	0.165	0.184	0.033	0.062	0.546
41	10 10 M S R	0.411	-0.440	0.056	0.365	0.529
42	48 48 M S U	-0.006	0.195	0.191	0.074	0.509
43	11 11 F E R	0.113	-0.164	0.124	0.055	0.490

TABLE XXXVIII (Continued)

FACTOR	3							
44	7 07	F E R	-0.023	0.036	0.310	0.098	0.982	
45	29 29	F S R	-0.079	-0.105	0.515	0.283	0.939	
46	2 02	M S R	-0.150	0.057	0.478	0.255	0.899	
47	19 19	F S R	-0.049	0.114	0.368	0.150	0.898	
48	52 52	M S U	-0.091	0.082	0.349	0.137	0.890	
49	50 50	M S U	-0.063	0.112	0.337	0.130	0.872	
50	61 61	F S U	-0.036	0.128	0.341	0.134	0.869	
51	21 21	F E R	-0.187	-0.071	0.513	0.303	0.867	
52	38 38	F E U	-0.075	-0.191	0.510	0.302	0.861	
53	36 36	F S U	0.110	-0.136	0.292	0.116	0.737	
54	35 35	F S U	0.081	-0.211	0.338	0.165	0.692	
55	26 26	M S R	-0.002	-0.433	0.576	0.519	0.639	
56	53 53	M S U	-0.111	0.157	0.253	0.101	0.634	
57	43 43	F S U	0.077	0.126	0.189	0.057	0.623	
58	22 22	F E R	-0.086	0.161	0.200	0.073	0.545	
59	8 08	F E R	-0.093	0.178	0.219	0.088	0.542	
60	6 06	F E R	-0.100	0.171	0.192	0.076	0.482	
61	14 14	M E R	0.232	-0.291	0.323	0.243	0.430	
TOTAL VAR	- PER FACTOR		0.0607	0.0593	0.0542	0.1742		
	- CUMULATIVE		0.0607	0.1200	0.1742			
COM. VAR.	- PER FACTOR		0.3483	0.3407	0.3110	1.0000		
	- CUMULATIVE		0.3483	0.6890	1.0000			

TABLE XXXIX

CONDITION TWO: TYPAL Z-SCORES

ITEM DESCRIPTIONS	TYPAL Z'S		
	1	2	3
N'S FOR EACH TYPE ARE	25	10	20
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.5	-0.5	0.3
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.2	1.8	1.7
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.4	2.0	1.7
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.6	-0.6	-2.1
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.5	1.3	-0.1
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.5	-0.6	-0.6
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.8	0.1	-0.0
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.9	-0.3	-1.5
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.7	-0.2	0.2
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.3	1.6	2.0
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.9	0.6	0.1
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.3	-0.8	0.4
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.7	1.4	0.4
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.8	0.8	-0.7
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.2	1.5	-0.1
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.6	1.7	1.6
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.8	1.0	-0.5
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.6	0.5	-1.4
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.7	0.6	-1.4
20. T PKUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.7	1.3	1.7
21. T PKUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.7	0.6	-0.9
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.0	-0.0	-1.4
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.2	0.2	-0.3
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.3	0.6	-0.1
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.7	0.6	1.3
26. M SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.5	0.4	1.4
27. M SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.9	0.8	1.4
28. M SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.0	0.8	1.1

TABLE XXXIX (Continued)

29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.3	-0.1	-0.2
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.6	-0.6	-0.8
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	1.0	0.1	0.5
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.2	-1.4	-0.9
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.3	-0.7	-0.4
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.5	-0.8	-0.4
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.2	-0.8	0.8
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.6	0.1	1.3
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.2	-1.6	-1.8
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.3	-1.2	-0.7
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.3	-1.0	0.6
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.3	-0.5	-1.2
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.1	-1.2	0.1
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-1.0	-0.8	0.1
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.4	-1.4	-0.3
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.2	-1.6	-0.2
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.3	-1.3	0.0
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.8	-0.7	0.0
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.4	-1.4	-0.4
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.6	-0.7	-0.6

TABLE XXXX

CONDITION TWO: DESCENDING ARRAY, FACTOR ONE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 1		
	ITEM DESCRIPTION	Z-SCORE
27.	H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.857
20.	T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.747
25.	H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.739
16.	T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.639
36.	H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.601
26.	H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.501
24.	T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.315
10.	M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.295
2.	M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.173
28.	H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.006
31.	H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.958
14.	T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.818
19.	T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.747
21.	T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.660
17.	T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.610
48.	P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.572
34.	H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.534
5.	M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.452
3.	M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.442
29.	H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.253
15.	T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.160
22.	T PRUITT:DEVELOPS NEW CURRICULUM.	0.016
23.	T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.184
35.	H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.236
12.	M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.255
45.	P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.280
33.	H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.330
39.	P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.350

TABLE XXXX (Continued)

43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.422
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.629
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.643
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.649
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.651
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.738
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.830
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.839
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.857
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.876
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.959
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.082
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.152
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.205
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.208
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.254
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.302
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.330
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.352
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.477

TABLE XXXXI

CONDITION TWO: DESCENDING ARRAY, FACTOR TWO

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 2		
	ITEM DESCRIPTION	Z-SCORE
3.	M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	2.011
2.	M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.754
16.	T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.730
10.	M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.573
15.	T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	1.469
13.	T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	1.406
20.	T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.350
5.	M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	1.343
17.	T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	1.024
14.	T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.827
26.	H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.623
27.	H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.812
24.	T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.756
25.	H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.620
19.	T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.613
21.	T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.612
11.	M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.571
18.	T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.478
26.	H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.435
23.	T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.244
7.	M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.105
31.	H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.058
36.	H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.056
22.	T PRUITT:DEVELOPS NEW CURRICULUM.	-0.020
29.	H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.137
9.	M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.204
8.	M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.316
1.	M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.334
40.	P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.492
4.	M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.576
6.	M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.620
48.	P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.650
46.	P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.651
33.	H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.724
42.	P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.753
30.	H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.760
35.	H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.804
12.	M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.807
34.	H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.836
39.	P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.957
41.	P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.167
38.	P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.227
45.	P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.299
32.	H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.360
43.	P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.375
47.	P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.424
44.	P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.567
37.	P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.615

TABLE XXXXII

CONDITION TWO: DESCENDING ARRAY, FACTOR THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 3	
ITEM DESCRIPTION	Z-SCORE
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.961
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.809
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.694
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.680
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.665
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.412
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.384
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.333
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.328
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.076
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	0.821
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	0.623
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.497
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.433
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.392
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	0.333
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	0.214
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	0.113
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.103
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	0.074
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.010
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	0.008
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.028
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	-0.065
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	-0.109
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-0.136
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.223
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.230
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.280
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.338
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.373
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.389
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.404
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-0.491
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.605
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.607
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.650
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-0.666
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.814
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.927
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-0.934
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.214
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.356
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-1.359
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-1.394
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.463
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.794
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-2.119

TABLE XXXXIII

CONDITION TWO: DESCENDING ARRAY OF DIFFERENCES, ONE/TWO

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 2			
	1	2	DIFFERENCE
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.601	0.058	1.543
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.534	-0.838	1.373
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.572	-0.650	1.222
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.739	0.620	1.119
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.501	0.435	1.066
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.857	0.812	1.045
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.280	-1.299	1.019
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.422	-1.375	0.953
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.958	0.058	0.900
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.350	-0.957	0.607
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.236	-0.804	0.568
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.315	0.756	0.559
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.255	-0.807	0.552
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.152	-1.615	0.463
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.747	1.350	0.397
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.330	-0.724	0.394
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.253	-0.137	0.390
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.205	-1.567	0.362
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.006	0.823	0.183
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.208	-1.360	0.152
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.747	0.613	0.134
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.082	-1.167	0.085
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.352	-1.424	0.072
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.060	0.612	0.047
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.016	-0.020	0.036
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.818	0.827	-0.010
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.643	-0.576	-0.067
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.830	-0.760	-0.070

TABLE XXXXIII (Continued)

38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.308	-1.227	-0.081
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.639	1.730	-0.090
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.839	-0.651	-0.187
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.959	-0.753	-0.207
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.295	1.573	-0.279
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.610	1.024	-0.415
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.184	0.244	-0.428
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.738	-0.204	-0.534
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.857	-0.316	-0.541
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.173	1.754	-0.581
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.649	0.105	-0.754
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.254	-0.492	-0.762
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.477	-0.620	-0.857
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.452	1.343	-0.891
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.330	-0.334	-0.996
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.629	0.478	-1.107
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.160	1.469	-1.309
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.876	0.571	-1.447
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.442	2.011	-1.569
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.651	1.408	-2.059

TABLE XXXXIV

CONDITION TWO: DESCENDING ARRAY OF DIFFERENCES, ONE/THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 3			
	1	3	DIFFERENCE
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.747	-1.394	2.141
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.660	-0.934	1.593
4. M GEN ^o L :KEEPS ROOM ATTRACTIVE.	-0.643	-2.119	1.477
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.818	-0.650	1.468
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.315	-0.136	1.451
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.016	-1.359	1.375
48. P GEN ^o L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.572	-0.607	1.179
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.610	-0.491	1.101
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.534	-0.373	0.907
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-0.629	-1.356	0.727
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.152	-1.794	0.642
8. M GEN ^o L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.857	-1.463	0.607
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.452	-0.065	0.516
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.253	-0.230	0.483
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.958	0.497	0.461
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.557	1.412	0.445
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.739	1.328	0.411
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.160	-0.109	0.270
36. H GEN ^o L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.601	1.333	0.268
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.184	-0.336	0.154
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.501	1.384	0.117
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.330	-0.389	0.058
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.747	1.694	0.053
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.830	-0.814	-0.016
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.254	-1.214	-0.040
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.006	1.076	-0.069
43. P GEN ^o L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.422	-0.280	-0.142
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.639	1.809	-0.169

TABLE XXXIV (Continued)

32.	H	SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.208	-0.927	-0.281
45.	P	SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.280	0.016	-0.296
2.	M	GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.173	1.665	-0.492
7.	M	SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.649	-0.028	-0.621
36.	P	SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.308	-0.666	-0.643
12.	M	SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.255	0.392	-0.647
10.	M	PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.295	1.961	-0.666
46.	P	PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.839	0.008	-0.847
6.	M	GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.477	-0.605	-0.871
47.	P	PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.352	-0.404	-0.948
9.	M	PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.738	0.214	-0.951
39.	P	SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.350	0.623	-0.973
11.	M	SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.876	0.103	-0.979
44.	P	GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.205	-0.223	-0.982
42.	P	SIM LG:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.959	0.074	-1.034
35.	H	SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.236	0.821	-1.057
13.	T	SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.651	0.433	-1.084
41.	P	SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.082	0.113	-1.195
3.	M	SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.442	1.080	-1.238
1.	M	SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.330	0.333	-1.663

TABLE XXXXV

CONDITION TWO: DESCENDING ARRAY OF DIFFERENCES, TWO/THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 2 AND 3			
	2	3	DIFFERENCE
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.613	-1.394	2.007
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.476	-1.356	1.834
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	1.469	-0.109	1.579
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.612	-0.934	1.546
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.576	-2.119	1.544
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	1.024	-0.491	1.516
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.827	-0.650	1.478
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	1.343	-0.065	1.408
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-0.020	-1.359	1.339
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.316	-1.463	1.147
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	1.408	0.433	0.975
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.756	-0.136	0.892
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.492	-1.214	0.723
23. T SIM LU:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.244	-0.338	0.582
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.571	0.103	0.468
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	2.011	1.680	0.330
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.615	-1.794	0.179
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.105	-0.028	0.133
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.137	-0.230	0.093
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.754	1.665	0.089
30. H SIM LU:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.760	-0.814	0.054
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.620	-0.605	-0.014
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.650	-0.607	-0.043
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.730	1.809	-0.079
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.823	1.076	-0.253
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.724	-0.389	-0.335
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.350	1.694	-0.344

TABLE XXXXV (Continued)

10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.573	1.961	-0.387
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.204	0.214	-0.417
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.360	-0.927	-0.433
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.058	0.497	-0.439
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.838	-0.373	-0.466
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.227	-0.666	-0.561
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.812	1.412	-0.600
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.651	0.008	-0.660
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.334	0.333	-0.667
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.620	1.328	-0.708
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.753	0.074	-0.827
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	0.435	1.384	-0.949
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.424	-0.404	-1.020
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.375	-0.280	-1.095
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.807	0.392	-1.199
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.058	1.333	-1.274
41. P SIM LU:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.167	0.113	-1.280
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.299	0.016	-1.315
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.567	-0.223	-1.344
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.957	0.623	-1.580
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.804	0.821	-1.624

TABLE XXXXVI

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR TWO

ITEMS ON WHICH TYPE 1 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	0.572	-0.628	1.200
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	0.534	-0.605	1.140
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.747	-0.391	1.138
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.315	0.310	1.005
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.601	0.695	0.906
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.660	-0.161	0.820
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.739	0.974	0.765
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.857	1.112	0.745
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.016	-0.690	0.706
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.958	0.278	0.681
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.501	0.910	0.591
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.152	-1.704	0.552
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.253	-0.184	0.437
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.330	-0.556	0.226
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.747	1.522	0.225

TABLE XXXXVII

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR ONE

ITEMS ON WHICH TYPE 1 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
	ITEM DESCRIPTION	Z-SCORE	AVERAGE Z DIFFERENCE
30.	H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.830	-0.787 -0.043
16.	T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.639	1.769 -0.130
38.	P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.308	-0.946 -0.362
40.	P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.254	-0.853 -0.401
10.	M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.295	1.767 -0.472
46.	P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.839	-0.322 -0.517
2.	M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.173	1.710 -0.536
42.	P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.959	-0.339 -0.620
7.	M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.649	0.038 -0.687
9.	M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.738	0.005 -0.743
6.	M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-1.477	-0.612 -0.864
11.	M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.876	0.337 -1.213
1.	M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-1.330	-0.000 -1.330
3.	M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	0.442	1.846 -1.403
13.	T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.651	0.921 -1.571

TABLE XXXXVIII

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR TWO

ITEMS ON WHICH TYPE 2 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	1.408	-0.109	1.517
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.478	-0.993	1.471
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	1.469	0.025	1.444
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	1.343	0.193	1.150
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	1.024	0.059	0.965
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.571	-0.386	0.957
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	2.011	1.061	0.950
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.315	-1.160	0.844
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-0.570	-1.381	0.805
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.827	0.084	0.744
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.492	-1.234	0.743
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.244	-0.261	0.505
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	0.105	-0.359	0.444
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.754	1.419	0.335
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.760	-0.822	0.062

TABLE XXXIX

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR TWO

ITEMS ON WHICH TYPE 2 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
28. H SIM HI: DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.823	1.041	-0.218
32. H SIM LO: DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.360	-1.067	-0.293
33. H SIM HI: DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.724	-0.360	-0.364
20. T PRUITT: IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.350	1.720	-0.371
47. P PRUITT: ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.424	-0.878	-0.546
48. P GEN'L : ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.650	-0.017	-0.633
31. H SIM LO: VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.050	0.720	-0.670
41. P SIM LO: BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.167	-0.485	-0.682
27. H SIM HI: DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.812	1.635	-0.822
44. P GEN'L : SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.567	-0.714	-0.853
12. M SIM HI: DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.807	0.068	-0.875
25. H PRUITT: USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	0.620	1.533	-0.913
34. H SIM HI: PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.838	0.081	-0.919
26. H SIM HI: PROMOTES POSITIVE SELF CONCEPT.	0.435	1.443	-1.007
43. P GEN'L : EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.375	-0.351	-1.024
39. P SIM HI: SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.957	0.137	-1.094
35. H SIM LO: EXHIBITS A SENSE OF HUMOR.	-0.804	0.292	-1.096
45. P SIM LO: AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.299	-0.132	-1.167
36. H GEN'L : ACCEPTS AND/OR USES IDEAS OF STUDENTS.	0.056	1.467	-1.409

TABLE L

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR THREE

ITEMS ON WHICH TYPE 3 Z'S ARE GREATER THAN ALL OTHER TYPAL Z'S				
	ITEM DESCRIPTION	Z-SCORE AVERAGE Z		DIFFERENCE
35.	H SIM LO:EXHIBITS A SENSE OF HUMOR.	0.821	-0.520	1.341
39.	P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	0.623	-0.653	1.276
41.	P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	0.113	-1.125	1.238
1.	M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	0.333	-0.832	1.165
44.	P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.223	-1.386	1.163
47.	P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.404	-1.388	0.984
42.	P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	0.074	-0.856	0.930
12.	M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	0.392	-0.531	0.923
45.	P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.016	-0.789	0.805
46.	P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	0.008	-0.745	0.753
9.	M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	0.214	-0.471	0.684
43.	P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.280	-0.899	0.619
38.	P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-0.666	-1.267	0.602
10.	M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.961	1.434	0.527
6.	M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.605	-1.048	0.443
32.	H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-0.927	-1.284	0.357
28.	H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.076	0.915	0.161
16.	T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.809	1.685	0.124

TABLE LI

CONDITION TWO: TYPAL Z DIFFERENCES, FACTOR THREE

ITEMS ON WHICH TYPE 3 Z'S ARE LESS THAN ALL OTHER TYPAL Z'S			
ITEM DESCRIPTION	Z-SCORE	AVERAGE Z	DIFFERENCE
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.230	0.058	-0.288
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.338	0.030	-0.368
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.794	-1.363	-0.411
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-1.463	-0.586	-0.877
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	-0.109	0.815	-0.924
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	-0.065	0.897	-0.962
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	-0.136	1.035	-1.171
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.356	-0.076	-1.280
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	-0.491	0.817	-1.308
22. T PRUITT:DEVELOPS NEW CURRICULUM.	-1.359	-0.002	-1.357
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	-0.650	0.823	-1.473
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-2.119	-0.609	-1.510
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	-0.934	0.636	-1.570
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	-1.394	0.680	-2.074

TABLE LII

CONDITION TWO: CONSENSUS ITEMS

18 CONSENSUS ITEMS AND AVERAGE Z-SCORES. CRITERION IS 1.000	
ITEM DESCRIPTION	AVERAGE Z
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.726
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.610
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.597
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.531
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	0.968
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.505
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.038
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.093
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.191
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.243
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.481
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.494
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.801
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.900
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-0.987
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.067
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.165
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.520

TABLE LIII

CONDITION THREE: PRINCIPAL AXIS (COMPONENTS) FACTOR MATRIX

COMMUNALITY	VAR	FACTOR LOADINGS	
		1	2
0.295	1 01 M E R	0.519	-0.159
0.455	2 02 M S R	0.665	-0.117
0.359	3 03 F E R	0.545	0.250
0.503	4 04 F E R	0.701	-0.103
0.425	5 05 F E R	0.644	-0.101
0.659	6 06 F E R	0.766	-0.268
0.506	7 07 F E R	0.576	-0.419
0.137	8 08 F E R	0.345	-0.135
0.363	9 09 F E R	0.583	-0.153
0.254	10 10 M S R	0.418	0.281
0.279	11 11 F E R	0.526	-0.053
0.602	12 12 F S R	0.775	0.037
0.630	13 13 F S R	0.787	-0.103
0.240	14 14 M E R	0.412	-0.265
0.662	15 15 F S R	0.802	-0.139
0.390	16 16 F E R	0.566	0.265
0.037	17 17 F S R	0.072	0.179
0.157	18 18 M S R	-0.175	0.355
0.461	19 19 F S R	0.672	0.097
0.557	20 20 F S R	0.737	-0.117
0.221	21 21 F E R	0.469	-0.035
0.173	22 22 F E R	0.293	-0.296

TABLE LIII (Continued)

0.608	23 23 F S R	0.734 -0.262
0.637	24 24 F S R	0.765 -0.228
0.547	25 25 F S R	-0.708 -0.214
0.223	26 26 M S R	0.440 -0.172
0.169	27 27 F S R	0.405 0.065
0.315	28 28 F E R	0.533 -0.174
0.261	29 29 F S R	0.493 -0.136
0.416	30 30 M S R	0.642 -0.062
0.547	31 31 F E R	0.739 -0.034
0.616	32 32 M E U	0.785 -0.011
0.498	33 33 F E U	0.387 0.590
0.356	34 34 F S U	0.596 0.021
0.410	35 35 F S U	0.533 0.354
0.400	36 36 F S U	0.499 0.388
0.334	37 37 F E U	0.438 0.377
0.216	38 38 F E U	0.411 0.215
0.382	39 39 F S U	0.513 0.344
0.474	40 40 F E U	0.517 0.454
0.520	41 41 F S U	0.703 0.158
0.408	42 42 M S U	0.543 0.337
0.625	43 43 F S U	0.787 -0.082
0.540	44 44 F E U	0.735 -0.011
0.476	45 45 M S U	0.473 0.503
0.094	46 46 M S U	0.065 0.301
0.539	47 47 M S U	0.471 0.563

TABLE LIII (Continued)

0.461	48 48 M S U	0.674 -0.083
0.542	49 49 F E U	0.702 -0.223
0.543	50 50 M S U	0.731 -0.094
0.278	51 51 F S U	0.435 0.298
0.467	52 52 M S U	0.682 0.046
0.487	53 54 M S U	0.606 -0.346
0.585	54 55 F S U	0.762 -0.065
0.254	55 56 F S U	0.281 0.419
0.515	56 57 F S U	0.630 -0.343
0.559	57 58 F S U	0.747 0.023
0.627	58 59 F E U	0.788 -0.071
0.631	59 60 F S U	0.793 0.045
0.513	60 61 F S U	0.701 -0.148

TABLE LIV

CONDITION THREE: SIMPLE STRUCTURE MATRIX

VARIABLE	1	2
1 01 M E R	0.527	0.133
2 02 M S R	0.629	0.244
3 03 F E R	0.337	0.496
4 04 F E R	0.653	0.276
5 05 F E R	0.603	0.248
6 06 F E R	0.794	0.167
7 07 F E R	0.709	-0.060
8 08 F E R	0.365	0.063
9 09 F E R	0.578	0.171
10 10 M S R	0.212	0.457
11 11 F E R	0.477	0.227
12 12 F S R	0.644	0.433
13 13 F S R	0.726	0.320
14 14 M E R	0.489	-0.013
15 15 F S R	0.757	0.297
16 16 F E R	0.347	0.520
17 17 F S R	-0.031	0.190
18 18 M S R	-0.333	0.213
19 19 F S R	0.524	0.431
20 20 F S R	0.691	0.282
21 21 F E R	0.419	0.213
22 22 F E R	0.404	-0.102

TABLE LIV (Continued)

23 23 F S R	0.764	0.157
24 24 F S R	0.772	0.201
25 25 F S R	-0.495	-0.550
26 26 M S R	0.465	0.081
27 27 F S R	0.313	0.265
28 28 F E R	0.546	0.128
29 29 F S R	0.492	0.139
30 30 M S R	0.581	0.280
31 31 F E R	0.649	0.354
32 32 M E U	0.677	0.397
33 33 F E U	0.025	0.705
34 34 F S U	0.499	0.327
35 35 F S U	0.272	0.579
36 36 F S U	0.226	0.591
37 37 F E U	0.179	0.549
38 38 F E U	0.240	0.398
39 39 F S U	0.261	0.560
40 40 F E U	0.207	0.656
41 41 F S U	0.520	0.499
42 42 M S U	0.289	0.569
43 43 F S U	0.715	0.338
44 44 F E U	0.634	0.372
45 45 M S U	0.144	0.675
46 46 M S U	-0.100	0.291

TABLE LIV (Continued)

47 47 M S U	0.111	0.725
48 48 M S U	0.619	0.279
49 49 F E U	0.715	0.173
50 50 M S U	0.674	0.299
51 51 F S U	0.218	0.480
52 52 M S U	0.559	0.393
53 54 M S U	0.697	0.018
54 55 F S U	0.686	0.340
55 56 F S U	0.024	0.504
56 57 F S U	0.717	0.033
57 58 F S U	0.627	0.407
58 59 F E U	0.711	0.348
59 60 F S U	0.655	0.449
60 61 F S U	0.676	0.236

TABLE LV

CONDITION THREE: RE-ORDERED FACTOR MATRIX

SEQ.	VARIABLE ID	1	2	COM.	PURE
FACTOR 1					
1	53 54 M S U	0.697	0.018	0.487	0.999
2	14 14 M E R	0.489	-0.013	0.240	0.999
3	56 57 F S U	0.717	0.033	0.515	0.998
4	7 07 F E R	0.709	-0.060	0.506	0.993
5	8 08 F E R	0.365	0.063	0.137	0.971
6	26 26 M S R	0.465	0.081	0.223	0.971
7	23 23 F S R	0.764	0.157	0.608	0.960
8	6 06 F E R	0.794	0.167	0.659	0.958
9	28 28 F E R	0.546	0.128	0.315	0.948
10	49 49 F E U	0.715	0.173	0.542	0.945
11	22 22 F E R	0.404	-0.102	0.173	0.940
12	1 01 M E R	0.527	0.133	0.295	0.940
13	24 24 F S R	0.772	0.201	0.637	0.937
14	29 29 F S R	0.492	0.139	0.261	0.926
15	9 09 F E R	0.578	0.171	0.363	0.919
16	60 61 F S U	0.676	0.236	0.513	0.891
17	2 02 M S R	0.629	0.244	0.455	0.869
18	15 15 F S R	0.757	0.297	0.662	0.867
19	20 20 F S R	0.691	0.282	0.557	0.858
20	5 05 F E R	0.603	0.248	0.425	0.856
21	4 04 F E R	0.653	0.276	0.503	0.849
22	13 13 F S R	0.726	0.320	0.630	0.838
23	50 50 M S U	0.674	0.299	0.543	0.836
24	48 48 M S U	0.619	0.279	0.461	0.832
25	43 43 F S U	0.715	0.338	0.625	0.817
26	11 11 F E R	0.477	0.227	0.279	0.816
27	30 30 M S R	0.581	0.280	0.416	0.812
28	58 59 F E U	0.711	0.348	0.627	0.807
29	54 55 F S U	0.686	0.340	0.585	0.803
30	21 21 F E R	0.419	0.213	0.221	0.794
31	31 31 F E R	0.649	0.354	0.547	0.771
32	44 44 F E U	0.634	0.372	0.540	0.744
33	32 32 M E U	0.677	0.397	0.616	0.744
34	18 18 M S R	-0.333	0.213	0.157	0.710
35	57 58 F S U	0.627	0.407	0.559	0.704
36	34 34 F S U	0.499	0.327	0.356	0.699
37	12 12 F S R	0.644	0.433	0.602	0.688
38	59 60 F S U	0.655	0.449	0.631	0.680
39	52 52 M S U	0.559	0.393	0.467	0.670
40	19 19 F S R	0.524	0.431	0.461	0.597
41	27 27 F S R	0.313	0.265	0.169	0.582
42	41 41 F S U	0.520	0.499	0.520	0.520

TABLE LV (Continued)

FACTOR	2								
43	33	33	F	E	U	0.025	0.705	0.498	0.999
44	55	56	F	S	U	0.024	0.504	0.254	0.998
45	47	47	M	S	U	0.111	0.725	0.539	0.977
46	17	17	F	S	R	-0.031	0.190	0.037	0.973
47	45	45	M	S	U	0.144	0.675	0.476	0.957
48	40	40	F	E	U	0.207	0.656	0.474	0.910
49	37	37	F	E	U	0.179	0.549	0.334	0.904
50	46	46	M	S	U	-0.100	0.291	0.094	0.893
51	36	36	F	S	U	0.226	0.591	0.400	0.873
52	51	51	F	S	U	0.218	0.480	0.278	0.830
53	10	10	M	S	R	0.212	0.457	0.254	0.823
54	39	39	F	S	U	0.261	0.560	0.382	0.822
55	35	35	F	S	U	0.272	0.579	0.410	0.819
56	42	42	M	S	U	0.289	0.569	0.408	0.795
57	38	38	F	E	U	0.240	0.398	0.216	0.732
58	16	16	F	E	R	0.347	0.520	0.390	0.692
59	3	03	F	E	R	0.337	0.496	0.359	0.684
60	25	25	F	S	R	-0.495	-0.550	0.547	0.553
TOTAL VAR - PER FACTOR						0.2813	0.1426	0.4239	
						- CUMULATIVE	0.2813	0.4239	
COM. VAR. - PER FACTOR						0.6635	0.3365	1.0000	
						- CUMULATIVE	0.6635	1.0000	

TABLE LVI

CONDITION THREE: TYPAL Z-SCORES

ITEM DESCRIPTIONS	TYPAL Z'S	
	1	2
N'S FOR EACH TYPE ARE	41	18
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.5	-2.3
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.3	1.5
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.4	1.1
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-1.1	-1.5
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.6	0.1
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.9	-2.2
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.3	-1.1
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.9	-0.6
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.6	-0.5
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.5	1.8
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.0	-0.2
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.2	-1.4
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.9	-0.8
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.7	0.3
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.8	0.5
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.9	2.1
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.7	0.4
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.2	-1.4
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.5	0.2
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.7	1.5
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.4	0.3
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.1	-0.9
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.7	-0.7
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.3	0.6
25. M PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.4	1.0
26. M SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.0	1.0
27. M SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.7	0.6
28. M SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.2	1.0
29. M PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.1	0.3
30. M SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.9	-0.2
31. M SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.1	-0.4
32. M SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.5	-1.2
33. M SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.4	-1.0
34. M SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.2	-0.6
35. M SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.6	0.2
36. M GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.1	1.4
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.0	-0.8
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.3	-0.7
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.9	-0.0
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.8	0.6
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.3	-0.1
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.7	0.4
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.2	-0.8
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.2	-0.5
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-1.0	0.5
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-1.0	1.0
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-1.0	0.5
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.4	1.0

TABLE LVII

CONDITION THREE: DESCENDING ARRAYS, FACTOR ONE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 1	
ITEM DESCRIPTION	Z-SCORE
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.867
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.742
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.682
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.467
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.362
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.359
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.280
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.272
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.158
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.109
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.024
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.865
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.784
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.746
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.736
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.679
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.569
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.512
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.405
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.186
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.092
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.086
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.043
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.123
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.194
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.227
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.318
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.366
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.442
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.465
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.603
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.621
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.713
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.857
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.872
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.905
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.931
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.959
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.978
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.981
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.030
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-1.106
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.165
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.235
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.265
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.316
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.522
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.831

TABLE LVIII

CONDITION THREE: DESCENDING ARRAYS, FACTOR TWO

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF Z-SCORES FOR TYPE 2		
	ITEM DESCRIPTION	Z-SCORE
16.	T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	2.126
10.	M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.751
2.	M GEN ^l :USES A VARIETY OF TEACHING TECHNIQUES.	1.513
20.	T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.454
36.	H GEN ^l :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.382
3.	M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.077
46.	P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	1.046
26.	H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.019
28.	H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.016
25.	H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.013
48.	P GEN ^l :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	1.003
27.	H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	0.622
24.	T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.617
40.	P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	0.560
47.	P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	0.542
15.	T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.495
45.	P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	0.481
17.	T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.370
42.	P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	0.360
21.	T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.348
14.	T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.311
29.	H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.295
35.	H SIM LO:EXHIBITS A SENSE OF HUMOR.	0.227
19.	T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.225
5.	M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.114
39.	P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.015
41.	P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-0.142
11.	M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.196
30.	H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.223
31.	H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	-0.361
9.	M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.504
44.	P GEN ^l :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.512
34.	H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.570
8.	M GEN ^l :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.616
23.	T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	-0.681
38.	P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-0.692
43.	P GEN ^l :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.770
13.	T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	-0.835
37.	P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-0.845
22.	T PRUITT:DEVELOPS NEW CURRICULUM.	-0.946
33.	H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.999
7.	M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-1.076
32.	H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.202
12.	M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-1.357
16.	T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	-1.391
4.	M GEN ^l :KEEPS ROOM ATTRACTIVE.	-1.499
6.	M GEN ^l :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-2.193
1.	M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-2.340

TABLE LIX

CONDITION ONE: DESCENDING ARRAY OF DIFFERENCES, TWO/THREE

ITEM DESCRIPTIONS AND DESCENDING ARRAY OF DIFFERENCES BETWEEN TYPES 1 AND 2			
	1	2	DIFFERENCE
1. M SIM HI:SETS HIGH STANDARDS FOR STUDENT BEHAVIOR.	-0.465	-2.340	1.875
13. T SIM HI:DEVELOPS AND IMPLEMENTS LESSON PLANS.	0.865	-0.835	1.700
18. T SIM HI:PREPARES APPROPRIATE EVALUATION ACTIVITIES.	0.186	-1.391	1.577
23. T SIM LO:EXHIBITS ENTHUSIASM FOR SUBJECT MATTER.	0.679	-0.681	1.359
6. M GEN'L :PROVIDES MATERIALS AND SUPPLIES FOR STUDENTS.	-0.857	-2.193	1.337
12. M SIM HI:DEMONSTRATES EVIDENCE OF PERSONAL ORGANIZATION.	-0.194	-1.357	1.163
27. H SIM HI:DEMONSTRATES AWARENESS OF NEEDS OF STUDENTS.	1.682	0.622	1.060
22. T PRUITT:DEVELOPS NEW CURRICULUM.	0.086	-0.946	1.033
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.318	-1.076	0.758
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	1.280	0.617	0.663
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.442	-0.999	0.556
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.569	0.114	0.454
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	0.092	-0.361	0.453
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.736	0.311	0.425
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-1.106	-1.499	0.393
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.746	0.370	0.376
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.359	1.013	0.346
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.227	-0.570	0.342
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.784	0.495	0.289
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.742	1.454	0.287
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.512	0.225	0.287
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.362	1.077	0.285
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	0.043	-0.196	0.239
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.158	1.016	0.142
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.405	0.348	0.057
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.024	1.019	0.005
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.621	-0.504	-0.117
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-1.030	-0.845	-0.184
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.272	1.513	-0.241
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.867	2.126	-0.258

TABLE LIX (Continued)

36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.109	1.382	-0.273
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.467	1.751	-0.284
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.931	-0.616	-0.315
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.522	-1.202	-0.320
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-1.165	-0.770	-0.395
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	-0.123	0.295	-0.417
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-1.265	-0.692	-0.573
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.905	-0.223	-0.683
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-1.235	-0.512	-0.723
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.603	0.227	-0.830
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.872	-0.015	-0.856
42. P SIM LO:ATTENDS AND PARTICIPATES IN SCHOOL-CALLED MEETINGS.	-0.713	0.360	-1.073
41. P SIM LO:BELONGS TO PROFESSIONAL ORGANIZATIONS.	-1.316	-0.142	-1.175
48. P GEN'L :ANALYZES PROFESSIONAL LITERATURE RELATED TO CLASSROOM EXPERIENCES.	-0.366	1.003	-1.369
45. P SIM LO:AVOIDS DISCUSSING OTHER SCHOOL PERSONNEL WITH STUDENTS OR PARENTS.	-0.959	0.481	-1.439
47. P PRUITT:ASSUMES CLASSROOM-CONNECTED ASSIGNMENTS.	-0.978	0.542	-1.520
46. P PRUITT:EXERTS POSITIVE LEADERSHIP WITHIN THE FACULTY FOR SOLVING PROBLEMS RELATED TO SCHOOL.	-0.981	1.046	-2.027
40. P SIM HI:DEMONSTRATES WILLINGNESS TO KEEP CURRICULUM AND INSTRUCTIONAL PRACTICES CURRENT.	-1.831	0.560	-2.390

TABLE LX

CONDITION THREE: CONSENSUS ITEMS

33 CONSENSUS ITEMS AND AVERAGE Z-SCORES. CRITERION IS 1.000

ITEM DESCRIPTION	AVERAGE Z
16. T SIM HI:SETS HIGH EXPECTATION FOR STUDENT ACHIEVEMENT.	1.997
10. M PRUITT:UTILIZES EDUCATIONAL RESOURCES WITHIN COMMUNITY.	1.609
20. T PRUITT:IDENTIFIES AND PLANS FOR INDIVIDUAL LEARNING DIFFICULTIES OF STUDENTS AND SEEKS HELP AS NEEDED.	1.598
2. M GEN'L :USES A VARIETY OF TEACHING TECHNIQUES.	1.393
36. H GEN'L :ACCEPTS AND/OR USES IDEAS OF STUDENTS.	1.245
3. M SIM HI:ORGANIZES STUDENTS FOR EFFECTIVE INSTRUCTION.	1.219
25. H PRUITT:USES REASONING WITH STUDENTS TO DISCIPLINE THEM.	1.186
28. H SIM HI:DEMONSTRATES EFFECTIVE INTERPERSONAL RELATIONSHIPS WITH OTHERS.	1.087
26. H SIM HI:PROMOTES POSITIVE SELF CONCEPT.	1.022
24. T SIM LO:USES VALID TESTING TECHNIQUES BASED ON IDENTIFIED OBJECTIVES.	0.949
15. T PRUITT:COLLECTS AND STUDIES INFORMATION ABOUT STUDENTS.	0.639
17. T SIM HI:PROVIDES STUDENTS WITH SPECIFIC EVALUATION FEEDBACK.	0.558
14. T SIM HI:ENSURES ADEQUATE STUDENT TIME ON TASK.	0.523
21. T PRUITT:DEVELOPS MATERIAL FOR USE IN THE CLASSROOM.	0.376
19. T PRUITT:ESTABLISHES SHORT- AND LONG-RANGE GOALS.	0.368
5. M SIM LO:DEMONSTRATES FLEXIBILITY IN CHANGING SITUATIONS.	0.341
29. H PRUITT:PROVIDES OPPORTUNITIES AND ENCOURAGES EACH CLASS MEMBER TO PARTICIPATE.	0.086
11. M SIM HI:USES AVAILABLE MATERIALS AND RESOURCES WITHIN SCHOOL.	-0.077
31. H SIM LO:VOLUNTEERS FOR SCHOOL-ASSOCIATED ACTIVITIES.	-0.135
35. H SIM LO:EXHIBITS A SENSE OF HUMOR.	-0.188
34. H SIM HI:PROMOTES SELF-DISCIPLINE AND RESPONSIBILITY.	-0.399
39. P SIM HI:SUPPORTS SCHOOL REGULATIONS AND POLICIES.	-0.444
9. M PRUITT:TAKES PRECAUTIONS TO PROTECT HEALTH AND SAFETY OF STUDENTS.	-0.563
30. H SIM LO:AVOIDS FORCING OWN DECISIONS ON THE CLASS.	-0.564
7. M SIM LO:DIRECTS STUDENTS TO SOURCES OF VOCATIONAL AND CAREER INFORMATION.	-0.697
33. H SIM HI:DEMONSTRATES SENSITIVITY IN RELATING TO STUDENTS.	-0.721
8. M GEN'L :EXHIBITS PROMPTNESS IN MEETING DEADLINES.	-0.774
44. P GEN'L :SEEKS FORMAL TRAINING BEYOND BACHELOR'S DEGREE.	-0.874
37. P PRUITT:PARTICIPATES IN IN-SERVICE ACTIVITIES.	-0.937
43. P GEN'L :EXPERIENCED SEVERAL YEARS OF TEACHING.	-0.968
38. P SIM HI:ASSUMES RESPONSIBILITIES OUTSIDE THE CLASSROOM AS THEY RELATE TO SCHOOL.	-0.978
4. M GEN'L :KEEPS ROOM ATTRACTIVE.	-1.303
32. H SIM LO:DIRECTS COMMENTS TO INDIVIDUAL STUDENTS, NOT TO GROUPS.	-1.362

2
VITA

Lyalla Sue Hoevelman

Candidate for the Degree of

Doctor of Education

Thesis: A Q STUDY OF THREE TEACHER PERCEPTIONS: SELF,
EFFECTIVE TEACHERS, MERIT-PAY RECIPIENTS

Major Field: Educational Administration

Biographical:

Personal Data: Born in Tulsa, Oklahoma, December 24, 1941,
the daughter of Lyle S. and Ferba Ellen. Married to
Ralph O. Hoevelman on May 28, 1970.

Education: Graduated from Bixby High School, Bixby, Oklahoma,
in May, 1959; received Bachelor of Science Degree in
Education from Oklahoma State University in May, 1962;
received Master of Teaching Arts degree from University
of Tulsa in August, 1968; completed requirements for
the Doctor of Educational Administration at Oklahoma
State University in December, 1984.

Professional Experiences: Teacher, Grades 7-12, Sumner Public
Schools, Sumner, Oklahoma, August, 1962, to May, 1963;
Teacher, Grades 10-11, Columbus Public Schools, Columbus,
Georgia, August, 1963, to May, 1965; Teacher, Grades 11-12,
Jenks Public Schools, Jenks, Oklahoma, August, 1965, to
May, 1980; Supervisor of Curriculum and Instruction, Jenks
Public Schools, Jenks, Oklahoma, August, 1981, to present.