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A STUDY OF MIDDLE LEVEL PRINCIPALS' INVOLVEMENT IN INSTRUCTIONAL LEADERSHIP

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A STUDY OF MIDDLE LEVEL PRINCIPALS' INVOLVEMENT IN INSTRUCTIONAL LEADERSHIP

By

Daniel Carl Pratley

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ABSTRACT

A STUDY OF MIDDLE LEVEL PRINCIPALS' INVOLVEMENT IN INSTRUCTIONAL LEADERSHIP

BY

DANIEL CARL PRATLEY

The purpose of this study was to examine the extent to which middle level principals in Michigan are involved in instructional leadership in their buildings and to determine organizational and/or personal factors which impede or enhance that level of involvement. The research questions addressed two major themes in this study; the principals' and teachers' perceptions of involvement in instructional leadership, and organizational or personal factors that relate to or explain the level of instructional leadership of the principal.

The instrument used in this study was the Principal Instructional Management Rating Scale developed by Dr. Philip Hallinger of Vanderbilt University. The survey instrument contains ten subscales describing instructional leadership techniques. The responses are scored on a five point scale ranging from never being involved to almost always being involved. Seventy-six principals were involved in this study. The responses of teachers from sixty-two of the schools are also included in the study.

The results of the study indicate that principals perceive higher levels of involvement in instructional

leadership than teachers and the differences were significant at the .05 level on nine of the ten subscales.

The results also indicate that the organizational variables of school size, an assistant principal, and central office duties made a significant difference on some of the subscales. A middle school/junior high organization made no significant difference on any subscale. The results of this study indicate that the personal variables of training in instructional supervision, gender, years of teaching experience, and level of teaching experience made a significant difference on some subscales. Years of building experience made no significant difference on any subscale. Gender was the variable having the greatest impact, with female principals being more significantly involved with instructional leadership than male principals on four subscales. Having an assistant principal significantly increased the level of instructional supervision of the principal on three subscales. The results of this study make it difficult to conclude that any individual variable in this study had a major impact on the extent to which the principal engaged in instructional leadership.

DEDICATION

To my wife Pat and my daughters Debbie and Rachel for their tremendous understanding, support, and for the many days and nights without husband and dad.

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Daniel C. Pratley

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CHAPTER 1

INTRODUCTION TO THE RESEARCH PROBLEM

Introduction

Research studies have pointed to the fact that the principal of a school plays a pivotal role in determining the level and extent to which a school's instructional program is considered to be effective. According to a 1983 study, one of five correlates of an effective school is strong instructional leadership (Wolfe, 1988). Martin (1981) and Willower (1983) reported that perhaps the most widely heralded role of the principal is that of instructional leader (Dwyer, 1987). While research indicates that the role of the principal as an instructional leader has a significant impact on the effectiveness of the total school program, the specific behaviors and practices of the principal in terms of instructional leadership have not been so clearly analyzed (Hallinger, 1985).

It is often erroneously assumed that principals have the tools to provide effective instructional leadership because they were once a classroom teacher. Having been a classroom teacher, however, does not ensure that an individual has the capability of helping improve classroom instruction, developing and coordinating curriculum, or assessing the attributes of another's teaching. A weak knowledge base in curriculum and instruction, an emphasis on

managerial skills, negotiated territorial rights for teachers which inhibit the manner and frequency of classroom visits, and the diverse role played by principals keep many site administrators from carrying out an instructional leadership role effectively (Hallinger and Murphy, 1987).

The inability to perform an effective instructional leadership role seems to be particularly acute at the secondary level. "Elementary principals seem to have more opportunity to exercise instructional leadership than do secondary principals" (Troisi, 1983 p. 10). This study is directly aimed at secondary principals in the middle level. This study identifies factors which impact the middle level principal's ability and opportunity to engage in instructional leadership. The identification of these factors provides middle level principals with the practical knowledge to provide increased opportunities for instructional leadership that has been characteristic of their elementary counterparts.

Effective schools research has indicated that the elementary principal plays a pivotal role in school improvement, which includes instructional leadership as one aspect. The findings from the studies of elementary principals have become the basis for training programs for all principals. There are those who feel, however, that because of organizational differences between elementary and

secondary schools the findings of studies involving elementary principals may not hold true for secondary principals (Firestone and Herriott, 1982). Thus, the models established for elementary principals to follow in instructional leadership may not work for secondary principals. If so, these principals are left with no well defined model to use in supervising instruction, even if instructional supervision is a high priority (Hallinger, Developing Instructional Leadership Teams, unpublished).

The Purpose of This Research Study

The purpose of this study will be to examine the extent to which middle level principals in Michigan are involved in instructional leadership in their buildings and to determine organizational and/or personal factors which impede or enhance that level of involvement. Past research on the instructional leadership role of the principal has concentrated on the instructional leadership of elementary principals and researchers have suggested that "applications of those findings to secondary schools may be limited due to differences in organization, mission, curriculum, size of school, and differences in the characteristics of the student body [Cotton & Savard, 1980; Firestone and Herroit, 1982; Hallinger, 1981; Persell, Cookson, & Lyons, 1982]" (Hallinger, 1985 p. 219).

In this study research questions are posed to determine why the findings of research on elementary principals might not apply at the secondary level. The research questions address two major themes. The first concerns the level of instructional leadership of the principal. The subsets of this first theme concern the principal's self perception of his/her level of involvement in instructional leadership, the teachers' perception of the principal's level of involvement, and the difference in the perceptions of teachers and principals.

The second concerns the factors which relate to or explain the level of instructional leadership of the principals. This theme involves two subset areas; organizational factors and personal factors. The organizational factors examined in this study are the size of the school, administrative assistance in the building, the principal having central office duties in addition to building duties, and middle school versus junior high school structure. The personal variables examined are: training the principal has experienced in instructional leadership, the gender of the principal, years of service in the building as principal, the number of years teaching experience for the principal, and the level of teaching experience (secondary, elementary or both).

Principals believe that instructional leadership is

important and that they should place it as a high priority. Several research studies indicate that in reality, principals devote more of their time and effort in handling "daily managerial tasks [Crowson, Hurwitz, Morris, & Porter-Gehrie, 1981; Friesen & Duignan, 1980; Hannaway, 1978; Martin and Willower, 1981; Peterson, 1977-78; Pitner, 1982; Willis, 1980; Willower & Kmetz, 1982]" (Hallinger and Murphy, 1985 p. 219). Principals need time to effectively provide for instructional leadership. Central office administration and boards of education can do a great deal to provide principals with this time by not adding central office duties such as transportation, food service, and other such duties to their already crammed worked schedules. Central office administration and boards of education must provide the support for building principals if they expect the principal to place instructional leadership high on the priority list (Herman and Stevens, 1989).

Hallinger and Murphy (1985) indicate that "few studies have investigated what principals do to manage curriculum and instruction (Hallinger, 1983; Murphy, Hallinger, & Mitman, 1983; Rowan, Dwyer, & Bossert, 1982)" (p. 217). Because of the lack of research in this area, principals desiring to improve instructional leadership skills have had little direction provided them in developing those skills.

Significance of this Study

The significance of this study is that it will provide some base data as to the extent to which middle level principals are involved with instructional leadership and if there are organizational or personal factors which relate to or explain the level of principal involvement in instructional leadership. The data from this study will help provide boards of education, superintendents and principals with some direction if they desire to place instructional leadership as a high priority for the principal. Michigan is recognized as a leader among the states in the field of education. A study of instructional leadership practices among Michigan middle level principals will provide important data from which to build additional research on this subject.

Research Questions

Within the two themes previously mentioned, the following research questions regarding the instructional leadership practices of middle level principals will be addressed:

Level of Instructional Leadership

Question 1:

To what extent do middle level principals believe they engage in instructional leadership within

their buildings?

Question 2:

To what extent do the teachers believe their principal engages in instructional leadership?

Question 3:

What is the extent of the difference between the principals' and teachers' perceptions?

Research has indicated that instructional leadership is a key component leading to the development of an effective school program. Literature indicates that instructional leadership should be the primary role of the building principal. There are a number of other duties of the building principal, however, that may hinder the fulfillment of that particular expectation.

Hallinger and Murphy's study of one district's elementary principals involvement in instructional leadership, yielded results that indicated these particular principals engaged in instructional leadership to a greater extent than had previously been believed (1985). Little is known about the extent to which secondary principals are involved with instructional leadership.

Hallinger and Murphy discovered, in their 1985 study of elementary schools in California, that generally teacher ratings of their principal's instructional leadership involvement tended to agree with the principal's assessment.

"However, in several cases, the results of teacher surveys were not consistent with the principal's assessment of instructional leadership. These results were also consistent with previous self-report appraisal research by Heneman, 1974; Latham and Wexley, 1981; Teel, 1978; Thornton, 1968, 1980" (p.232). Therefore, Hallinger recommends that the Principal Instructional Management Rating Scale survey instrument be administered to the teaching staff in part or whole, since only the teacher scores have demonstrated reliability.

Since teachers in the building are the recipients of instructional leadership by principals, it seems that the perceptions of the teachers about the level of instructional leadership by their principal is essential in achieving a better understanding of the instructional leadership practices of principals. Smith and Andrews (1986) surveyed 1,100 teachers in their study of twenty-five principals comparing their administrative practices. They felt that teachers' perceptions of their principal's instructional leadership were critical in gaining a firmer understanding of the extent of that role among administrators in the study. Surveying teachers for their perceptions of the level of involvement in instructional leadership by their principal will provide a sounder research basis for drawing any conclusions as to the extent to which middle level

principals in Michigan engage in instructional leadership.

Factors Relating to the Level of Involvement

Organizational Factors

In part, the following research questions relate to administrative burden and the time that is devoted to instructional leadership by a principal.

Question 1:

> Does the size of the school relate to the level of the principal's involvement in instructional leadership?

"School size seems to be one factor accounting for the difference" (Troisi, 1983 p. 10). Hallinger and Murphy, in their 1985 study of elementary schools, examined the relationship between instructional leadership and a series of organizational variables, including school size. They found that school size was the only organizational variable closely associated with principals' instructional leadership activities. Their research indicated that "principals of smaller schools (mean size = 385 pupils) tend to be more involved with instructional leadership then principals of larger schools (mean size = 600 students). This finding was consistent with other research findings of Gross and Herriot in 1965 and Salley, McPherson and Baehr in 1979" (p.235).

The adaptive-reactive theory on principal behavior suggests that principal behavior is a product of such

variables as school size. This theory is based on the premise that the principal's behavior is based on the principal's reaction to external and internal forces impacting the organization. Therefore, the principal adapts his administrative behaviors in order to address those forces. The size of the student body dictates the size of the staff that must be supervised by that principal. There is a point at which the mere size of the staff will preclude effective instructional supervision of all individual instructional staff members simply because of a time factor. A school with 385 students will have an instructional staff of approximately twenty-six, whereas a school with 600 students will have approximately forty instructional staff members. Thus the amount of time required of the principal for instructional leadership also increases. The adaptive-reactive theory suggests that the principal reacts to the increased demand on time by reducing the amount of instructional leadership provided each teacher, as well as the total overall time devoted to instructional leadership, since increased size also brings demand for administrative time in other areas.

"Student scheduling and monitoring hallways are significant factors influencing principal behavior" (Smith and Andrews, 1989, p. 6). The larger the student population, the more effort is concentrated by the principal

on operational management than on instructional leadership.

Question 2:

> Does having an assistant principal relate to the extent to which the principal is involved in instructional leadership?

Whether or not the principal has some assistance from other personnel in handling certain administrative duties may impact on the amount of time the principal can set aside for instructional leadership. If the principal has an assistant to handle attendance and discipline matters, this may enable the principal to spent a greater amount of time on instructional leadership. Discipline and attendance are two areas of building administration that consume a great deal of the principal's time. In a building with a single administrator attention given to these two areas by the principal may leave little time for instructional leadership. Hallinger and Murphy (1985), in their study of principals in one California district, indicated that the presence of assistant principals may have influenced the amount of time principals spent on instructional leadership. "It relieved principals of some of the time pressures inherent in the job, pressures that principals contend limit their ability to observe in classrooms" (p.238).

Question 3:

> Does having central office administrative responsibilities, in addition to building administrative responsibilities, relate to the level of instructional leadership by the principal?

Whether or not the principal has assigned central office administrative responsiblities, such as transportation or building and grounds, may impact on the amount of time the principal can devote to instructional leadership in the building, in addition to general building operations. It has already been mentioned that principals tend to put off the allotment of time for instructional leadership due to the perceived pressures of time in other aspects of building administration. Adding central office duties to the principal's schedule will only further erode the time that will be spent on instructional leadership. If central office administration desires to have principals spending a greater amount of time in instructional leadership, they are going to have to seek ways to eliminate central office duties from principals' schedules.

Question 4:

Does being the principal of a junior high, as opposed to a middle school, relate to the level of instructional leadership of the principal?

The structures, and thus the practices of junior high schools, are different than those of a middle school. Although both organizations are considered middle level and secondary as opposed to elementary, they have different philosophical bases of existence and operation. Junior high schools tend to operate as mini-high schools, whereas middle schools attempt to provide social experiences appropriate to 11-14 year olds. Georgiady, Romano and Heald (1973) identified different characteristics of distinction between middle schools and junior highs. Those characteristic differences directly relate to instructional leadership including team teaching versus departmentalization, multi-material approach versus single text approach, flexible schedules versus rigid block schedules, student-centered versus teacher-centered activities, and teacher/student versus teacher planning of lessons. With the latter characteristics being found in junior highs, they do more closely resemble high schools than middle schools whose characteristics are somewhat more transitional from elementary characteristics. This might well suggest that the principals may tend to engage in instructional

leadership to a greater or less degree depending on slant of orientation toward a secondary program or a transitional program from the elementary.

Personal Factors

In pursuit of this research into the extent to which a selected group of middle level principals are involved in instructional leadership in their schools, the following questions regarding personal variables were also examined.

Question 1:

> Does having received training in an instructional supervisory model relate to the level of instructional leadership of the principal?

Whether or not the principal has received specific training in instructional supervisory models may impact the emphasis the principal places on instructional leadership. Having been trained in an instructional supervisory model may well raise the consciousness level of the principal in this area of management, and perhaps increase his level of involvement. Models such as Madeline Hunter's Instructional Theory Into Practice (I.T.I.P.), Teacher Effectiveness Student Achievement (T.E.S.A.), Cooperative Learning and a host of other models are designed to teach principals the techniques necessary to assist teachers in being more effective instructors. One of the many features of these models is to assist principals in recognizing the importance

of instructional leadership. Thus, being trained in recognizing the importance of instructional leadership may lead principals to engage in this activity to a greater degree than principals who have not been trained in such models.

Question 2:

Is the gender of the principal a factor that relates to the level of instructional leadership?

In Hallinger and Murphy's 1985 study, they found that examination of personal variables among principals did not reveal a consistent pattern, except the variable gender. In their study of ten principals, the top two ranked principals in terms of instructional leadership were women and the bottom ranked principals were men. They found the findings intriging, since there were only three women in the study. "Previous research findings of Hemphill, Griffiths and Fredericks in 1962; Salley, McPherson and Baehr in 1979, suggest that women administrators may be more actively involved in instructional supervision" (Hallinger and Murphy, 1985 p. 234). Smith and Andrews report, in a 1986 study of twenty-one elementary, middle and high school principals, that the ten female principals tended to spend more time on instructional improvement activities than did the eleven male principals (1989).

Hallinger and Murphy concede that their study was

limited in scope and thus it was difficult to draw any conclusion as to whether or not female principals spent more time on instructional leadership activities than their male counterparts. They believed that further studies with larger sample populations were needed to verify whether or not the gender of the principal was a factor. The Smith and Andrews' study was a little more diverse than the earlier Hallinger and Murphy study, in that it included multiple school districts, even though the total sample population was still small. Hallinger and Murphy (1985) suggested that a larger population study might reveal a clearer picture as to how gender relates to instructional leadership. If such a study did reveal gender to be a factor, further study could then be conducted to determine how gender affects the instructional leadership activities of principals.

Question 3:

Does the number of years the principal has served in the building relate to his/her extent of involvement in instructional leadership?

Hallinger and Murphy's findings, from their 1985 study, indicated that administrative experience was not a variable that had any significant impact on the extent to which the principal engaged in instructional leadership. Years of experience in a particular building are measures of quantity and not quality. They found that the variable of

number of years in the building as an administrator did not have a relationship to the ranking of the principals in their study in terms of effective instructional leadership.

Snyder and Drummond (1988) concluded, in their review of competencies of principals, that experience as a principal is significant only if it is used to improve poor habits. Experience is a disadvantage if it perpetuates bad habits. Experience would then seem to be a factor only if it meant that over a period of time the principal had developed instructional leadership skills that led to enhancement of the total instructional program.

In Smith and Andrews' study (1986), twenty of the twenty-five principals were considered by their staffs to be strong instructional leaders, based on a score of at least one standard deviation above the score of average principals on an instrument designed to measure instructional leadership skills. The experience of those twenty-one principals ranged from three to sixteen years. Smith and Andrews did not find administrative experience to be a significant factor. Results from a larger population might reveal that experience as an administrator is not a significant factor in instructional leadership. All similar studies have revealed that personal factors do not play as big a role as organizational factors, when it involves the amount of time devoted to instructional

leadership by principals.

Question 4:

Does the number of years of teaching experience for the principal relate to the extent of involvement in instructional leadership?

Research indicates that experience as a teacher does not necessarily prepare a principal to effectively analyze another's teaching techniques or improve instructional techniques and practices of classroom teachers (Hallinger, 1987). In fact, most principals who effectively evaluate teaching practices probably received specific training in instructional leadership after having became an administrator, rather than during their teaching years. Many administrators have received formal training in instructional leadership in only the last eight to ten years. In these cases, the techniques taught have little or nothing to do with teaching experience.

Again, the literature on previous studies has indicated that almost all personal factors concerning principals do not play a significant role in determining the extent to which the principal engages in instructional leadership. Unless the principal happened to have brought some particular experience in instructional leadership from

the teaching experience to administration, it is not expected that years experience as a teacher would be a factor of significance in this study. It is suspected that specific training as a teacher in peer instructional coaching might be a greater factor than simple experience as a teacher in the degree to which that person would be involved in instructional leadership as a principal.

Question 5:

Is the level at which the principal taught, a factor that relates to the level of instructional leadership?

Literature indicates the elementary principal engages in instructional leadership to a greater degree than the secondary principal. It is conceiveable that a principal having elementary teaching experience may have a tendancy to place greater emphasis on instructional leadership than a principal with secondary teaching experience, assuming he/she experienced a high level of instructional leadership as a teacher from the principal.

Previous research studies have shown, however, that personal variables such as length of teaching service have had no effect on the behavioral characteristics demonstrated by teachers who become principals. Therefore, it is anticipated that no difference will be found with respect to this variable.

Assumptions

The assumption is made in this study that instructional leadership is a critical component leading to an effective school. The principal is the key figure in instructional leadership and thus, the key to an effective school. "One of the most powerful tools a principal possesses is the knowledge of how to improve the effectiveness of a school as a school" (English, 1987, p. 35). The role of the principal as an instructional leader has increasingly become more important, with legislation in many states requiring schools to demonstrate movement toward improved student academic performance. These various laws and regulations require principals to report on the academic status of students as well as the status of curriculum in their buildings. For principals in Michigan, that legislation is in the form of Public Act 25, which requires the building principal to annually report on such things as core curriculum, student achievement, school improvement, and accreditation status from state or private institutions based on stated student outcomes. "The new focus is on curriculum quality and the capability of teachers to teach curriculum" (Kirst, 1987, p. 8). English and Hill (1990), in their discussions on restructuring of schools and the role of the principal, describe three different types of schools: custodial, effective, and restructured. In describing the principal's

role in each setting, they characterize the custodial school principal as a manager who controls. The principal of an effective school is an instructional leader who strives for excellence in teaching that results in student achievement. The principal of a restructured school is an opportunist who recognizes staff achievement and provides the incentives for new programs. The principal of an effective school, as an instructional leader, utilizes the techniques of clinical supervision to produce student achievement. English and Hill imply that a principal of an effective school utilizing clinical supervisory techniques is a much better instructional supervisor than the principal of a custodial school who evaluates instruction based on written or understood policy rather than technique that best meets the learning needs of students.

It is also assumed that the more frequently the principal is engaged in instructional leadership, the more effective the school will be in terms of student achievement. The assumption is that with increased principal involvement in instructional leadership, higher student achievement will result. The relationship between principal involvement in instructional leadership and student achievement is left to future research.

It is also assumed in this study that teachers have a different perspective on the frequency of instructional

leadership by their principal, than the principal's self perception. Hallinger and Murphy (1985) discovered in their study that teachers and principals tended to differ in their perceptions of frequency of principal involvement in instructional leadership. For that reason, teachers were also surveyed as a part of this study.

Further, it is assumed that there are organizational and personal variables that impact the extent to which the principal engages in instructional leadership. Although not all inclusive, those variables are delineated in the research questions. It is assumed, based on previous research findings, that at least two of the factors in this study, the size of the building and the gender of the principal will be factors affecting the level of instructional leadership by the principal. Previous research has shown that female principals tend to have higher levels of instructional leadership than male principals. It is assumed that results in this study will indicate that female principals have higher levels of instructional leadership than male principals. Previous studies have not indicated that the other factors considered in this study are factors of significance.

Definition of Terms

The following definitions are offered for terms used in the course of this study:

1. Middle Level Principal - The building administrator for a building housing an educational program for students in grades that might range from grades six through nine.
2. Middle School - an educational entity for students aged 11 to 14 that provides a transitional program and environment from an elementary program leading to a high school program.
3. Junior High School - an educational entity for students usually in grades seven to nine that provides students with academic and social programs similar to those found in a high school program.
4. Instructional Leadership - is defined by the terms associated with the survey instrument known as the Principal Instructional Management Rating Scale (P.I.M.R.S., Hallinger, 1985). The term leadership as defined in this study is intended to suggest an element of risk taking on the part of the principal. Instructional leadership is defined to include instructional supervision and instructional management as subset roles that do not imply an element of risk, but rather a maintenance of status quo. The following terms associated with

the Principal Instructional Management Rating Scale are associated with the terms Instructional Leadership, Instructional Supervision and Instructional Management.

a. Framing the School's Goals - A role of the principal having to do with identifying the areas in which the school's resources and staff energies will be focused during the school year.
b. Communicating the School's Goals - A role of the principal in which the focus of the school's energies and resources in a given school year are communicated to the staff, students, parents, and community.
c. Supervising and Evaluating Instruction - A role of the principal in which the goals of the school are carried into an action phase.
d. Coordinating the Curriculum - A role of the principal in which the goals of the school are coordinated with the classroom objectives of the teaching staff across grade levels.

e. Monitoring Student Progress - A role of the principal by which test data and other measurements of student achievement are used to make decisions about the strengths and weaknesses of the curriculum.

f. Protecting Instructional Time - A role of the principal to ensure that interruptions to instructional time are kept at a minimum.

g. Maintaining High Visibility - The degree to which the principal's presence is detected by students and staff in the classrooms and other parts of the building during the instructional day and at school activities.

h. Providing Incentives for Teachers - A role of the principal in providing a positive working environment and a system of rewards or mechanisms for recognizing teacher efforts.

i. Promoting Professional Development - A role of the principal to provide opportunities for for staff inservice and that the inservice is in keeping with the goals of the school. The role also includes the principal providing opportunities for staff career advancement.

j. Providing Incentives For Learning - A role of the principal in providing a positive learning environment and a system of recognizing and rewarding student academic achievements.

5. Principal's Perception - The individual belief of the principal as determined by the average score of the principal's responses to the items on each of the ten sub scales of the P.I.M.R.S.
6. Teachers' Perception - A collective belief of the teachers in each building as determined by averaging the total scores of all responding teachers in a building for each of the sub scales of the P.I.M.R.S.
7. Building Size - The student population of the building, which when combined with the collective, bargaining process often dictates the number of teaching staff.
8. Assistant Principal - A certified administrator responsible for managing some of the operations in the building, as determined by the principal.
9. Central Office Duties - District administrative duties for such things as transportation, food service, special education or other duties, exclusive of those involving building duties.

10. Instructional Supervisory Training - Training received in Instructional Theory Into Practice (I.T.I.P.), Program for Effective Teaching (P.E.T.), Cooperative Learning, Teacher Effectiveness Student Achievement (T.E.S.A.), or other models specifically involving instructional supervisory techniques.
11. Elementary Level - Inclusive of grades kindergarten through fifth grade.
12. Secondary Level - Inclusive of grades six through twelve.
13. Public Act 25 - A 1990 Michigan Law which includes provisions mandating that principals annually report to the constituents in the local district and to the State Department of Education, the efforts of the school staff and administration in developing a core curriculum, a school improvement plan based on student outcomes, the status of student achievement scores, and the accreditation status of the building as determined by a set of standards from state or private accrediting institutions.

Procedures for the Study

This study involves survey research. The survey instrument used in the study is the Principal Instructional Management Rating Scale (P.I.M.R.S.) developed by Dr. Philip Hallinger of Vanderbilt University. Permission was obtained from Dr. Hallinger to utilize the P.I.M.R.S. in this study. A cover sheet was developed as a method of identifying the variables considered in this study for both the principal and teacher surveys. An introductory cover letter explaining the purpose of the research was also developed.

The survey instrument and accompanying documents were reviewed by the Michigan State University Committee on Research Involving Human Subjects and subsequently approved for use in this research study. The instrument was field tested with teachers and administrators. The survey was mailed to 120 middle level principals across Michigan who had been in their administrative position for at least one year. The principals were chosen from across the state without regard to geographic area or size of building. Consideration was given to ensure the inclusion of female principals in this study, although it is recognized that male principals far outnumber female principals in Michigan middle level school buildings. Specific organizational and personal variables were selected to determine their effect

on the extent to which a principal engages in instructional leadership.

When the principal returned the survey, ten teacher surveys were sent to the building to teachers who had been teaching in the building for at least one year. If the principal failed to return the survey within two weeks, a reminder notice was sent to the principal. If the teacher surveys were not returned within a two week period, reminder notices were sent to the principal to encourage teachers to return the surveys.

Delimitations

This study was limited to middle level principals defined as secondary principals. Further, this study was restricted to middle level principals in Michigan. To further delimit this study, only principals in at least their second year as principal of the building were included in this study. It is recognized that other variables not considered in this study may impact the frequency of instructional leadership by principals. Contractual agreements with teaching staffs may limit the number of classroom visits by principals and thus influence the extent of instructional supervision. The extent of a support system for the principal to use in assisting teachers in specific skill areas was not considered in this study. This

support system may be critical to the middle level principal who has a staff more diversified in skill areas than the elementary principal and may influence the time a principal has to devote to instructional leadership. This study did not involve an analysis of student achievement in the buildings of principals involved in this study.

This study did not include a consideration of the wealth of the districts involved or the socio-economic status of the district's constituents. It is recognized that the wealth of a district may be a factor impacting the level of instructional leadership of principals.

This study also did not include the age of the principal as a personal variable. This variable was not considered based on the results of similar studies which indicated that the age of the principal was not a factor of significant difference.

At the time this study was conducted among Michigan middle level principals, the Michigan Legislature had just recently enacted Public Act 25. P.A. 25 mandates building principals to establish a core curriculum, develop a school improvement plan, attain or move toward attainment of building accreditation through the State Department of Education or a private accrediting agency, and report annually to the public, the status of the aforementioned as well as student achievement. This study did not

specifically seek to determine the relationship of P.A. 25 and the level of instructional leadership of principals. It is conceivable that P.A. 25 will impact principal involvement in instructional leadership, the extent to which is left to future research.

Overview

This dissertation is organized into five chapters. The initial chapter provided the background, purpose of the study, the research problem, delimitations of the study, and a brief review of the study procedures. A review of the literature is presented in the second chapter. The research problem, the methodologies used to answer the research questions, a description of the study population, and the data collection and analysis procedures are reported in the third chapter. The fourth chapter contains an analysis of the findings from the study. The fifth and final chapter includes a summary of the findings, conclusions from the study and recommendatons for future research.

CHAPTER II

REVIEW OF LITERATURE

Introduction

There is an increasing emphasis being directed at principals by central office administration and boards of education to be more directly involved with teachers in the classroom in terms of monitoring instruction and assisting teachers in reviewing, preparing, and presenting material effectively. A considerable emphasis is placed on principals developing instructional coaching techniques to assist teachers in improving their instructional techniques and processes. Research is accumulating which attests to the importance of the principal as an instructional leader, and to the necessity for increasing instructional effectiveness in the classrooms. Numerous "quick fix" measures have come and gone in an attempt to improve curriculum instruction, but the basis for developing effective instruction has been missing. It has also often been assumed that teacher certification meant instructional competence and thus, principals often turn their attention to other aspects of administration, mistakenly assuming that teachers were generally effective instructors.

The following topics will be reviewed in this chapter, relative to instructional leadership: the role of the

instructional leader, the principal providing a vision, managing the instructional program, promoting professional development, high visibility of the principal, the principal providing rewards, the principal providing incentives for learning, instructional leadership and school improvement, influences on levels of instructional supervision, personal factors relating to instructional supervision, competency in instructional leadership, competencies of leadership, and instructional management behavior descriptors.

The Principal and Instructional Leadership

Defining the Role of Instructional Leader

It is difficult to assess the role of the principal in instructional leadership when the role has not been clearly defined. Research by Bossert, Dwyer, Rowan, and Lee (1982), Hallinger and Murphy (1985), Hallinger, Murphy, Weil, Mesa, and Mitman, (1983), Shoemaker and Fraser (1981) and Stallings (1982) has aided greatly in defining this role (Hallinger and Murphy, 1987). In defining the expectations of an instructional leader, Smith and Andrews (1989) cite the four areas of leadership activities previously mentioned; resource provider, instructional resource, communicator, and visible presence in the building, as key areas for assessing principal performance. Hallinger and Murphy (1987) suggest that the instructional management role

of the principal is divided into three categories: defining the school mission, managing the instructional program and promoting a positive learning climate. Persell and Cookson (1982) reviewed several research studies and reported that the behaviors most associated with strong principals are: (1) commitment to academic goals, (2) high expectations for staff and students, (3) functioning as a forceful and dynamic instructional leader, (4) effectively communicating with others, (5) creating an orderly environment, (6) providing resources, (7) using time well, and (8) evaluating results.

These three analyses of what makes an effective instructional leader all seem to be saying essentially the same thing in different ways. There are a number of characteristics, behaviors and activities associated with being an instructional leader. The important thing is that all of these elements must be planned for and carefully implemented in order to provide principals who are effective instructional leaders.

The Principal Providing a Vision

Essential to becoming a strong instructional leader is having a vision for where the organization is going. In order for a principal to provide effective leadership for the staff, there must be a sense of direction and a strong consensus on the part of the staff that the principal and

the staff have cooperatively determined the goals for the organization to follow. If a principal can't achieve a cooperative sense of purpose with the staff, no amount of substantive leadership in other areas is going to bring about strong instructional leadership qualities in the principal.

Defining a school's mission requires a vision on the part of the principal as to what steps can be taken to bring the facility, faculty, community, and curriculum together to best meet the needs of all students in a shared sense of purpose. A belief that all students can learn is an essential ingredient to the development of that vision. A mission statement is also essential for effective school leadership. Schools with a clear mission statement are generally more effective than those without a clear sense of purpose and direction. The mission statement can be a powerful management tool for the school principal as it empowers the principal to take action to carry out the stated purposes of the individual school. This mission statement is an agreed upon direction arrived at by a consensus of the stakeholders in the school; students, staff, administration, parents and the community in general (N.A.S.S.P., 1987).

Smith and Andrews (1989) found as a result of their survey of teachers that 90% of the respondents from schools

with strong instructional leaders, said that their principal provided a clear vision of what the school was about, while only 49% of the teachers in average "leader" schools said that about their principals. Persell and Cookson, (1982), in their review of over seventy research studies, reported that a recurrent behavior among strong instructional leaders was a demonstration of commitment to academic goals articulated by a clear vision of long-term goals for the school. "Effective principals have clear informed visions of what they want their schools to become, translate these visions into expectations for teachers, students and themselves and continuously monitor progress" (Rutherford, 1985 p. 32).

Managing the Instructional Program

In managing the instructional program, the principal assumes the responsibility for supervising, evaluating and coordinating the curriculum, and monitoring students' progress through that curriculum (Hallinger and Murphy, 1987). Student achievement is related to students and teachers knowing where they are heading, and finding out how far they have progressed. Findings from research on effective schools show that in high-achieving schools instructional objectives guide the programs, and testing and evaluation are given serious attention (Shoemaker and Fraser, 1981). Principals believe they should spend most of their time assessing the instructional program and

techniques, but in reality they do not allocate enough time for this activity (Hallinger et. al., 1985). In Smith and Andrews' study (1989), the average principal indicated they spent about 2.3 hours per day on instructional supervision, while the strong instructional supervisor spent more than twice that amount of time on developing the instructional program; 4.75 hours per day.

In Smith and Andrews' (1989) survey of teachers, on the subject of the principal as a resource provider, 90% of the teachers surveyed in identified strong leader buildings said that their principal mobilized the resources to help achieve academic achievement goals. There was a significant decline in percentage of teachers responding positively to this statement among average to weak leaders; 54% and 33% respectively. Concerning the question of the principal encouraging a variety of instructional strategies, 89% of the teachers in strong leader buildings responded that their principal encouraged this practice as opposed to 78% and 75% in the "average" and "weak leader" buildings. Although teachers rated their principals high in this area, regardless of the type of leader, more teachers in "strong leader" buildings felt positive about this area, than in the other two types of buildings.

One writer on the subject of principals as instructional leaders observed:

> "that instructional leaders must observe teachers and provide feedback, monitor student progress by reviewing tests, work with teachers to build the instructional programs, promote staff development by securing requisite resources and opportunities for growth, communicate to staff members the responsibility for student achievement, and act as an informational mode and resource person. Most principals are trained as managers and are simply not prepared to meet the school's needs for instructional leadership. Research shows that little if any time spent by principals focuses on instructional supervision. It implies that even if the principal was inclined to be an instructional leader, the reality of the work day would not leave time for carrying out this function" (Ginsberg, 1988, p.78-79).

Principals must be conscious of the need to move from the role of building manager to that of instructional leader. In a study conducted among 140 North Carolina Schools in 1986, 416 teachers were surveyed to determined teachers' desires for their principal's role and just how they perceived that role. A framework for the study developed by Brubacker and Simon in 1987 five concepts of a principal's role were used and are defined as follows: "Principal-Teacher, teaches part of the day; General Manager, serves as a liason between school and central office; Professional and Scientific Manager, spends more time in classroom supervision than routine administration; Administrator and Instructional Leader, recognizes both instructional and management responsibilities; and Curriculum Leader, views the curriculum as an experience" (Williams, 1988, p. 111).

Williams found that 57.3% of those teachers surveyed indicated that their principals operated as administrator/instructional leaders and 31.2% felt their principal operated as a general manager. However, "74.7% preferred their principal operate as an administrator/instructional leader" (Williams, 1988, p. 112). Principals who are successful in changing to the role of instructional leader may find that the new role makes them even a more effective building manager. "McCormack-Larkin and Kretch in describing Milwaukee's Project R.I.S.E. reported that as the effectiveness of the schools increased, the principal's role changed from building manager to instructional leader" (Arnn and Mangieri., 1988, p.2). It is essential that principals place instructional supervision and leadership high on a priority list and demonstrate a commitment to that priority by spending as much time as possible in the classroom observing and evaluating instruction (Regan, 1988). Data from Andrews and Hallet's study (1983) and Smith and Andrews (1989) suggests that principals who are perceived as strong instructional leaders spend their time differently than average and weak instructional leaders. "Strong instructional leaders seem to spend more time with instructional improvement activities and less time on handling student problems", than average and weak principals (Smith and Andrews, 1989, p.30).

Promoting a Positive Climate

The fourth dimension of the instructional leadership role of the principal is promoting a positive learning environment. Learning climate can be defined in a variety of ways, but essentially it is the existing norms and attitudes of the staff and students in a given school building. The principal plays a pivotal role in influencing the building climate by establishing explicit standards for academic achievement and acceptable social behavior on the part of students. The principal can further influence that climate by establishing a clear set of goals and high levels of expectation for faculty performance toward achieving those goals. The principal can influence student and teacher attitudes by providing appropriate reward systems for both groups that will provide incentives and meaning for achievement of high standards (Hallinger and Murphy, 1985).

There are several avenues a principal may take to promote an effective learning climate in the building. These avenues that promote an effective learning climate coincidentially are some of the same factors that Hallinger identified as the dimensions of instructional leadership that comprise the Principal Instructional Management Rating Scale used in this study.

Promoting Professional Development

One avenue is promoting professional development by encouraging staff to attend appropriate inservice activities related to the staff member's particular field of teaching or inservice activities that will help the teacher deal with a problem area that has been identified by the principal. Smith and Andrews (1989) found in their survey of teachers that 95% of the teachers in strong instructional leader buildings felt their principal promoted staff development activities for teachers while the percentages dropped to 68% and 41% percent, respectively, from teachers in "average" and "weak" instructional leader buildings.

An important follow-up to inservice activities is to allow time for that staff member to share ideas with the other members of the faculty. The careful selection of key staff members to lead inservice activities can do much to develop the sense of self-worth and value to a given program to which an individual perceives they contribute.

High Visibility

A highly visible principal can do much to contribute to an effective learning climate. In 1982, David Dwyer and others studied a principal characterized as an exemplary instructional leader and the strategies employed by this principal to influence instruction. The most potent and pervasive strategy was the informal classroom visit. This

principal monitored instruction by dropping into classrooms on a regular basis, working with students, and making brief, constructive and supportive comments to staff (Dwyer, Bennett, and Lee, 1987). Seventy-two percent of the teachers surveyed in buildings with "strong" instructional leaders felt their principal made frequent classroom visits, which was more than twice the percentage of teachers (31%) in "average" instructional leadership buildings, and more than four times the percentage of teachers (17%) in "weak" leader buildings (Smith and Andrews, 1989). High visibility throughout the building gives the principal an opportunity to interact with students and staff to not only assess their needs, but to communicate the priorities and goals of the school (Hallinger and Murphy 1985). "The extent to which the principal creates a visible presence in the school to both staff and students is the most important factor for the principal to be seen as a strong instructional leader by teachers. At the middle/junior high level, strong principals do not consider their week to have been successful unless they are in every classroom during the week" (Smith and Andrews, 1987, p. 37). A highly visible principal can convey a sense of collegiality to faculty, particularly if that principal interacts with staff and projects an image of a team leader endeavoring to assist teachers in achieving higher levels of performance.

Providing Rewards

Rewarding teachers for achieving higher levels of performance is also an important aspect of fostering an effective learning climate. Principals often do not have control over contractual rewards such as salaries and fringe benefits, but there are other rewards the principal can provide that can be just as meaningful to the individual faculty member. Providing constructive feedback to teachers on classroom performance is one effective way of rewarding teachers. Unfortunately, that aspect of rewarding teachers is often overlooked by principals. Smith and Andrews (1989) did find in their survey of teachers that 68% of the teachers in "strong" instructional leader type buildings felt that the principal did provide frequent feedback on classroom performance, whereas the teacher response from "average" and "weak" leader buildings was considerably less at 29% and 18%. Seventy-eight percent of the teachers in "strong" leader buildings felt that the principal's evaluation of their performance helped improve their teaching, while the percentage in "average" and "weak" leader buildings on that subject dropped to 46% and 17% respectively. Official administrative recognition and commendation of a teacher's efforts can often have a positive impact on the teacher. "Successful principals understand people and know how to get along with them. They

are sensitive to the talents and feelings of others and know what to say or do in their relationship with them" (Giammatteo, 1981, p. 47).

Providing Incentives for Learning

The principal can foster an effective learning climate by establishing high levels of expectation for both student and faculty performance. "Research indicates that schools with predominately low achieving students are characterized by low expectations on the part of teachers and administration" (Arganbright, 1983, p. 93). The principal's leadership style sets the tone for the building and controls the level of excellence not only strived for, but achieved, by faculty and students.

Instructional Leadership and School Improvement

Research evidence indicates that the leadership of the principal in the areas of effective instruction, school productivity, school learning climate, and learning styles is critical in initiating and sustaining any process of school improvement. Instructional leadership is the role played by the principal in providing direction, resources, and support to teachers and students for the improvement of teaching and learning in the school (Keefe, 1987). The relationship the principal establishes with the faculty and students is critical in developing effective instructional leadership. Effective principals who exhibit strong

instructional leadership are influential, providing leadership through their interactions with staff and students (Jacobsen, 1987).

"Edmonds, in an investigation of elements that make schools effective, discovered that such schools have strong instructional leadership from the principal" (Trump, 1987, p.89). Leadership may be regarded as a series of functions that builds and maintains the group, gets the job done, helps the group feel comfortable, helps set and clearly define objectives, and cooperatively works toward those objectives. "Leadership is the activity of helping others work toward common goals and purposes" (Giammatteo, 1981, p. 2). Schools in which high levels of student performance are attained, have faculties that develop and accept a basic set of learning objectives, accept the responsibility for achieving those goals, and have high expectations for student achievement and attainment of those goals (Kelly, 1980).

The principal is the single figure in a school building with the responsibility for coordinating the skills of the professional teaching staff and combining that pool of skills with other resources available in order to work toward curriculum improvement. This role of the principal demands a vision on the part of the leader that encompasses the whole curriculum and demands that the principal have the

ability to convey or share that sense of vision with the professional staff (Tanner, 1987). In a study conducted by the National Association of Secondary School Principals in 1987 on the effectiveness of middle level principals, 44% of the principals saw their role as one of facilitator of curriculum. Seventy-seven percent of the parents, principals, and teachers surveyed, saw the principal as being effective or very effective in curriculum development (Keefe, Clark, Dickerson, and Valentine, 1983).

Influences on Levels of Instructional Leadership

Administrative Time Allocation

A 1978 study (Krajewski) found a discrepancy between what principals said they preferred to do in their job, i.e., curriculum supervision, and what they actually did, i.e., management. The National Association of Secondary School Principals conducted a similar study at about the same time. The results indicated that principals considered school management much less important than instructional leadership, yet it received more of their time and attention. The Lake Washington School District in Kirkland, Washington set out to conduct a study of their building administrators and how they would prefer to spend their time on the job and what they actually did do with their time. In the area of instructional leadership, the elementary principals thought they spent about 35% of their time with

instructional leadership, when in reality it was only about 24%. The secondary principals reported that they believed they spent about 27% of their time with instructional leadership, but the study revealed they spent only 17% of their time in this area (Smith & Andrews, 1989).

In 1986 Smith and Andrews conducted a study among a sample of school districts in the Pacific Northwest to determine how the average principal spent time on the job as compared to principals considered to be instructional leaders. Superintendents in districts were asked to nominate principals they considered to be instructional leaders. Principals were also asked to nominate peers that they considered instructional leaders. Where the superintendents and principals concurred on individual principals, those principals were then contacted for permission to have their staffs assess their instructional leadership. Of the twenty-eight principals selected, twenty-five agreed to the assessment. "For the principal to be considered a "strong" instructional leader by the staff, the principal had to score at least one standard deviation above the average principal on a measure of instructional leadership. Of the principals nominated, twenty-one qualified as strong instructional leaders" (Smith and Andrews, 1987, p. 27). Ten secondary (five high school, five middle school) and eleven elementary principals were in

the group. They administered buildings in size ranging from 125 to 2,600 students. Eleven administrators were females and ten were males. Their administrative experience ranged from three to sixteen years.

Each principal kept a daily log of activities using methodologies developed in a study by Andrews and Hallett in 1983. The original study was conducted on 1,006 principals (583 elementary, 182 middle level, 161 high school, and 80 other). The "strong" instructional principals, from this study were compared to these principals on these job dimensions: educational program improvement, school-community relations, student-related services and activities, building management, operations, and district relations. The results indicated that the "strong" instructional leaders spent slightly more time per day on the job than the "average" leader; 10.75 hours versus 10 hours per day. The "average" principal spent 27% of the time on educational program improvement, as compared to 41% for the "strong" instructional leader. Each group spent about the same percentage of time on school-community relations, but the "strong" instructional leader spent considerably less time on student-related services (18% vs 28%, or about an hour less per day). The "average" principal spent about 3.9 hours per day on building management as compared to 3.7 hours for the "strong"

instructional leader. The study found that the difference between the groups was not a matter of priority so much as poor use of discretionary time. The study revealed that middle level principals spent more time with student-related functions than either high school or elementary principals. High school principals spent more time on management functions than elementary principals.

Among the "average" principals, the amount of time spent on educational program improvement was fairly consistent among elementary, middle and high school principals ranging from 23% to 28%. Among the "strong" instructional leaders, however, the time spent in this area was higher, but the discrepancy between groups was greater. The elementary principals spent an average of 4.6 hours per day on instructional leadership, the middle level principal 4 hours and the high school principal 3 hours. While the "strong" instructional leader spent about twice as much time per day on instructional leadership as the "average" principal at the elementary and middle level, the difference was only about a half hour at the high school level (Smith and Andrews, 1989).

Factors Other Than Time For Instructional Leadership

In an attempt to discover if there were other factors besides time allocation to account for differences between "average" principals and "strong" instructional leaders,

Smith and Andrews surveyed 1,100 teachers to see how they rated their principals as resource providers, instructional resources, communicators and as a visible presence. Eighty-nine percent of the teachers working in "strong" instructional leadership schools rated their principal as a good resource provider, while only 52% of the teachers in schools with "average" instructional leaders saw the principal as a good provider of resources. For the principal, serving as an instructional resource, 78% of the teachers in "strong" leader schools gave positive ratings, while only 52% of the staff in "average" leader schools gave their principal positive ratings. In the areas of communications, one-on-one, small group and creating a sense of vision for the school, 84% of the teachers of "strong" leaders rated their principal positively, while only 47% of the teachers of "average" leaders rated their principal positively. In terms of visibility in the classrooms and throughout the building, 89% of the teachers of "strong" leaders rated their principals positively while 60% of teachers of "average" leaders rated the principal positively. Smith and Andrews, 1989 found that these four factors largely accounted for the difference between "strong" and "average" instructional leaders.

Personal Factors Relating to Instructional Leadership

Instructional Coaching by Instructional Leaders

"One of the most powerful tools a principal possesses is the knowledge of how to improve the effectiveness of the school as a school" (English, 1987, p. 35). Most principals possess the knowledge to improve curriculum instruction in their buildings, but mere possession of the knowledge is not sufficient. The principal must take the time and place a high priority on imparting that knowledge to the professional staff in order to achieve effectiveness and excellence in the instructional program. A principal must be willing to assume the role of an instructional coach with the teaching staff. This requires that the principal be highly knowledgeable about the characteristics of effective teaching. A key factor in instructional improvement remains the principal's skill in diagnosing instructional situations and suggesting optional behaviors teachers can use to be more effective. "The effective principal also recognizes the differences that exist between his or her personal administrative style and the resulting impact that has on contrasting teaching style" (Jacobsen, 1987, p. 60). The ability to influence the varying teaching styles effectively with that management style is critical to the success of the principal in achieving effectiveness in curricular instruction and subsequent student levels of achievement in

the building.

Competency in Instructional Leadership

"There are three forms of instructional leadership competence. Content competence is the ability to assist teachers in organizing and presenting academic content. Methodological competence is the ability to assist teachers in improving instructional delivery. Supervisory competence is the ability to assist teachers in implementing effective instructional practices" (Keefe, 1987, p. 50). These three forms of instructional leadership competence are the heart and soul of instructional or peer coaching found in Instructional Theory Into Practice (I.T.I.P), Program For Effective Teaching (P.E.T.), or any number of other research based programs for effective teaching.

Administrators trained in models of effective teaching and curriculum supervision will readily recognize the importance of attaining these three forms of leadership competence. "The role of the principal is both specific and essential in peer coaching models. Principals provide the skill and ability to diagnose and analyze a teacher's needs and then work with that teacher to develop a plan for improvement tailored to meet the unique needs of that individual teacher. What is needed are principals who can provide leadership because they have a knowledge base beyond that of even the most exceptional peer coaches. Such

principals are skillful observers of the instructional process because they know how to use their supervisory tools effectively" (Knoll, 1988, p. 2).

Competencies of Leadership

In examining the leadership role of the principal, a joint committee of educators representing the National Education Association and the National Association of Secondary School Principals described the effective principal as one who "assumes leadership for improving the instructional program. The principal demonstrates an active interest in classroom events and activities. The principal encourages staff to continue to experiment with classroom techniques, resources and activities to achieve instructional goals" (Ventures in Good Schooling, 1986, p.20). Principals who establish themselves as effective instructional leaders will discover that they have the tools and opportunities to shape the destiny of their school (Regan, 1988).

Leadership is determined by the situations in which leadership is displayed. Three theories have helped present a better picture of what factors shape leadership behavior. Role theorists have suggested that the principal's leadership behavior is determined by how the principal perceives the expectations of others. Expectancy theorists suggest that the principal's behavior as a leader can be

determined from the principal's expectations about the consequences of his behavior. However, this theory does not explain how the principal prioritizes those expectations. The third theory or adaptive-reactive theory suggests that the principal's behavior is influenced by factors such as the size of the school, external influences from the community, and the decision making process in the school district. Collectively, these theories provide a sounder basis for determining a principal's leadership behavior than any one of them alone. If we want principals to be good instructional leaders, we must plan for addressing each of the characteristics explained by these theories (Smith and Andrews, 1989).

Cohen (1981), in his studies of effective schools, stated that, "perhaps unusually effective schools are different than most schools and what accounts for that effectiveness is precisely that they are more tightly managed" (p.48). It is implied that principals of effective schools carefully set forth plans to ensure effectiveness. They may assume little and take little for granted. Tightly managed schools have principals that pay attention to detail, and carefully consider and plan for the external and internal forces that shape the curriculum and general school climate.

Instructional Leadership Behavior Descriptors

In the 1985 study, Hallinger and Murphy set out to describe the instructional leadership behavior of principals in terms of specific job behaviors. As part of the study, they developed an appraisal instrument to assess instructional leadership. They realized, after researching educational leadership and school effectiveness, that there were a general lack of behavioral indicators of leadership, there were problems of generalizability, and there were a lack of explanatory models. They targeted their study on the gaps they found in the research. The instrument they developed and used in their study contains eleven job function descriptors from which they assessed each principal's instructional leadership behavior. The instrument and the job descriptors will be discussed in detail. Direct observation of principals and interviews were not conducted in this study. To guard against unwarranted inferences, they surveyed teachers as well as principals on the instructional leadership behaviors of the principal, and then checked the teachers' perceptions against the principal's perceptions.

What they found from profiles on principals, drawn from teacher perceptions of their principal's instructional leadership behavior, were consistent differences between principals in their instructional leadership behavior.

The self-reports of principals tended to be inconsistent with that of the teachers. Despite some limitations in this study, several patterns did emerge. These patterns evolved from the teachers' perceptions of the principal. Generally principals, as reported by teachers, were more actively involved in curriculum and instructional leadership than the literature suggests. The results of this study indicate that;

> "principals supervise and evaluate curriculum more closely than previous studies indicated. Principals generally do not view students as a key audience and thus do not concentrate on establishing and maintaining close contact with students. However, principals who were highly ranked across all eleven job categories, tended to maintain close contact with the students. Principals, in the absence of policies, tended to monitor closely, the classroom practices that promote effective use of time. Principals rarely reinforce teacher effort publicly, but preferred to do it privately through personal notes. They also found that principals tend to rank consistently across the job categories. If they ranked high in a few, they tended to rank high in all categories" (p.34 & 35).

Administrative factors in this particular district may account for the differences in the findings from this study and those of previous studies. The superintendent in this district had been implementing a 4-year school improvement program in which he stressed that principals were to be highly involved in instructional leadership in their buildings. Administrative appointments and promotions were based on instructional expertise. The superintendent had only made three appointments to elementary principalships in the four years and two of the three appointees were the top

two rated principals in this study. Hallinger and Murphy (1985) conclude from this study that further research using the Principal Instructional Management Rating Scale in other settings is needed in order to more fully understand the implications of their findings.

Despite the small sampling, Hallinger and Murphy (1985) believe that the study did provide a basis for identifying factors related to instructional leadership behavior. They explained their findings in three areas: individual differences of principals, differences in organizational structure, and a combination of the two.

Personal Factors

In explaining individual differences, they looked at gender, age, educational training, building administrative experience, tenure in position, teaching experience including level, and length of service. Personality traits and leadership style were not considered in their study, although they recognized that they are considerations. The personal variables did not reveal a consistent pattern, although the variable that did yield differences was gender. Three of the ten principals in this study were female and two of them ranked at the top in instructional leadership. "Previous research suggests that women administrators may be more active instructional leaders [Hemphill, Griffiths, & Frederiksen, 1962; Salley, McPherson, & Baehr, 1979]"

(Hallinger and Murphy, 1985, p.36). Although this study was limited in size, and drawing conclusions is limited, gender may be a factor that would have some significance in a study with a larger sample.

Age as a variable also revealed a potential pattern. In this study, the top ranked principals tended to be younger, with a mean age of forty-three as opposed to a mean age of forty-nine for the bottom of the rankings. There is no indication, however, what factor age plays in terms of the degree of involvement with instructional leadership as is true with most personal variables. The other personal variables did not serve as explanatory factors for principal involvement in instructional leadership. In fact, age and tenure in position may be easily explained away because the individuals who were younger and in position fewer years were hired by the superintendent who was stressing greater involvement in instructional leadership.

Organizational Factors

The following organizational variables were examined in this study: school size, school socioeconomic status, special program management, and district office relationship. Only school size was closely associated with instructional leadership behavior. It has been previously stated that schools with a mean size of 385 pupils tended to be more involved in instructional leadership than principals

in schools with a mean size of 600 pupils.

Hallinger and Murphy report that because of the size of the study sample, generalizations are difficult to make about the results of the study, but the interaction of personal and organizational variables may yield meaningful explanations for instructional leadership behavior in future studies involving larger sample populations.

Hallinger and Murphy's (1985) study involved elementary school principals and the findings they received from the study in this particular school district ran contrary to the findings of earlier studies about the involvement of elementary principals in instructional leadership. The fact that the principals in their study were highly involved in instructional leadership can be explained by the fact that the superintendent placed such a high priority on instructional leadership, that promotion and evaluation of principals within the district hinged in part, on their level of involvement in this aspect of administration.

Study Focus

The focus of this study is in examining the extent to which selected middle school principals in Michigan are involved in instructional leadership in their buildings. This study may serve to yield data which will better explain the relationship between the variables that Hallinger and

Murphy identified in their study and the instructional leadership practices of middle level principals.

Personal Variables

Several personal variables were considered which may impact on the extent to which these selected principals involve themselves in the instructional leadership process. One variable that was considered in this study was the gender of the administrator, and whether or not that is a factor as to the extent to which the administrator provides instructional leadership. As indicated previously, Hallinger and Murphy suggested from the results of their study in the one California district that the gender of the administrator may be significant in determining levels of instructional leadership, but that a larger sample population was needed in the study in order to make a more accurate assessment. Other research work has suggested that women play a more active role than men in terms of instructional leadership.

Two other variables that warrant examination in this study are the tenure in position for the principal and the number of years of teaching experience of the principal. Although Hallinger and Murphy (1985) conceded that these were not significant factors in their study, they also conceded that the limitations of their study could explain the fact that these and other variables did not yield

significant and useful data. In their study, the younger and least tenured administrators tended to be more actively involved in instructional leadership. However, these same administrators were hired by a superintendent who made it clear that instructional leadership was to be a high priority for the building administrators in the district. A larger study population may reveal that these two variables are factors in determining the extent to which a principal engages in instructional leadership, and thus warrants close examination.

Two additional personal variables will be examined in this study that were not examined in the study by Hallinger and Murphy. Those two personal variables are the level at which the principal taught and whether the principal has received training in a specific model of instructional supervision.

Organizational Variables

Hallinger and Murphy's study hinted that the size of the school might be a variable accounting for differences in the level of instructional leadership exhibited by the principal. They noted that previous studies seemed to indicate that size of student population in the building was a factor in determining leadership behavior on the part of the principal. The size of the student population in the buildings surveyed for this study was one of the variables

considered.

Three organizational variables not considered in the Hallinger and Murphy study that will be considered in this study are the presence of an assistant principal in the building, whether or not the principal has district central office duties such as transportation, food service or special education, and whether the principal is an administrator of a middle school or junior high organization.

Additional Considerations

This study also involved a survey of teachers within the building as well as a survey of the building principal. Studies have indicated that the assessment by teachers of their building principal's instructional leadership behavior was critical as a verification of the results of the principal's self-assessment. Hallinger and Murphy developed as part of the P.I.M.R.S., a teacher assessment instrument of the principal's instructional leadership behavior, noting that only the teachers' assessment results lent credibility to the principal's responses. Thus, the teachers' responses in assessing the instructional leadership behavior of their principal were considered a variable in determining the extent to which principals engage in instructional leadership in this study.

Summary

In this chapter, a review of the literature and past research on instructional leadership practices of principals was conducted. The purpose of this literature review was to establish a basis for continued research through this study into the instructional leadership practices of principals. This chapter also sought to focus on variables that would be examined in this study which enhance or hinder the extent to which a principal engages in instructional leadership .

These variables are stated in the form of research questions in the succeeding chapter. These variables are not necessarily all inclusive and the researcher recognizes that there may be other variables that influence instructional leadership behavior. However, based on previous research in attempting to identify and explain the instructional leadership behavior of principals, researchers have suggested that these variables should receive attention in future research.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The purpose of this chapter is to describe the research design, the selection of a sample population, the survey instrument employed, and the procedures used in the collection and analysis of data.

Research Design and Procedures

The purpose of this study was to determine the extent to which middle level principals in Michigan engaged in instructional leadership in their buildings. In pursuit of this study, research questions were developed that sought to determine the level of instructional leadership of the principal as perceived by the principal and by teachers, and the extent of the difference. Questions also focused on personal factors about the principal, and organizational factors that concern the school. For instance, is the level of instructional leadership attributable to personal factors such as years of teaching experience, level of teaching experience, either elementary, secondary or both, years of administrative experience, gender, or training in instructional leadership? Is the level of instructional leadership attributable to organizational factors such as whether or not the building is a junior high or middle

school organization, student population count, the presence of an administrative assistant, or if the principal has central office duties in addition to building responsibilities?

This study was ex-post facto in nature in that the independent variables could not be manipulated by the research. Variables other than those identified could have affected the outcome of the research.

Permission to use the P.I.M.R.S. survey was obtained from its developer Dr. Philip Hallinger of Vanderbilt University. A revised version of the P.I.M.R.S. (Hallinger and Murphy, 1987) was used in this study. In Dr. Hallinger's 1985 study, the P.I.M.R.S. instrument contained 11 areas and 71 items. One area, Developing and Enforcing Academic Standards, was eliminated by Dr.Hallinger from the revised instrument and the items were reduced to fifty, five per category.

A cover sheet was developed to gather data from both principal and teacher respondents to help identify the independent variable characteristics of the sample population. Principals were asked to indicate gender, a range of years they had served as principal of the building, a range of years they previously taught, the level at which they taught; elementary, secondary or both, if their building was characterized as a middle school or junior high

school, whether or not they had central office administrative responsibilities, whether or not they had an assistant principal, and whether or not they had received instructional supervisory training in Instructional Theory Into Practice (I.T.I.P.), Program for Effective Teaching (P.E.T.), Cooperative Learning, Teacher Effectiveness Student Achievement (T.E.S.A.), or other models. The teachers were asked to respond as to gender, a range of years they had worked with the principal, a range of years they had been teaching, grade levels at which they taught, and if they had received training in instructional models as indicated with the principals' survey. An introductory cover letter was included explaining the nature and purpose of the survey and subsequent research study.

This study was reviewed by the Michigan State University Committee on Research Involving Human Subjects. The project was exempt from a full U.C.R.I.H.S. review. The committee review indicated that the rights and welfare of the subjects involved in the study appeared to be protected and permission was granted to proceed with the research.

Description of the Population and Sample

For purposes of this study, it was determined that the principal of the building must have been in position during the 1989-90 school year in order to be considered in this

study. Using the Michigan Education Directory for 1989 and 1990, it was determined that 448 middle school principals represented the population from which the sample could be drawn. With a bound on the error of estimation B = .1 and a 95% certainty that the difference between the sample population and the true population was 10%, a sample size of eighty principals was required. With a 90% certainty that the sample population and the true population differences were 10%, a sample size of fifty-nine principals was required.

Description of the Survey Instrument

The survey instrument used in this study and developed by Dr. Philip Hallinger is the Principal Instructional Management Rating Scale. The instrument contains 50 questions with five items under each of the following descriptors:

1. Framing the School Goals
2. Communicating the School Goals
3. Supervising and Evaluating Curriculum
4. Coordinating the Curriculum
5. Monitoring Student Progress
6. Protecting Instructional Time
7. Maintaining High Visibility
8. Providing Incentives For Teachers

9. Promoting Professional Development

10. Providing Incentives for Learning.

Hallinger identified these ten areas as the dimensions of instructional management, after thorough review of research examining each instructional leadership function. Practicing administrators were asked to provide input into the practices they felt were critical to performing each function and these were translated into behaviorally anchored descriptions (Hallinger and Murphy, 1987). High scores across the various functions are an indication of instructional leadership behaviors associated with principals in effective schools. The P.I.M.R.S. was developed in cooperation with the Milpitas Unified School District in California. It was used in a 1985 study involving ten elementary schools in this district. It has been used successfully in studies of elementary and secondary principals with respect to instructional supervisory practices.

The respondent answered each question by circling a number as follows:

1 if he almost never engaged in that behavior

2 if he seldom engaged in the behavior

3 if he sometimes engaged in the behavior

4 if he frequently engaged in the behavior

5 if he almost always engaged in that behavior

No answer was scored as a zero. The teachers responded to the same survey instrument. The teacher means in each of the ten areas were arrived at by averaging the scores for the five questions.

The range of the scores was interpreted as follows:

1.00 - 1.49 almost never engaged in the behavior

1.50 - 2.49 seldom engaged in the behavior

2.50 - 3.49 sometimes engaged in the behavior

3.50 - 4.49 frequently engaged in the behavior

4.50 - 5.00 almost always engaged in the behavior

The instrument, including the cover sheet identifying the variable characteristics in this study, was field tested. The instrument was tested with two building principals and five middle level teachers to determine the appropriateness of questions and the ease of responding to the instrument. Each of the respondents to the field test indicated that the instrument was clear in terms of understanding and response.

Validity and Reliability of the Instrument

Hallinger provided reliability scores from previous studies (1983 and 1985) using this instrument. He tested the validity and reliability of the instrument in five areas;

> Validity
> 1. "Content Validity - items making up each subscale of the instrument must be relevant to the critical requirements of the job; each item assigned to a subscale achieved a minimum average agreement of .80 among a group of raters.
>
> 2. Validity (analysis of variance) the subscales should discriminate among principals.
>
> 3. Construct validity (subscale intercorrelation) groups of items within a subscale correlated more strongly with each other than with other subscales.
>
> 4. Construct validity (documentary support) - an analysis of school documents related to the instructional management behavior of principals generally yielded instructional management profiles similar to those obtained from teachers with the questionnaire.
>
> Reliability
>
> Reliability (Cronbach's alpha) coefficients of at least .75 as a test of the instrument's internal consistency" (1985 p. 225-226).

The correlation coefficients using Cronbach's alpha for each of the subscales supplied by Hallinger from his studies using the P.I.M.R.S. revised version are presented on Table 3.1.

Data Collection

The surveys were mailed to 120 Michigan middle level principals who had been in position for at least two years.

Table 3.1

SUMMARY OF THE RELIABILITY COEFFICIENTS USING CRONBACH'S ALPHA FROM PREVIOUS HALLINGER STUDIES

Name of Scale	Hallinger Studies
Framing School's Goals	.89
Communicating School's Goals	.89
Supervising/Evaluating Curriculum	.90
Coordinating Curriculum	.90
Monitoring Student Progress	.90
Protecting Instructional Time	.84
Maintaining High Visibility	.81
Providing Incentives For Teachers	.78
Promoting Professional Development	.86
Providing Incentives For Learning For Learning	.87

Note: Each scale contained five items

The number 120 was chosen so that enough principals were sampled to ensure that those returned surveys would have a 90% to 95% certainty that the difference between the sample population and the true population was 10%. It was anticipated that one-half to two-thirds of the surveys would be returned. Principals were given two weeks to respond to the survey. If a response was not received after that period of time, a follow-up reminder letter was sent to the principal. The letter to the principal explained that upon receipt of the completed survey by the researcher, ten teacher surveys would be sent to the school to teachers who had taught at least one year for that principal. The teacher surveys contained a cover letter explaining that the principal had participated in the survey and that the teacher survey responses were being used as a verification of the data received from the principal. Teachers were asked to return the survey within two weeks. If surveys were not returned, letters were sent to the principal to encourage staff members to return their surveys.

The teachers are the recipients and benefactors of the principal's instructional leadership and thus, the researcher sought to determine whether or not differences exist between the principals self-assessment of instructional leadership and that of the teachers being supervised. An average mean score of the teachers' responses was computed for each building to compare with the

principal's responses.

Data Treatment and Analysis

This study posed a series of research questions relating to the level of instructional involvement of the principal, personal attributes of the principal as they relate to the level of instructional leadership, and organizational factors as they relate to the principal's level of instructional leadership.

An analysis of the mean scores of responses from both the principals and the teachers was made on each of the ten scales on the survey instrument. Where two means were being compared, a 2-tailed t test was conducted using pooled variance estimates of mean differences if the F value for homogeneity of variance was greater than .05 and a separate variance estimate of the mean differences if the F value for homogeneity of variance was less than .05.

If more than two means were being compared, a one way analysis of variance was conducted to determine if group means differed significantly. If the probability of the F test was less than or equal to .05, a Scheffé post hoc analysis was conducted to determine the nature of the differences.

All analyses were made from data sets representing two viewpoints. One viewpoint was that of the principal's self

assessment of the degree to which he or she engaged in instructional leadership in the building in relationship to the ten instructional leadership descriptors on the survey instrument. The second viewpoint was that of the teachers' as they perceived the degree to which their principal engaged in instructional leadership as defined by the ten descriptors on the survey instrument.

Summary

This chapter contained a description of the research design and procedures used in this study, a description of the sample population, a description of the survey instrument, a review of validity and reliability of the instrument from previous studies, a description of the data collection, and an explanation of the data treatment and analysis. In Chapter IV the findings of this study are reported.

CHAPTER IV

DATA ANALYSIS

Overview

A survey of 120 middle level principals was conducted across the state of Michigan using an instrument which measures the level of instructional leadership of the principal on ten scales of measurement. Of the 120 principals surveyed, seventy-six principals returned the survey. The seventy-six responses represented a sixty-three percent return and there is a ninety percent certainty that the sample population and the true population differences are ten percent. To have a ninety percent certainty that the differences between the sample and true populations were ten percent, a sample response of fifty-nine principals was needed.

When the principal returned his survey, ten teacher surveys, similar to the principal's form, were sent to the building. Of the 760 teachers surveyed, 420 teachers returned their surveys, a fifty-five percent return representing sixty-nine schools. However, only sixty-two schools had four or more teachers responding to the survey. Four responses was the minimal number allowed to represent the total building staff in this study. The teacher responses representing sixty-two schools falls within the ninety percent confidence interval that the difference

between the sample population and the true population is ten percent.

In this chapter, a brief review of the problem is followed by findings for each research question. Where a research question deals with a comparison of two means or two groups of means, a two-tailed t test was used to analyze the data. If the 2-tail probability of the F test of homogeneity of variance was greater than .05, a pooled variance estimate of the mean was made. If the 2-tail probability of the F test of was less than or equal to .05, than a separate variance estimate of the mean was used. Where more than two means or groups of means were analyzed, a one-way analysis of variance was applied. If an F probability equal to or less than .05 occurred, indicating a difference between two or more groups, a Scheffé post hoc analysis was used to determine which groups were different. An analysis of the teachers' responses was made using the teachers' average mean score for each building on each scale on the survey instrument, in addition to an analysis of the principals' responses. Data are presented on each of the questions, representing the view of the principals and the view of the teachers.

The survey instrument used in this study and developed by Hallinger is the Principal Instructional Management Rating Scale. The instrument consists of ten scales.

Each scale contains five questions. The respondent answered each question by circling a 1 if the principal almost never engaged in that behavior, a 2 if the principal seldom engaged in the behavior, a 3 if the principal sometimes engaged in the behavior, a 4 if the principal frequently engaged in the behavior or a 5 if the principal almost always engaged in that behavior. The means in each of the ten areas were determined by averaging the scores for the five questions per respondent. In each of the test situations, a .05 level of significance was used.

Review of the Problem

The purpose of this study was to examine the extent to which middle level principals in Michigan are involved in instructional leadership in their buildings and to determine if there are organizational or personal factors which might impede or enhance that level of involvement.

The following research questions were posed:

Level of Principal Involvement in Instructional Leadership

Question 1 To what extent do middle level principals believe they engage in instructional leadership within their buildings?

Question 2 To what extent do the teachers believe their principal engages in instructional leadership?

Question 3 What is the extent of the difference between the principals' and teachers' perceptions?

Organizational Factors Relating to the Level of Instructional Leadership

Question 1 Does the size of the school relate to the level of the principal's involvement in instructional leadership?

Question 2 Does having an assistant principal relate to the extent to which the principal is involved in instructional leadership?

Question 3 Does having central office administrative responsibilities in addition to building administrative responsibilities relate to the level of instructional leadership by the principal?

Question 4 Does being the principal of a junior high as opposed to a middle school relate to the level of instructional leadership of the principal?

Personal Factors Relating to the Level of Instructional Leadership

Question 1 Does having received training in an instructional supervisory model relate to the level of instructional leadership of the principal?

Question 2 Is the gender of the principal a factor that relates to the level of instructional leadership?

Question 3 Does the number of years the principal has served in the building relate to his/her extent of involvement in instructional leadership?

Question 4 Does the number of years of teaching experience for the principal relate to the extent of involvement in instructional leadership?

Question 5 Is the level at which the principal taught a factor that relates to the level of instructional leadership?

Scoring the Instrument

Scores ranging from 1.00 - 1.49 indicate that the principal almost never is involved with that aspect of instructional leadership; 1.50 - 2.49 indicates the principal is seldom involved; 2.50 -3.49 indicates the principal is sometimes involved; 3.50 -4.49 indicates the principal is frequently involved; 4.50 -5.00 indicates the principal is almost always involved. It is possible that the responses of principals and teachers could fall within the same range and a significant difference occur. It is also possible for the responses of teachers and principals to fall in different ranges and a significant difference not occur.

Findings

Level of Instructional Leadership

Question 1 To what extent do middle level principals believe they engage in instructional leadership within their buildings?

The results of analyzing the self perceptions of principals on the extent of their involvement in instructional leadership is presented on Table 4.1. The mean scores of the principals that are presented in Table 4.1 would indicate that the principals believe they frequently are involved in all ten dimensions of instructional leadership as measured by the P.I.M.R.S. The mean scores of the principals across all ten areas of instructional leadership range from 3.57 to 4.17 which falls within the range of 3.50 to 4.49 defined as being frequently involved in instructional leadership.

Question 2 To what extent do the teachers believe their principal engages in instructional leadership?

The results of analyzing the teachers' perceptions of their principals level of involvement in instructional leadership are also presented on Table 4.1. The mean scores of the teachers' perceptions indicate that the teachers believe their principals sometimes are involved with some dimensions of instructional leadership as defined by the P.I.M.R.S., and are frequently involved with other

TABLE 4.1

SUMMARY OF THE T-TESTS OF THE DIFFERENCES BETWEEN TEACHER PERCEPTIONS AND THE PERCEPTIONS OF PRINCIPALS ON INSTRUCTIONAL LEADERSHIP PRACTICES OF THE PRINCIPALS

Group 1 = Principals
Group 2 = Teachers
N = 62 CASES

	Mean	St. Dev.	St. Err.	Diff Mean	St. Dev.	St. Err.	Corr	2-Tail Prob.	T Val.	Df	2-Tail Prob.
PIMRS 1 Frame Sch Goals											
1	3.62	.814	.103	.1294	.856	.109	.318	.012	1.19	61	.239
2	3.49	.630	.080								
PIMRS 2 Comm Sch Goals											
1	3.57	.770	.098	.2163	.793	.101	.379	.002	2.15	61	.036*
2	3.36	.639	.081								
PIMRS 3 Super/Eval Instr											
1	3.91	.538	.068	.5248	.662	.084	.203	.114	6.24	61	.000*
2	3.38	.510	.065								
PIMRS 4 Coor. Curr.											
1	3.71	.670	.085	.3879	.783	.099	.257	.043	3.90	61	.000*
2	3.32	.613	.078								
PIMRS 5 Monit. Stud Prog											
1	3.65	.696	.088	.3698	.692	.088	.408	.001	4.21	61	.000*
2	3.29	.574	.069								
PIMRS 6 Prot Inst Time											
1	4.02	.486	.062	.4153	.581	.074	.170	.186	5.63	61	.000*
2	3.61	.412	.052								
PIMRS 7 Main High Visib											
1	3.93	.620	.079	.6235	.591	.075	.490	.000	8.31	61	.000*
2	3.30	.543	.069								
PIMRS 8 Prov Incen Teach											
1	3.97	.707	.090	.5382	.670	.085	.488	.000	6.33	61	.000*
2	3.43	.605	.077								
PIMRS 9 Prom Prof Dev											
1	3.98	.595	.076	.2590	.732	.093	.131	.309	2.78	61	.007*
2	3.72	.513	.065								
PIMRS 10 Prov Incen Lrn											
1	4.17	.577	.073	.2892	.658	.084	.323	.010	3.46	61	.001*
2	3.81	.628	.076								

LEVEL OF SIGNIFICANCE 2Q .05 = 2.00
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

dimensions of instructional leadership. The teachers believe that principals sometimes are involved with framing the school's goals, communicating the school's goals, supervising and evaluating instruction, coordinating the curriculum, monitoring student progress, maintaining high visibility in the building, and providing incentives for teachers. Their mean scores for these areas, which ranged from 3.29 to 3.49, fall within the range of 2.50 to 3.49 indicating they are sometimes involved. The teachers believe that the principals are frequently involved in protecting instructional time, promoting professional development and providing incentives for learning. With mean scores of 3.61, 3.72 and 3.81 respectively, the means fall within the frequent involvement range of 3.50 to 4.49.

Question 3 What is the extent of the difference between the principals' and teachers' perceptions?

An analysis of the data indicates that significant differences between principals' perceptions and the perceptions of teachers occurred in nine of the ten areas on the P.I.M.R.S. A 2-tail probability of the t test equal to or less than .05 indicates a significant difference.
In the area Framing the School's Goals, the 2-tail probability was .239 indicating no signficant difference between the responses of the two groups. The teachers see their principals as sometimes framing the school's goals

(3.49), but at the extreme upper limits of that range. The principals see themselves as frequently being involved with this aspect of instructional leadership (3.62), but at the lower end of that range. Although the means fell in two different ranges, the means were not too far apart and the differences were not significant. There are significant differences between the perceptions of the teachers and the principals as to the extent to which the principal engages in communicating the school's goals, supervises and evaluates instruction, coordinates curriculum, monitors student progress, protects instructional time, maintains high visibility in the building, provides incentives for teachers, promotes professional development and provides incentives for learning. The results of this analysis indicate that principals have a considerably higher perception of their level of involvement in instructional leadership than do the teachers in their buildings.

An Item Analysis of Perception Differences

To further analyze these differences in perceptions, since they were significant in nine of the ten areas, an item analysis was conducted involving the sixty-two principals and the teachers in those schools who responded to the survey.

Table 4.2 contains the mean scores of the sixty-two principals and the teachers of those schools involved in

this study. In looking at specific items within each of the nine areas where significant differences occurred between the perceptions of principals and teachers, some items had mean scores from the principals and teachers that fell within different ranges of frequency. An analysis of those items may help clarify the significant differences that occurred between the two groups.

Item 13, in the area of Supervising and Evaluating Instruction, was one item where the mean scores fell in different ranges. This item concerns the principal conducting informal classroom visits on a regular basis. The principals believed they frequently conducted such visits (3.82), whereas the teachers' perception is of a much lower level of involvement. The teachers feel that principals sometimes make informal classroom visits (3.03). Item 16 in the area of Coordinating the Curriculum, revealed that the principals felt they frequently made it clear who was responsibile for coordinating curriculum across grade levels (4.00), whereas teachers felt that principals sometimes made that responsibility clear (3.42). In that same area Item 20, the principal's participation in the review of curricular materials, revealed that the principals felt they frequently were involved in this activity (3.85), while teachers felt that principals were sometimes involved (3.42).

In the area of Monitoring Student Progress, there were three items in which the means of teachers and principals fell in different ranges. Item 21 concerns the frequency with which the principal meets with individual teachers to discuss student academic progress. The principals felt they frequently were involved in this activity (3.81), whereas teachers saw that as only sometimes occurring (3.11). Item 23 concerned the principal using test results to assess progress toward goals. The principals felt they frequently used test results for this purpose (3.58), whereas teachers perceived that tests results were sometimes used for this purpose (3.44). The difference between the means was only .14 although the means fell in different descriptive ranges. Item 25 concerned the principal informing the students of test results. The principals felt they frequently informed students of test results (3.53), but the teachers felt this only sometimes occurred (3.14).

In the area of Maintaining High Visibility, there were four items where the mean scores fell in different ranges. In Item 32, the frequency with which the principal visits classrooms to discuss school issues with teachers and students, the principals believed they frequently engage in this activity (3.95), whereas the teachers believe that principals sometimes visit classrooms for this purpose (3.05). On item 33, attending or participating in

co-curricular activities, the principals felt they almost always (4.56) were involved and the teachers felt they were frequently involved (4.27). On item 34, covering classrooms for teachers arriving late or until a substitute arrives, the principals believe they frequently cover classrooms (4.08), but teachers see that as sometimes happening (3.26). In terms of the principal tutoring or providing instruction to students (item 35), the principals felt they sometimes provided this service (2.60), but teachers felt this seldom occurred (1.94).

In the area of Providing Incentives for Teachers, there were four items where the means fell in different ranges. In Item 37, complimenting teachers privately for their efforts, the principals felt they almost always complimented teachers (4.52) , while the teachers felt the principals frequently complimented them (4.00). On Item 38, acknowledging teachers' exceptional performance with written notes, the principals felt they frequently acknowledged exceptional teacher performance (3.94), whereas teachers felt that principals sometimes make that acknowledgement (3.21). Rewarding teachers for exceptional performance with professional recognition (Item 39) was something the principals felt they frequently did for teachers (3.85). The teachers felt that principals sometimes rewarded them with professional recognition (3.26). Item 40, creating

professional growth opportunities as a reward for contributions was another area that principals felt they frequently provided (3.77). The teachers' perception was that it sometimes occurs (3.10).

Item 45, in the area of Promoting Professional Development, involves the principal setting aside time during faculty meetings for teachers to share ideas from inservice activities. Principals felt they frequently provided time for this activity (3.60), but teachers felt this sometimes occurred (3.42).

In the area of Providing Incentives for Learning, Item 48, recognizing superior student work by seeing students with their work in the office was something the principals felt they did frequently (3.53), but the teachers saw it as only sometimes occurring (3.19).

On item 46, in the area of Providing Incentives for Learning, both the principals (4.82) and the teachers (4.60) felt that the principals almost always recognize students who do superior work with formal awards such as honor roll or with articles in the newsletter. This item had the highest mean score for both the teachers and principals as an item of involvement for the principal. The item where both groups felt that the principal was least involved in was tutoring students or providing direct instruction to students (item 35) in the area of Maintaining High

TABLE 4.2

SUMMARY OF THE MEAN SCORES FOR THE PRINCIPALS AND TEACHERS ON EACH ITEM OF THE P.I.M.R.S.

ITEM	PRINCIPALS' MEAN SCORE		TEACHERS MEAN SCORE	
N =	62		62	
* N =	61			
** N =	60			
		STD DEV		STD DEV
Frame Sch. Goals				
1	4.00	1.10	3.73	.72
2	3.44	.93	3.50	.67
3	3.48	1.13	3.42	.65
4	3.84	1.06	3.58	.66
5	3.37	.94	3.26	.70
Commun. Goals				
6	3.92	.98	3.75	.77
7	4.10	.88	3.75	.69
8	3.85	.94	3.57	.67
9	3.19	1.21	2.99	.81
10**	2.80	1.19	2.77	.73
Sup/Eval Instr.				
11	3.68	.83	3.34	.56
12	3.37	.98	2.85	.69
13	3.82	.98	3.03	.75
14	4.47	.65	3.99	.62
15	4.05	.80	3.70	.69
Coord. Curr.				
16	4.00	1.01	3.42	.68
17*	3.92	.78	3.52	.69
18	3.39	.86	2.99	.68
19	3.48	.88	3.27	.68
20	3.85	.81	3.42	.66
Monitor Progress				
21	3.81	.83	3.11	.67
22	3.47	.97	3.02	.73
23	3.58	1.03	3.44	.73
24	3.85	1.07	3.67	.74
25	3.53	1.11	3.14	.62
Prot. Inst. Time				
26	4.31	.69	3.90	.64
27*	3.02	.88	2.95	.54
28	4.35	.81	3.52	.74
29	4.32	.70	4.01	.62
30*	4.20	.73	3.72	.56
Maint. High Vis.				
31	4.45	.72	4.02	.68
32	3.95	.93	3.05	.77
33	4.56	.64	4.27	.60
34	4.08	1.04	3.26	.91
35	2.60	1.11	1.94	.64

TABLE 4.2 (CONT'D)

ITEM	PRINCIPALS' MEAN SCORE	STD DEV	TEACHERS' MEAN SCORE	STD DEV
N =	62		62	
Prov. Incent. Teach.				
36	3.84	.94	3.58	.71
37	4.52	.62	4.00	.79
38	3.94	.88	3.21	.75
39	3.85	.85	3.26	.74
40*	3.77	1.09	3.10	.72
Prom. Prof. Dev.				
41*	4.00	.82	3.84	.61
42	4.05	.76	3.81	.60
43	4.18	.82	3.92	.52
44	4.15	.81	3.77	.59
45	3.60	1.03	3.42	.66
Prov. Incent. Lrn.				
46	4.82	.43	4.60	.40
47	4.27	1.06	4.10	.78
48	3.53	1.16	3.19	.58
49	4.00	.96	3.57	.69
50	4.21	.73	4.05	.53

* N = 61
** N = 60

NOTE: A description of each item is contained on the P.I.M.R.S. survey instrument found in the Appendix.

Visibility (principals = 2.60; teachers = 1.94).

This study also sought to determine if there were certain organizational or personal factors about the principal that might influence the degree to which the principal engaged in instructional leadership in the building.

Organizational Factors Relating to the Level of Instructional Leadership

Question 1 Does the size of the school relate to the level of the principal's involvement in instructional leadership?

Three groups representing ranges in size of the building by pupil enrollment were used in this analysis. The three groups were (1) 0-500 students represented by thirty-seven principals; (2) 501-750 students represented by thirty-eight principals; (3) 751 students or more represented by eleven principals. Previous research cited earlier, indicates that size has been a variable that influences the level of instructional leadership of the principal. Principals of schools with smaller student populations tend to be more involved in curriculum supervision than principals from schools with large student populations.

A one way analysis of variance was conducted on each of the ten areas of instructional supervision to assess whether

or not significant differences existed among the means of the groups. If a significant difference did occur, a Scheffé post hoc analysis was conducted to see if the nature of the difference could be determined.

a. Principals' Perspective

The results of analysis of data from the principals' perspective are illustrated on Table 4.3. The complete results can be found on Table 4.18 in the appendix. From the principals' viewpoint, only one area, Maintaining High Visibility, yielded a F probability less than .05 (.0497). The follow-up Scheffé post hoc analysis did not reveal the nature of difference between the groups. It would appear that the difference is most likely to be between Group 1 (4.03) and Group 2 (3.98), and Group 3 (3.49). The principals in Groups 1 and 2 feel they frequently maintain high visibility, while the principals of

TABLE 4.3

ANALYSIS OF VARIANCE OF THE SIZE OF THE BUILDING AS A FACTOR AFFECTING THE LEVEL OF THE PRINCIPAL'S INSTRUCTIONAL LEADERSHIP FROM THE PRINCIPALS' VIEW

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB. *
SS BETWEEN	2.5737	2	1.2869	3.2916	.0497
SS WITHIN	30.0173	73	.4112		
SS TOTAL	32.5910	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	4.03	.545	.900	3.00	5.00	3.85 to 4.21
2	501-750	28	3.98	.681	.129	2.20	5.00	3.71 to 4.24
3	751,+	11	3.49	.826	.249	2.00	5.00	2.93 to 4.05

Scheffé Procedure - No two groups significantly different at .05 level

Group 3 feel they sometimes maintain visibility (3.49). However, a mean score of 3.49 places Group 3 principal responses at the upper limits of that range.

b. Teachers' Perspective

The teacher responses to the survey (Table 4.4) represent thirty-two schools in Group 1, twenty-two in Group 2, and eight in Group 3. The number representing teacher responses differs from the number of principals because not all principals had four or more teachers responding to the survey. The teacher groups represent schools where four or more teachers responded. The teachers' responses indicate that size is a significant factor in two areas; Coordinating the Curriculum and Maintaining High Visibility.

In the area of Coordinating the Curriculum, an F probability of .0465 indicated that a significant difference existed between two or more groups at the .05 level.

TABLE 4.4

ANALYSIS OF VARIANCE OF THE SIZE OF THE BUILDING AS A FACTOR AFFECTING THE LEVEL OF THE PRINCIPAL'S INSTRUCTIONAL LEADERSHIP FROM THE TEACHERS' VIEW

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.2625	2	1.1312	3.2325	.0465*
SS WITHIN	20.6470	59	.3499		
SS TOTAL	22.9095	61			

	Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.19	.696	.123	1.90	4.33	2.94 to 3.44
2	501-750	22	3.58	.401	.085	2.96	4.19	3.40 to 3.76
3	751 +	8	3.15	.568	.201	2.53	4.20	2.67 to 3.62

Scheffé Procedure = No two groups significantly different at the .05 level

A Scheffé post hoc analysis failed to indicate the nature of the difference. Group 2 teachers indicated that their principals frequently are involved with coordinating the curriculum (3.58), whereas the teachers of Group 1 (3.19) and Group 3 (3.15) perceive their principals as sometimes being involved with coordinating the curriculum. It is likely that Group 2 is different from Groups 1 and 3.

In the area of Maintaining High Visibility, an F probability of .0274 indicates a significant difference exists at the .05 level. The Scheffé post hoc analysis indicated that the nature of the difference was between Group 1 and Group 3. Group 2 did not differ significantly from either Group 1 or 3. Although the teachers in both groups felt their principals sometimes maintained high visibility, the teachers of Group 1, the small schools, felt their principals had a higher rate of maintaining high visibility (3.39), than the teachers of Group 3 (2.83), the largest schools.

TABLE 4.4 (CONT'D)

PIMRS 7 Maintain High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.0649	2	1.0324	3.8262	.0274*
SS WITHIN	15.9202	59	.2698		
SS TOTAL	17.9851	61			

	Groups	N	Mean	St. Dev.	St. Err	Min	Max	95% Conf. Int.
1	0-500	32	3.39	.489	.086	2.32	4.24	3.21 to 3.57
2	501-750	22	3.35	.576	.123	2.20	4.32	3.09 to 3.60
3	751 +	8	2.83	.473	.167	2.20	3.58	2.44 to 3.23

Scheffé Procedure - Group 3 significantly differs from Group 1

There were no other areas from either the principals' or the teachers' perspective where size was a factor of significant difference affecting the extent of the principal's involvement in instructional leadership. The complete results can be found on Table 4.19 in the appendix.

Question 2 Does having an assistant principal relate to the extent to which the principal is involved in instructional leadership as perceived by the principals and the teachers?

a. Principals' Perspective

In this study, forty-four of the responding principals have an assistant principal in their building and thirty-two are single administrators in the building. Table 4.5 illustrates the mean scores for each group of principals on each of the ten subscales of the P.I.M.R.S. If the 2-tail probability of the F value for the homogeneity of variance was greater than .05, then a pooled variance estimate of the t test was used. If the F value was equal to or less than .05, then a separate variance estimate was used.

The results of this analysis indicate that in two of the ten dimensions of instructional leadership, Framing the School's Goals and Monitoring Student Progress, significant differences did occur between the two groups.

In the area of Framing the School's Goals, Group 1, those with assistant principals, had a mean score of 3.85

TABLE 4.5

SUMMARY OF THE T-TEST OF MEAN SCORES FOR PRINCIPALS WITH ASSISTANT PRINCIPALS AND THOSE WITHOUT ASSISTANT PRINCIPALS AS VIEWED BY THE PRINCIPALS

Group 1 Assistant Principals N = 44
Group 2 No Assistant Principals N = 32

MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Frame Sch Goals					POOLED VAR. EST.		
Group 1	3.85	.689	.104	1.77	.084	2.30	74	.024*
Group 2	3.43	.916	.162					
PIMRS 2	Comm Sch Goals					POOLED VAR. EST.		
Group 1	3.67	.678	.102	1.60	.150	1.17	74	.244
Group 2	3.47	.859	.152					
PIMRS 3	Super/Eval Instr					POOLED VAR. EST.		
Group 1	4.05	.535	.081	1.15	.665	1.62	74	.109
Group 2	3.84	.573	.101					
PIMRS 4	Coord Curr					POOLED VAR. EST.		
Group 1	3.76	.640	.097	1.53	.196	.24	74	.815
Group 2	3.73	.791	.140					
PIMRS 5	Monit Stud Prog					POOLED VAR. EST.		
Group 1	3.86	.667	.100	1.21	.561	2.16	74	.034*
Group 2	3.52	.732	.129					
PIRMS 6	Prot Inst Time					SEP. VAR. EST.		
Group 1	3.95	.364	.055	.20	.017	-1.97	50.84	.055
Group 2	4.16	.541	.096					
PIMRS 7	Maint High Visib					POOLED VAR. EST.		
Group 1	3.88	.716	.108	1.54	.208	- .81	74	.420
Group 2	4.01	.576	.102					
PIMRS 8	Prov Incen Teach					POOLED VAR. EST.		
Group 1	4.07	.683	.103	1.17	.621	.78	74	.435
Group 2	3.94	.740	.131					
PIMRS 9	Prom Prof Dev					POOLED VAR. EST.		
Group 1	4.02	.609	.092	1.06	.868	- .51	74	.613
Group 2	4.09	.590	.104					
PIMRS 10	Prov Incen Lrn					POOLED VAR. EST.		
Group 1	4.17	.602	.091	1.10	.799	.88	74	.859
Group 2	4.14	.575	.102					

LEVEL OF SIGNIFICANCE 2Q = .05 - 2.00 (POOLED AND SEPARATE)
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

indicating that the principals feel they frequently are involved with this aspect of instructional leadership. The Group 2 principals, those without assistant principals, had a mean score of 3.43 indicating they feel they are sometimes involved with framing the school's goals, but near the upper limits of that range.

In the area of Monitoring Student Progress, the mean scores of both groups indicates that the principals feel they are frequently involved in this activity. The mean score of principals with assistant principals (3.86) indicates they believe they have a higher frequency of involvement than the principals without assistant principals (3.52). Although both groups feel they are frequently involved with monitoring student progress, the results of the t test indicate that the level of involvement of principals who have assistant principals is significantly higher than that of principals without assistant principals (.034).

b. Teachers' Perspective

From the teachers' perspective, the presence of an assistant principal made a significant difference in one area. The teacher responses represented thirty-three schools with assistant principals and twenty-nine schools without assistant principals. In the area of Providing Incentives for Teachers a significant difference between the

TABLE 4.6

SUMMARY OF THE T-TEST OF MEAN SCORES FOR PRINCIPALS WITH ASSISTANT PRINCIPALS AND THOSE WITHOUT ASSISTANT PRINCIPALS AS VIEWED BY THE TEACHERS

Group 1 = Asst. Princ. N = 33
Group 2 = No Asst. Princ. N = 29

	TEACHER GRAND MEAN SCORE	St Dev.	St. Err.	F Value	F Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Framing Sch. Goals					POOLED VAR. EST.		
Group 1	3.60	.514	.089	2.03	.055	1.40	60	.166
Group 2	3.37	.731	.136					
PIMRS 2	Comm. Sch. Goals					POOLED VAR. EST.		
Group 1	3.50	.613	.107	1.08	.830	1.97	60	.054
Group 2	3.19	.637	.136					
PIMRS 3	Super./Eval. Instr.					SEP VAR. EST.		
Group 1	3.49	.402	.070	2.19	.033	1.73	48.18	.090
Group 2	3.26	.596	.111			ALPHA .05 = 2.02		
PIMRS 4	Coordinate Curr.					POOLED VAR. EST.		
Group 1	3.41	.573	.100	1.28	.492	1.27	60	.211
Group 2	3.22	.649	.121					
PIMRS 5	Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1	3.34	.544	.095	1.12	.745	.87	60	.385
Group 2	3.22	.576	.107					
PIMRS 6	Protect Instr. Time					POOLED VAR. EST.		
Group 1	3.59	.432	.075	1.20	.636	-.45	60	.656
Group 2	3.63	.395	.073					
PIMRS 7	Maint. High Visib.					SEP. VAR. EST.		
Group 1	3.25	.628	.109	2.13	.045	- .78	59.89	.438
Group 2	3.36	.430	.080					
PIMRS 8	Prov. Incen. Teach.					POOLED VAR. EST.		
Group 1	3.57	.599	.104	1.07	.860	2 06	60	.044*
Group 2	3.27	.571	.104					
PIMRS 9	Prom. Prof. Dev.					POOLED VAR. EST.		
Group 1	3.77	.485	.084	1.27	.515	.80	60	.429
Group 2	3.67	.546	.101					
PIMRS 10	Prov. Incen. Lrn.					POOLED VAR. EST.		
Group 1	3.93	.498	.087	1.52	.250	.74	60	.465
Group 2	3.82	.615	.114					

LEVEL OF SIGNIFICANCE 2Q .05 = 2.00
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

two groups exists (Table 4.6). Teachers in schools with assistant principals feel their principals frequently provide incentives for teachers (3.57), whereas teachers in schools without assistant principals feel their principals sometimes provide those incentives (3.27). A 2-tail probability score of .044 indicates a significant difference at the .05 level.

Although significant differences did not occur in any other areas of instructional leadership, the principals and the teachers in buildings with assistant principals had mean scores higher than teachers in Group 2, except for the areas of Maintaining High Visibility and Protecting Instructional Time, and in addition for the principals, the area of Promoting Professional Development.

Question 3 Does having central office administrative responsibilities, in addition to building administrative responsibilities, relate to the level of instructional leadership as perceived by the principals and the teachers?

a. Principals' Perspective

Twenty-five of the responding principals have central office duties in addition to building administrative responsibilities and fifty-one of the principals do not have central office duties. The results of the analysis of data from the principals' perspective is presented on Table 4.7.

TABLE 4.7

SUMMARY OF THE T-TEST OF MEAN SCORES OF PRINCIPALS WHO HAVE CENTRAL OFFICE DUTIES AND THOSE WHO DO NOT HAVE CENTRAL OFFICE DUTIES AS VIEWED BY THE PRINCIPALS

Group 1 = Central Office Duties N = 25
Group 2 = No Central Office Duties N = 51

MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Frame Sch Goals					POOLED VAR. EST.		
Group 1	3.50	.717	.143	1.41	.359	-1.30	74	.199
Group 2	3.76	.852	.119					
PIMRS 2	Comm Sch Goals					SEP. VAR. EST.		
Group 1	3.56	.569	.114	2.20	.039	- .20	55.91	.174
Group 2	3.60	.844	.118					
PIMRS 3	Super/Eval Instr					POOLED VAR. EST.		
Group 1	3.94	.519	.104	1.25	.560	- .24	74	.812
Group 2	3.97	.580	.081					
PIMRS 4	Coord Curr					POOLED VAR. EST.		
Group 1	3.65	.676	.135	1.12	.774	- .86	74	.392
Group 2	3.80	.717	.100					
PIMRS 5	Monit Stud Prog					POOLED VAR. EST.		
Group 1	3.46	.739	.148	1.21	.552	-2.23	74	.029*
Group 2	3.84	.671	.094					
PIMRS 6	Prot Instr Time					POOLED VAR. EST.		
Group 1	4.10	.504	.101	1.35	.367	.90	74	.373
Group 2	4.00	.434	.061					
PIMRS 7	Maint High Visib					POOLED VAR. EST.		
Group 1	4.05	.514	.103	1.95	.078	1.05	74	.294
Group 2	3.88	.718	.101					
PIMRS 8	Prov Incen Teach					POOLED VAR. EST.		
Group 1	4.024	.674	.135	1.16	.699	.05	74	.962
Group 2	4.015	.728	.102					
PIMRS 9	Prom Prof Dev					POOLED VAR. EST.		
Group 1	4.04	.577	.115	1.13	.764	- .13	74	.898
Group 2	4.06	.614	.086					
PIMRS 10	Prov Incen Lrn					POOLED VAR. EST.		
Group 1	4.12	.535	.107	1.32	.464	- .39	74	.696
Group 2	4.18	.615	.086					

LEVEL OF SIGNIFICANCE 2Q = .05 - 2.00 (POOLED AND SEPARATE)
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

From the principals' perspective, a significant difference between the two groups occurred in only one of the ten areas of instructional supervision. An analysis of the area of Monitoring Student Progress yielded a 2-tail probability of the t value at .029 indicating a significant difference between the two groups at the .05 level. Principals without central office duties believe that they frequently monitor student progress (3.84), whereas principals who have central office duties feel they sometimes monitor student progress (3.46). There were no other areas where significant differences occurred between the groups from the principals' perspective.

b. Teachers' Perspective

Twenty-three of the schools from which the teachers responded have principals who have central office duties and thirty-nine of the schools from which teachers responded have principals who do not have central office duties. The results of analysis of teacher data are presented on Table 4.8. From the teachers' perspective there were no significant differences at the .05 level occurring between the two groups on any of the ten scales. Interestingly, with the exception of the area Coordinating the Curriculum, the teachers of principals with central office duties had mean scores higher than teachers of principals who do not have central office duties. The difference in the area of

TABLE 4.8

SUMMARY OF THE T-TEST OF MEAN SCORES OF PRINCIPALS WHO HAVE CENTRAL OFFICE DUTIES AND THOSE WHO DO NOT HAVE CENTRAL OFFICE DUTIES AS VIEWED BY THE TEACHERS

Group 1 = Central Office Duties N = 23
Group 2 = No Central Office Duties N = 39

	TEACHER GRAND MEAN SCORE	St. Dev.	St. Err.	F Value	F Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Framing Sch. Goals					POOLED VAR. EST.		
Group 1	3.55	.677	.141	1.24	.543	.52	60	.604
Group 2	3.46	.607	.097					
PIMRS 2	Comm. Sch. Goals					POOLED VAR. EST.		
Group 1	3.358	.578	.121	1.38	.424	.02	60	.985
Group 2	3.355	.680	.109					
PIMRS 3	Super./Eval. Instr.					POOLED VAR. EST.		
Group 1	3.45	.540	.113	1.19	.618	.82	60	.415
Group 2	3.34	.495	.079					
PIMRS 4	Coordinate Curr.					POOLED VAR. EST.		
Group 1	3.318	.626	.131	1.04	.885	-.03	60	.973
Group 2	3.324	.613	.098					
PIMRS 5	Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1	3.32	.486	.101	1.53	.290	.42	60	.675
Group 2	3.26	.602	.096					
PIMRS 6	Protect Instr. Time					POOLED VAR. EST.		
Group 1	3.68	.344	.072	1.68	.198	1.09	60	.281
Group 2	3.56	.446	.071					
PIMRS 7	Maint. High Visib.					POOLED VAR. EST.		
Group 1	3.48	.535	.111	1.02	.923	1.97	60	.053
Group 2	3.20	.528	.085					
PIMRS 8	Prov. Incen. Teach.					POOLED VAR. EST.		
Group 1	3.53	.649	.135	1.26	.515	1.01	60	.315
Group 2	3.37	.578	.093					
PIMRS 9	Prom. Prof. Dev.					POOLED VAR. EST.		
Group 1	3.73	.467	.097	1.36	.451	.13	60	.894
Group 2	3.71	.544	.087					
PIMRS 10	Prov. Incent. Lrn.					POOLED VAR. EST.		
Group 1	3.97	.563	.117	1.05	.872	.95	60	.348
Group 2	3.83	.549	.088					

LEVEL OF SIGNIFICANCE 2Q .05 = 2.00

Coordinating the Curriculum was negligible with the central office duties group having a mean of 3.318 and the group with no central office duties having a mean of 3.324.

Question 4 Does being the principal of a junior high as opposed to a middle school relate to the level of instructional leadership of the principal as perceived by the principals and the teachers?

a. Principals' Perspective

In this study, the principals were asked to identify their buildings as either a middle school or a junior high school. Forty-eight of the responding principals indicated that their buildings were middle schools and twenty-eight indicated their buildings were classified as junior highs. Table 4.9 illustrates the results between principals of middle schools and principals of junior highs, from the principals' viewpoint.

In analyzing the data from the principals' perspective no significant differences were revealed for any of the ten areas of instructional leadership. Although significant differences did not exist between the two groups, the mean scores for junior high principals were higher than middle school principals in the areas of Framing the School's Goals, Communicating the School's Goals, Supervision and Evaluation of Curriculum, Monitoring Student Progress, Promoting Professional Development and Providing Incentives

TABLE 4.9

SUMMARY OF THE T-TEST OF THE MEANS FOR PRINCIPALS OF MIDDLE SCHOOLS VERSUS JUNIOR HIGH SCHOOLS AS VIEWED BY THE PRINCIPALS

Group 1 Middle Schools N = 48
Group 2 Junior High Schools N = 28

MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Framing Sch Goals						SEP. VAR. EST.	
Group 1	3.58	.918	.133	2.60	.010	-1.61	73.66	.112
Group 2	3.85	.570	.108					
PIMRS 2	Comm. Sch. Goals						SEP. VAR. EST.	
Group 1	3.51	.844	.122	2.08	.044	-1.24	71.67	.219
Group 2	3.71	.585	.111					
PIMRS 3	Super/Eval Instr						POOLED VAR. EST.	
Group 1	3.91	.612	.088	1.88	.083	-1.02	74	.313
Group 2	4.04	.447	.083					
PIMRS 4	Coordinate Curr						POOLED VAR. EST.	
Group 1	3.79	.716	.103	1.09	.834	.65	74	.518
Group 2	3.68	.687	.130					
PIMRS 5	Monitor Stud Prog						SEP. VAR. EST.	
Group 1	3.69	.813	.117	2. 62	.009	- .50	73.71	.622
Group 2	3.76	.502	.095					
PIMRS 6	Prot. Instr. Time						POOLED VAR. EST.	
Group 1	4.04	.442	.064	1.22	.536	.12	74	.905
Group 2	4.03	.489	.092					
PIMRS 7	Maint. High Visib						POOLED VAR. EST.	
Group 1	4.05	.598	.086	1.46	.248	1.97	74	.053
Group 2	3.74	.724	.137					
PIMRS 8	Prov Incen Teach						POOLED VAR. EST.	
Group 1	4.05	.703	.101	1.05	.865	.51	74	.613
Group 2	3.96	.720	.136					
PIMRS 9	Pro Prof Dev						POOLED VAR. EST.	
Group 1	4.03	.582	.084	1.19	.597	- .45	74	.657
Group 2	4.09	.634	.120					
PIMRS 10	Pro Incent Lrn						POOLED VAR. EST.	
Group 1	4.14	.612	.088	1.23	.576	- .31	74	.755
Group 2	4.19	.552	.104					

Level of Significance 2Q =.05 - 2.00 (POOLED AND SEPARATE)

for Learning. The mean scores of the middle school principals were higher than junior high principals in Maintaining High Visibility, Coordinating the Curriculum, Protecting Instructional Time and Providing Incentives for Teachers.

b. Teachers' Perspective

The teacher responses represented forty middle schools and twenty-two junior high schools. The analysis of the teacher responses relative to the organization of the school are illustrated on Table 4.10. No significant differences between groups were found from the teachers' perspective on any of the ten scales of instructional leadership. The mean scores of teachers from middle schools were higher than the mean scores of teachers from junior highs in the areas of Maintaining High Visibility, Coordinating the Curriculum, Protecting Instructional Time, Providing Incentives for Teachers, Monitoring Student Progress, and Providing Incentives for Learning.

TABLE 4.10

SUMMARY OF THE T-TEST OF THE MEANS FOR PRINCIPALS OF MIDDLE SCHOOLS VERSUS JUNIOR HIGH SCHOOLS AS VIEWED BY THE TEACHERS

Group 1 Middle Schools N = 40
Group 2 Junior Highs N = 22

TEACHER'S GRAND MEAN SCORE	St. Dev.	St. Err	F Value	F Prob.	T Value	Df	2-Tail Prob.
PIMRS 1 Frame Sch Goals					POOLED VAR. EST.		
Group 1 3.49	.661	.105	1.28	.551	-.10	60	.924
Group 2 3.50	.584	.124					
PIMRS 2 Comm. Sch. Goals					POOLED VAR. EST.		
Group 1 3.35	.639	.101	1.05	.874	-.12	60	.902
Group 2 3.37	.654	.139					
PIMRS 3 Super/Eval. Instr.					SEP. VAR. EST.		
Group 1 3.38	.574	.091	2.26	.049	-.15	57.68	.879
Group 2 3.40	.382	.081					
PIMRS 4 Coordinate Curr.					POOLED VAR. EST.		
Group 1 3.35	.640	.101	1.26	.582	.53	60	.596
Group 2 3.27	.570	.122					
PIMRS 5 Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1 3.34	.606	.096	1.78	.159	1.10	60	.276
Group 2 3.18	.454	.097					
PIMRS 6 Protect Instr. Time					POOLED VAR. EST.		
Group 1 3.65	.357	.056	1.95	.071	1.04	60	.304
Group 2 3.53	.498	.106					
PIMRS 7 Maint. High Visib.					POOLED VAR. EST.		
Group 1 3.34	.571	.090	1.33	.488	.69	60	.492
Group 2 3.24	.495	.105					
PIMRS 8 Prov. Incent. Teach.					POOLED VAR. EST.		
Group 1 3.43	.631	.100	1.23	.623	.06	60	.952
Group 2 3.42	.569	.121					
PIMRS 9 Prom. Prof. Dev.					POOLED VAR. EST.		
Group 1 3.72	.505	.080	1.13	.718	-.11	60	.913
Group 2 3.73	.537	.115					
PIMRS 10 Prov. Incent. Lrn.					POOLED VAR. EST.		
Group 1 3.90	.558	.088	1.00	1.000	.42	60	.674
Group 2 3.84	.557	.119					

LEVEL OF SIGNIFICANCE. 2Q .05 = 2.00

Personal Factors Relating to the Level of Instructional Leadership

Question 1 Does having received training in an instructional supervisory model relate to the level of involvement in instructional leadership of the principal from the perspective of the principals and the teachers?

In this study, each of the responding principals was asked if they had received any training in the following instructional supervisory models: Instructional Theory Into Practice, Program For Effective Teaching, Teacher Effectiveness Student Achievement or other models. Under other models, Cooperative Learning was the most frequent listing. The type of instructional supervisory model was not as critical as whether training had been received from any model.

a. Principals' Perspective

Sixty-eight of the responding principals indicated that they had received instructional training in a supervisory model, and eight indicated that they had received no formal training in instructional supervision. Table 4.11 presents the results of the principals' views in regard to the level of their instructional leadership as measured on the ten dimensions of the P.I.M.R.S., based on having received or not received formal training in instructional supervision.

TABLE 4.11

SUMMARY OF THE T-TEST OF THE MEANS FOR PRINCIPALS WHO HAVE TRAINING IN INSTRUCTIONAL SUPERVISION AND THOSE WITHOUT TRAINING AS VIEWED BY THE PRINCIPALS

Group 1 = Curriculum Training N = 68
Group 2 = No Curriculun Training N = 8

MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Frame Sch Goals					POOLED VAR. EST.		
Group 1	3.75	.768	.093	1.68	.257	2.27	74	.026*
Group 2	3.08	.997	.352					
PIMRS 2	Commun Sch Goals					POOLED VAR. EST.		
Group 1	3.67	.708	.086	1.53	.347	2.93	74	.005*
Group 2	2.88	.875	.309					
PIMRS 3	Super/Eval Instr					POOLED VAR. EST.		
Group 1	3.96	.567	.059	1.29	.775	.04	74	.967
Group 2	3.95	.499	.176					
PIMRS 4	Coord Curr					POOLED VAR. EST.		
Group 1	3.747	.722	.088	1.71	.471	- .01	74	.991
Group 2	3.75	.553	.195					
PIMRS 5	Monit Stud Prog					POOLED VAR. EST.		
Group 1	3.75	.710	.086	1.08	1.000	1.34	74	.184
Group 2	3.40	.685	.242					
PIMRS 6	Prot Instr Time					POOLED VAR. EST.		
Group 1	4.04	.474	.057	2.64	.177	.40	74	.689
Group 2	3.98	.292	.103					
PIMRS 7	Maint High Visib					POOLED VAR. EST.		
Group 1	3.95	.653	.079	1.27	.556	.72	74	.474
Group 2	3.78	.756	.260					
PIMRS 8	Prov Incen Teach					POOLED VAR. EST.		
Group 1	4.00	.712	.086	1.13	.958	- .66	74	.511
Group 2	4.18	.671	.237					
PIMRS 9	Prom Prof Dev					POOLED VAR. EST.		
Group 1	4.06	.615	.075	1.79	.426	.39	74	.701
Group 2	3.98	.459	.162					
PIMRS 10	Prov Incen Lrn					POOLED VAR. EST.		
Group 1	4.16	.583	.071	1.30	.525	.04	74	.968
Group 2	4.15	.665	.235					

LEVEL OF SIGNIFICANCE 2Q .05 = 2.00
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

From the perspective of the principals, having received training in instructional supervision made a significant difference in two of the ten areas of instructional leadership on the P.I.M.R.S. With a 2-tail probability of .026 in the area Framing the School's Goals, the principals who had received training in instructional supervision engaged in this activity at a significantly higher rate than those principals without that training. The principals who received training believe they frequently are involved with framing the school's goals (3.75), while the principals who have not been through an instructional supervisory training program felt they sometimes were involved in this activity (3.08).

With a 2-tail probability of .005 in the area of Communicating the School's Goals, the principals who received training in instructional supervision felt they communicated the school's goals significantly more often than principals who have not been trained in instructional supervision. The principals with training felt they frequently are engaged in this aspect of instructional supervision (3.67), whereas the principals without this training feel they sometimes are involved (2.88). Although significant differences did not result between the two groups in any of the other dimensions of instructional

leadership, generally the group of principals with training in instructional supervision had higher mean scores than principals who had not received training. The difference however, may be due to chance.

b. Teachers' Perspective

The teacher responses came from fifty-six schools where the principal had received training and six where the principal had not received training. Table 4.12 presents the results of the teachers' perceptions of their principal's level of instructional leadership on each of the dimensions of the P.I.M.R.S., based on whether or not their principal had received training in instructional supervision.

From the perspective of the teachers, there were no significant differences between the two groups of principals in any of the ten areas of instructional leadership. The mean scores of teachers of principals with training in instructional supervision were higher than the means of the teachers in the other group in six of the ten areas. However, since the differences were not significant, they may be due to chance.

TABLE 4.12

SUMMARY OF THE T-TEST OF THE MEANS FOR PRINCIPALS WHO HAVE TRAINING IN INSTRUCTIONAL SUPERVISION AND THOSE WITHOUT TRAINING AS VIEWED BY THE TEACHERS

Group 1 = Training N= 56
Group 2 = No training N= 6

TEACHER GRAND MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Framing Sch.Goals					POOLED VAR. EST.		
Group 1	3.52	.615	.082	1.50	.409	1.15	60	.255
Group 2	3.21	.754	.308					
PIMRS 2	Comm. Sch. Goals					POOLED VAR. EST.		
Group 1	3.38	.632	.085	1.34	.522	.68	60	.449
Group 2	3.17	.732	.299					
PIMRS 3	Super/Eval Instr.					POOLED VAR. EST.		
Group 1	3.40	.502	.067	1.53	.394	.61	60	.544
Group 2	3.26	.620	.253					
PIMRS 4	Coordinating Curr.					POOLED VAR. EST.		
Group 1	3.33	.589	.079	2.14	.149	.48	60	.632
Group 2	3.21	.862	.352					
PIMRS 5	Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1	3.28	.530	.071	2.53	.078	-.14	60	.866
Group 2	3.31	.843	.344					
PIMRS 6	Protect Instr. Time					POOLED VAR. EST.		
Group 1	3.64	.404	.054	1.07	.773	1.81	60	.076
Group 2	3.32	.418	.171					
PIMRS 7	Maint. High Visib.					POOLED VAR. EST.		
Group 1	3.30	.544	.073	1.13	.708	-.16	60	.872
Group 2	3.34	.580	.237					
PIMRS 8	Prov. Incen. Teach.					POOLED VAR. EST.		
Group 1	3.42	.594	.079	1.66	.317	-.28	60	.778
Group 2	3.50	.766	.313					
PIMRS 9	Pro. Prof. Dev.					POOLED VAR. EST.		
Group 1	3.73	.504	.067	1.55	.377	.50	60	.619
Group 2	3.62	.629	.257					
PIMRS 10	Prov. Incen. Lrn.					POOLED VAR. EST.		
Group 1	3.85	.541	.072	1.52	.400	-1.18	60	.242
Group 2	4.13	.666	.272					
LEVEL OF SIGNIFICANCE			2Q	.05 = 2.00				

Question 2 Is the gender of the principal a factor that relates to the level of instructional leadership of the principal as perceived by the principals and the teachers?

As indicated in the literature review, studies have indicated that women may engage in instructional leadership practices to a greater extent than men. In this study, twelve of the respondents were female principals and sixty-four were male principals. To analyze the data relative to gender differences and instructional leadership, t tests were conducted.

a. Principals' Perspective

The results of the t test analyses from the principals' perspective are illustrated on Table 4.13. From the principals' point of view, there were three areas of significant difference between male and female principals: Providing Incentives For Teachers, Promoting Professional Development, and Providing Incentives for Learning. In each of these three areas, the female principals believed they engaged in instructional leadership practices at a higher rate than male principals.

In the area of Providing Incentives for Teachers, the female principals believe that they almost always (4.50) engage in this aspect of instructional leadership, whereas the male principals believe they frequently are involved

TABLE 4.13

SUMMARY OF THE T-TEST FOR THE DIFFERENCE IN THE MEAN SCORES FOR MALE AND FEMALE PRINCIPALS AS VIEWED BY THE PRINCIPALS

Group 1 = Male Principals N = 64
Group 2 = Female Principals N = 12

MEAN SCORES		St. Dev.	St. Err.	F Value	2-Tail Prob.	T Value	Df	2-Tail Prob.
PIMRS 1	Framing Sch. Goals					POOLED VAR. EST.		
Group 1	3.64	.822	.103	1.13	.887	- .96	74	.341
Group 2	3.88	.774	.224					
PIMRS 2	Comm. Sch. Goals					POOLED VAR. EST.		
Group 1	3.53	.774	.097	1.44	.526	-1.40	74	.165
Group 2	3.87	.646	.186					
PIRMS 3	Super/Eval of Instr					POOLED VAR. EST.		
Group 1	3.91	.551	.069	1.07	.965	-1.90	74	.062
GROUP 2	4.23	.531	.153					
PIMRS 4	Coordinating Curr					POOLED VAR. EST.		
Group 1	3.73	.694	.087	1.24	.561	- .55	74	.585
Group 2	3.85	.773	.223					
PIMRS 5	Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1	3.69	.722	.090	1.20	.778	- .88	74	.381
Group 2	3.88	.658	.190					
PIMRS 6	Protect Instr. Time					POOLED VAR. EST.		
Group 1	4.00	.472	.059	2.53	.094	-1.79	74	.078
Group 2	4.25	.297	.086					
PIMRS 7	Maintain High Visib					POOLED VAR. EST.		
Group 1	3.94	.659	.082	1.10	.758	.10	74	.921
Group 2	3.92	.690	.199					
PIMRS 8	Prov. Incen. Teach.					SEP. VAR. EST.		
Group 1	3.93	.722	.090	4.62	.008	-4.32	33.9	.000*
Group 2	4.50	.336	.097					
PIMRS 9	Pro. Prof. Dev.					POOLED VAR. EST.		
Group 1	3.99	.601	.075	1.72	.329	-2.25	74	.027*
Group 2	4.40	.459	.133					
PIMRS 10	Prov. Incen. Lrn.					POOLED VAR. EST.		
Group 1	4.08	.587	.073	2.17	.159	-2.74	74	.008*
Group 2	4.57	.398	.115					

LEVEL OF SIGNIFICANCE 2Q =.05 - 2.00 (POOLED VARIANCE)
2.04 (SEPARATE VARIANCE)

*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

with providing incentives for teachers (3.93). A t value of -4.32 at the .05 level of significance indicates that a significant difference exists between the two groups.

In the area of Promoting Professional Development, a 2-tail probability of .027 indicates that a significant difference exists between the two groups. In this case, both the male and female principals believe that they frequently are involved in promoting professional development. However, the analysis of data in this study indicates that the female principals promote professional development at a significantly higher rate (4.40), than the male principals (3.99).

In the area of Providing Incentives for Learning, a 2-tail probability of .008 indicates that a significant difference exists between the two groups as to the extent to which they involve themselves in this activity. The female principals perceive that they almost always (4.57) provide incentives for learning and the male principals believe they are frequently involved with providing incentives (4.08).

In six of the remaining seven areas of instructional leadership, although significant differences did not exist between the two groups, the female principals' mean scores were consistently higher than the mean scores for male principals. The one area where the mean score for male principals (3.94) was higher than female principals (3.92)

was in Maintaining High Visibility. Again, these differences may be due to chance.

b. Teachers' Perspective

The teacher responses came from fifty-two schools headed by a male principal and from ten schools headed by a female principal. The results of the analysis of the teachers' perceptions are illustrated on Table 4.14. The analysis of the teacher data indicates two areas where significant differences occurred between the two groups.

In the area of Supervising and Evaluating Instruction, the teachers of female principals believe their principals frequently are involved with this activity (3.70) and at a rate significantly higher than the male principals (2-tail probability = .034). The teachers of male principals feel that their principals sometimes supervise and evaluate curriculum (3.32).

The area of Providing Incentives for Teachers was the second area where the mean scores of the teachers indicate a significant difference between the two groups (2-tail probability = .035). The teachers of female principals believe their principals frequently provide incentives for teachers (3.80), whereas the teachers of male principals believe that their principals sometimes provide those incentives (3.36). Although significant differences did not occur in the remaining eight areas, the mean scores of

TABLE 4.14

SUMMARY OF THE T-TEST FOR THE DIFFERENCE IN THE MEAN SCORES FOR MALE AND FEMALE PRINCIPALS AS VIEWED BY THE TEACHERS

Group 1 = Male Principals N = 52
Group 2 = Female Principals N = 10

TEACHER'S GRAND MEAN SCORE		St. Dev.	St. Err.	F Value	F Prob.	T Value	DF	2-Tail Prob.
PIMRS 1	Framing Sch. Goals					POOLED VAR. EST.		
Group 1	3.45	.633	.088	1.17	.860	-1.30	60	.199
Group 2	3.73	.586	.185					
PIMRS 2	Comm. Sch. Goals					POOLED VAR. EST.		
Group 1	3.29	.649	.090	1.82	.339	-1.84	60	.070
Group 2	3.69	.482	.152					
PIMRS 3	Super/Eval. Instr.					POOLED VAR. EST.		
Group 1	3.32	.515	.071	1.94	.287	-2.18	60	.034*
Group 2	3.70	.369	.117					
PIMRS 4	Coordinate Curr.					POOLED VAR. EST.		
Group 1	3.28	.605	.084	1.13	.719	-1.21	60	.230
Group 2	3.54	.643	.203					
PIMRS 5	Monitor Stud. Prog.					POOLED VAR. EST.		
Group 1	3.24	.566	.078	1.35	.658	-1.33	60	.187
Group 2	3.50	.486	.154					
PIMRS 6	Protect Instr. Time					POOLED VAR. EST.		
Group 1	3.58	.430	.060	2.32	.196	-1.06	60	.292
Group 2	3.73	.288	.091					
PIMRS 7	Maint. High Visib.					POOLED VAR. EST.		
Group 1	3.28	.527	.073	1.48	.361	- .69	60	.494
Group 2	3.41	.641	.203					
PIMRS 8	Prov. Incent. Teach.					POOLED VAR. EST.		
Group 1	3.36	.585	.081	1.07	.800	-2.16	60	.035*
Group 2	3.80	.605	.191					
PIMRS 9	Prom. Prof. Dev.					POOLED VAR. EST.		
Group 1	3.68	.510	.071	1.06	1.000	-1.45	60	.152
Group 2	3.94	.496	.157					
PIMRS 10	Prov. Incent. Lrn.					POOLED VAR. EST.		
Group 1	3.82	.510	.071	2.30	.181	-1.88	60	.065
Group 2	4.17	.374	.118					

LEVEL OF SIGNIFICANCE 2Q .05 = 2.00
*SIGNIFICANT DIFFERENCE AT α = .05 2 TAIL TEST

teachers of female principals were higher than teachers of male principals in all ten categories of instructional leadership. Since the differences were not significant however, the differences may be due to chance.

Question 3 Does the number of years the principal has served in the building relate to his/her extent of involvement in instructional leadership as perceived by the principals and the teachers?

In analyzing the number of years the principal had served in the building as a factor affecting the level of instructional leadership, the principals were grouped into four categories; Group 1: 2-5 years (thirty cases), Group 2: 6-10 years (twenty-two cases), Group 3: 11-15 years (three cases), Group 4: 16 years or more (twenty-one cases). In order to be selected for this study, principals must have been in position in that building during the 1989-90 school year. For that reason all principals in this study were in at least their second year as principal of that building.

A one way analysis of variance was conducted for each of the ten areas of instructional leadership to determine if there were significant differences between the groups at the .05 level of significance. The analysis of data from the principals' responses is illustrated on Table 4.20 which can be found in the appendix.

a. Principals' Perspective

As a result of the one way analysis of variance with respect to the principal's years experience in the building, there was no significant difference between any of the groups of principals. The mean scores of Group 3 tended to be the highest of the four groups across all ten categories. However, the differences may be due to chance.

b. Teachers' Perspective

The teacher responses represented twenty-five schools in Group 1, seventeen schools in Group 2, two schools in Group 3, and eighteen schools in Group 4. The results of the analysis of teacher responses are illustrated on Table 4.21 which can be found in the appendix. An analysis of the teacher responses indicates that there are no significant differences between groups in any of the ten categories of instructional leadership relative to the years the principal has been in the building. From the teachers' perspective, the principals in Group 1 had higher mean scores in six of ten categories and Group 2 had higher mean scores in three categories. These differences may be due to chance.

Question 4 Does the number of years of teaching experience for the principal relate to the extent of involvement in instructional leadership as perceived by the principals and the teachers?

a. Principals' Perspective

Table 4.22 contains the results of the one way analysis of variance test of the principals' responses for each of the ten areas of instructional leadership with the principal's years of teaching experience as a variable. A complete list of Table 4.22 can be found in the appendix. The principals were categorized in four groups according to years experience; Group 1: 2-5 years (sixteen cases), Group 2: 6-10 years (thirty cases), Group 3: 11-15 years (eighteen cases), Group 4: 16 years or more (twelve cases).

From the principals' perspective, there were no significant differences between any of the four groups on any of the ten areas of instructional leadership at the .05 level of significance.

b. Teachers' Perspective

When examining the responses of the teachers for each of the ten areas of instructional leadership, grouped by years of teaching experience of the principal, significant differences were found in two areas; Monitoring Student Progress, and Providing Incentives for Learning. The teacher responses are illustrated on Table 4.15. A complete

listing of data can be found on Table 4.23 in the appendix. There were teacher responses representing eight schools in Group 1, twenty-six schools in Group 2, seventeen schools in Group 3, and eleven schools in Group 4.

In the area of Monitoring Student Progress, an F probability of .0403 indicates that a significant difference exists between two or more groups at the .05 level of significance. A Scheffé post hoc analysis was conducted to determine the nature of the difference; however that analysis failed to reveal the nature of the difference. Upon examining the mean scores, Group 4 principals believe that they frequently monitor student progress (3.66), while the principals in Group 1 (3.11), Group 2, (3.13) and Group 3 (3.35) felt they sometimes monitor student progress.

TABLE 4.15

ANALYSIS OF VARIANCE OF THE YEARS OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE TEACHERS

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.5123	3	.8374	2.9452	.0403*
SS WITHIN	16.4911	58	.2843		
SS TOTAL	19.0033	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2- 5 yrs	8	3.11	.549	.194	2.40	4.03	2.65 to 3.57
2 6-10 yrs	26	3.13	.516	.101	2.00	4.07	2.92 to 3.33
3 11-15 yrs	17	3.35	.496	.120	2.53	4.20	3.10 to 3.61
4 16 + yrs	11	3.66	.616	.186	2.30	4.28	3.25 to 4.07

Scheffé Procedure - No two groups significantly different at .05 level

The source of the difference would seem to be between

Group 4 and all other groups.

In the area of Providing Incentives for Learning, an F probability score of .0024 indicates that a significant difference exists between two or more groups. A Scheffé post hoc analysis indicated that Group 1 is significantly different from Groups 3 and 4. The principals in Group 4 (4.14), Group 3 (4.15) and Group 2 (3.73) believe that they frequently provide incentives for learning. The principals of Group 1, those with the least teaching experience, believe they sometimes provide incentives for learning (3.44).

TABLE 4.15 (CONT'D.)

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	4.0779	3	1.3593	5.3850	.0024*
SS WITHIN	14.6405	58	.2524		
SS TOTAL	18.7184	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.44	.744	.263	2.40	4.30	2.82 to 4.06
2	6-10 yrs	26	3.73	.542	.106	2.84	4.75	3.51 to 3.95
3	11-15 yrs	17	4.15	.351	.085	3.60	4.64	3.97 to 4.33
4	16 + yrs	11	4.14	.381	.115	3.60	4.86	3.88 to 4.39

Scheffé Procedure - Group 1 is significantly different from Groups 3 and 4

Although significant differences did not occur in the other categories of instructional leadership, the observable difference in the means would seem to indicate that the amount of involvement in instructional leadership increased as the principal's years of teaching experience increased. Group 1, with the least amount of years teaching experience,

tended to have lower mean scores in each category than the other groups, from the perspective of the teachers.

Question 5 Is the level at which the principal taught a factor that relates to the level of instructional leadership, as perceived by the principals and the teachers?

In this study, six of the responding principals who had only elementary teaching experience were in Group 1, fifty-nine principals who had secondary teaching experience only were in Group 2 and eleven principals who had teaching experience at both levels made up Group 3. In analyzing the data, a one way analysis of variance was conducted to compare means for significant differences. The results of the one way analysis of variance for each of the ten areas of instructional leadership from the principals' perspective is illustrated on Table 4.24 in the appendix.

a. Principals' Perspective

From the principals' perspective, there were no significant differences between groups of principals as it relates to the principal's level of teaching experience as a factor affecting the principal's level of instructional leadership. In this study, the majority of the principals had only secondary teaching experience.

Although significant differences between groups were not revealed in the analysis of data, the data on Table 4.24

indicate that principals with teaching experience at both levels scored slightly higher than principals with elementary only teaching experience in eight of ten areas and in all ten areas when compared with principals who had only secondary teaching experience. The principals with teaching experience at the elementary level had higher mean scores in six areas than principals with secondary teaching experience.

b. Teachers' Perspective

The teachers responding to the survey represented four schools where the principal had elementary teaching experience, forty-eight schools where the principal had secondary teaching experience and ten where the principal had teaching experience at both levels. The analysis of the teacher responses relative to the level of teaching experience of the principal is illustrated on Table 4.16.

From the teachers' perspective there were significant differences between two or more groups in three of the ten areas of instructional leadership. In the first area, Framing the School's Goals, an F probability of .0049 indicates that a significant difference exists between two or more groups. A Scheffé post hoc analysis was conducted to determine the nature of the difference. The Scheffé analysis revealed that Group 1 significantly differed from Groups 2 and 3 at the .05 level. The teachers of principals

with secondary teaching experience (3.50) and the principals with teaching experience at both levels (3.79) perceive that their principals frequently are involved with framing the school's goals, while teachers of principals with elementary teaching experience believe their principals sometimes are involved in this activity (2.62).

TABLE 4.16

SUMMARY OF THE ANALYSIS OF VARIANCE FOR THE LEVEL OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE TEACHERS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.9893	2	1.9946	5.8245	.0049*
SS WITHIN	20.2051	59	.3425		
SS TOTAL	24.1944	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.62	.336	.168	2.13	2.89	2.08 to 3.15
2 Sec	48	3.50	.637	.092	1.90	4.51	3.32 to 3.69
3 Both	10	3.79	.297	.094	3.33	4.24	3.58 to 4.01

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level

In the area of Communicating the School's Goals, an F probability score of .0076 indicates that a significant difference exists between two or more groups. The Scheffé post hoc analysis revealed that Group 1 differed significantly from Groups 2 and 3. In this case, the teachers of principals in Group 3 with teaching experience at both the elementary and secondary levels, felt their principals frequently communicated the school's goals (3.61). Teachers of principals in Group 2 with teaching

experience only at the secondary level, felt their principals sometimes communicated the school's goals (3.38). However, the teachers of principals in Group 1 with teaching experience only at the elementary level, felt their principals seldom communicated the school's goals (2.47).

TABLE 4.16 (CONT'D.)

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.7981	2	1.8991	5.3043	.0076*
SS WITHIN	21.1233	59	.3580		
SS TOTAL	24.9214	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.47	.311	.156	2.03	3.75	1.98 to 2.97
2 Sec	48	3.38	.631	.091	1.93	4.47	3.19 to 3.56
3 Both	10	3.61	.488	.154	3.00	4.35	3.26 TO 3.96

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level

In the area of Coordinating the Curriculum, an F probability score of .0146 indicates that a significant difference exists between two or more groups. The Scheffé post hoc analysis revealed that Group 1 differed significantly from Groups 2 and 3. The teachers of principals with experience at both levels felt their principals frequently were involved with coordinating the curriculum (3.55). The teachers of principals with only secondary teaching experience (3.34) and principals with only elementary experience (2.53) felt their principals sometimes were involved with activities that lead to coordination of the curriculum, but the difference between

the two groups was still significant. In this area, the responses from teachers of principals with only elementary teaching experience differed significantly from the responses of teachers of principals with only secondary experience, and with the teacher responses of principals with experience at both levels. The responses from teachers of principals with only secondary experience did not differ significantly with the teacher responses of principals with experience at both levels.

TABLE 4.16 (CONT'D.)

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.0569	2	1.5284	4.5423	.0146*
SS WITHIN	19.8526	59	.3365		
SS TOTAL	22.9095	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.53	.189	.095	2.26	2.70	2.23 to 2.83
2 Sec	48	3.34	.617	.089	1.90	4.33	3.16 to 3.52
3 Both	10	3.55	.456	.144	2.59	4.15	3.22 to 3.88

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level

Significant differences did not exist in the other areas of instructional leadership; however the means of teachers of principals with only elementary experience were consistently lower than the means of teachers of principals with only secondary experience and the means of teachers of principals with experience at both levels. A complete list of the data for this variable can be found in the appendix on Table 4.25.

Results of Instrument Reliability Test

Although reliability coefficients were available from previous Hallinger studies using the P.I.M.R.S., separate reliability tests using Cronbach's alpha were made on both the principal and teacher survey forms. The reliability coefficients for each of the ten Hallinger P.I.M.R.S. descriptors are reported on Table 4.17.

The reliability coefficients on the principal form from this study indicate that three scales are weak. However, the corresponding reliability coefficients on the teacher form are much stronger and more in line with the alpha scores Hallinger found in previous studies using this instrument. The statements on the principal form and teacher form are identical. The reliability scores from the principal form are comparable to 7 of 10 scores from the teacher form and 7 of 10 scores from previous Hallinger studies.

The reliability coefficients on the teacher form were greater than .75 on all scales. On the principal form, the reliability coefficients were weak in three areas; Supervising and Evaluating Curriculum, .64; Protecting Instructional Time, .49; and Providing Incentives for Learning, .64. In the area of Monitoring Student Progress, the coefficient was .73 just below .75 indicating that it is marginal in terms of strength.

Table 4.17

A SUMMARY OF THE RELIABILITY COEFFICIENTS USING CRONBACH'S ALPHA FROM THIS STUDY AND PREVIOUS HALLINGER STUDIES

Name of Scale	Pratley Study Principal Form alpha	Pratley Study Teacher Form alpha	Hallinger Studies alpha
N =	76	420	
Framing School's Goals	.85	.90	.89
Communicating School's Goals	.80	.87	.89
Supervising and Evaluating Curriculum	.64	.79	.90
Coordinating Curriculum	.78	.88	.90
Monitor Student Progress	.73	.83	.90
Protecting Instructional Time	.49	.77	.84
Maintaining High Visibility	.75	.80	.81
Providing Incentives For Teachers	.85	.89	.78
Promoting Professional Development	.74	.85	.86
Providing Incentives For Learning	.64	.79	.87

Note: Each scale contained five items

Summary

Perceptions of Principals, Teachers, and the Differences

The results of this study revealed that when measured by the ten dimensions of the Principal Instructional Management Rating Scale the principals feel they are frequently involved with all aspects of instructional leadership. From the teachers' perspective, principals are frequently involved in the areas of Protecting Instructional Time, Promoting Professional Development and Providing Incentives For Learning. In all other areas of instructional leadership as measured by the P.I.M.R.S., the teachers perceive that principals are sometimes involved in instructional leadership.

Significant differences between the perceptions of teachers and principals as to the level of involvement of the principal in instructional leadership occurred in all areas except Framing the School's Goals, with teachers having a perception of lower levels of principal involvement than the perception of the principals.

Organizational Factors

Four organizational variables relating to the principal's level of instructional leadership were examined in this study.

Size of the Building

The size of the building as a variable from the perspective of the principals revealed that in one area, Maintaining High Visibility, a significant difference occurred. A post hoc analysis failed to reveal the nature of the difference. The mean scores of the principals from the smallest schools to the largest schools was inversely relational to the size of the schools. As the size of the school groups increased, the mean scores decreased indicating that the larger the school the less involvement of the principal in this aspect of instructional leadership.

From the perspective of the teachers, significant differences were revealed in two areas, Coordinating the Curriculum and Maintaining High Visibility. In the area of Coordinating the Curriculum a post hoc analysis failed to reveal the nature of the difference. It is likely that the teachers of the mid-size schools feel their principals are involved in this aspect of instructional leadership at a higher level than the teachers of principals of either the larger schools or the smaller schools. In the area of Maintaining High Visibility, the teachers of principals of the smaller schools felt their principals were involved with this aspect of instructional leadership at higher levels than the teachers of principals of the larger schools. The mean score of teachers of mid-size schools did not

significantly differ from either the smaller or larger schools.

Assistant Principal

From the perspective of the principals, having an assistant principal made a significant difference in two areas, Framing the School's Goals and Monitoring Student Progress. In both areas the principals who had assistant principals felt they were more frequently involved with these aspects of instructional leadership than principals without assistants.

From the perspective of the teachers having an assistant principal made a significant difference in the level of their principal's involvement in instructional leadership in one area, Providing Incentives for Teachers. The teachers of principals who had an assistant felt their principals provided incentives for teachers at a higher rate than principals without assistants.

Central Office Duties

From the perspective of the principals having central office duties in addition to building administrative responsibilities made a significant difference in the area of Monitoring Student Progress. The principals who did not have central office duties felt they were able to monitor student progress more often than principals who had central office duties. There were no areas where significant

differences occurred from the perspective of the teachers.

Junior High/Middle School Organization

From the perspectives of both the principals and the teachers, being the principal of a junior high or a middle school did not make a significant difference in any of the ten areas of instructional leadership as to the level of involvement of the principal.

Personal Variables

There were five personal variables about the principal that were examined in this study as they related to the level of instructional leadership of the principal.

Training In Instructional Supervisory Models

From the perspective of the principals, there were two areas where significant differences occurred. In the areas of Framing the School's Goals and Communicating the School's Goals, principals who had received training in instructional supervisory models felt they had higher levels of involvement than principals who had not received training. From the perspective of the teachers, training in any particular instructional supervisory models did not make a significant difference in the level of the principal's involvement for any of the aspects of instructional leadership.

Gender

From the perspective of the principals, gender as a variable made a significant difference in three areas of instructional leadership. In the areas of Providing Incentives for Teachers, Promoting Professional Development and Providing Incentives for Learning, the results of this study revealed that female principals had higher levels of involvement than male principals.

From the perspective of the teachers, significant differences were revealed in two areas. In the areas of Supervising and Evaluating Instruction and Providing Incentives for Teachers, the teachers felt that female principals had higher levels of involvement than male principals.

Years of Administration in the Building

The results of this study did not reveal that years of administrative experience in the building made any significant difference in the level of instructional leadership of the principal from either the perspective of the principals or the teachers.

Years of Teaching Experience

From the perspective of the principals, the number of years teaching experience was not a factor of significance as it related to their levels of instructional leadership. From the perspective of the teachers, however, the number of

years of teaching experience of the principal was a factor of significance in two areas. In the area of Monitoring Student Progress a significant difference occurred between groups of principals based on teaching experience. A post hoc analysis failed to reveal the nature of the difference. The results of this study would seem to indicate that the principals who had more than sixteen years of teaching experience were involved in this aspect of instructional leadership to a greater extent than principals with less teaching experience, from the perspective of the teachers.

In the area of Providing Incentives for Learning, from the perspective of the teachers, the principals with the least amount of teaching experience were involved with this aspect of instructional leadership at a significantly lower level than principals with eleven or more years of experience.

Level of Teaching Experience

This results of this study revealed that from the perspective of the principals, teaching experience at the elementary, secondary or both levels was not a factor of significant difference in any aspect of instructional leadership.

From the perspective of the teachers, however, the level at which the principal taught was related to a significant difference in three areas. In the areas of

Framing the School's Goals, Communicating the School's Goals and Coordinating the Curriculum the teachers felt that principals with only elementary teaching experience were involved with this aspect of instructional leadership at a significantly lower rate than principals with either secondary teaching experience or experience at both levels.

In the next chapter, the findings of the study are discussed and implications for future research are presented.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Introduction

In this chapter, a summary of the study and the conclusions drawn from the data analysis and findings are presented. In addition, the implications for future research are shared along with the implications for practicing middle level administrators, potential middle level administrators, and supervisors of those administrators seeking an understanding of the processes involved in instructional leadership.

In this study, the researcher examined the extent to which middle level principals across the state of Michigan were involved in various aspects of instructional leadership as indentified by the Principal Instructional Management Rating Scale developed by Hallinger, and initially used to study the levels of instructional leadership of a group of elementary school principals in a California school district. Previous research of this nature has focused primarily on elementary principals and little research had been done at the secondary level, in particular the middle school level. The purpose of this study was to determine whether certain identified variables tended to influence the extent to which the principal was involved in instructional leadership in the building.

These variables were categorized as either organizational or personal in nature.

In addition to collecting data from middle level principals as to their perceptions of their level of involvement in instructional leadership, data was collected from teachers in the buildings of principals involved in the study. In the review of the research literature, it was noted that teacher responses have demonstrated reliability and validity. The teachers are the direct beneficiaries of the principal's instructional leadership practices, and therefore in a position to give a more accurate assessment of the extent to which the principal is involved in the various aspects of instructional leadership.

Summary of Findings

The summary of findings from this study are presented in two parts. The first part involves the level of principal involvement in instructional leadership from the perspective of the principals and the teachers. A summary of the differences between the perceptions of principals and teachers will also be discussed. In the second part, organizational and personal variables posed in this study will be discussed as they relate to the degree of instructional leadership.

Previous research has indicated that in some aspects of

instructional leadership, the perceptions of principals and teachers may differ significantly in terms of the extent to which the principal engages in those activities. Previous research has also indicated that certain organizational or personal factors may influence the extent to which the principal engages in instructional leadership. Hallinger suggested in his 1985 study that factors such as the gender of the principal and the size of the building should be examined in future research studies to more accurately determine whether or not these two factors in particular influence a principal's level of instructional leadership.

Level of Instructional Leadership

Question 1. To what extent do middle level principals believe they engage in instructional leadership?

In examining the self-assessment of the principals' level of instructional leadership for each of the ten areas of instructional leadership defined by the P.I.M.R.S., the principals believe that they frequently engage in all aspects of instructional leadership with mean scores ranging from 3.57 to 4.17 on the five point scale.

Question 2. To what extent do the teachers believe their principal engages in instructional leadership?

The teachers' perceive that principals sometimes to frequently engage in all areas of instructional leadership. The teachers perceive that the principals frequently engage

in Protecting Instructional Time, Promoting Professional Development, and Providing Incentives for Learning. In all other areas the teachers' perceptions are that instructional leadership sometimes occurs through the principals.

Question 3. What is the extent of the difference between the principals' and teachers' perceptions?

The differences between teachers' and principals' perceptions were significant at the .05 level in all areas except Framing the School's Goals. In that one area, the differences in the mean scores were .13 with the principals having a perception of involvement slightly higher (3.62) than the teachers' perception (3.49). The results of this study indicate that principals have a perception of greater involvement in instructional leadership than teachers, who are the beneficiaries of the principals' leadership efforts. When examining the means of the principals and the teachers, it is important to note just where in the range, the means fall. In Framing the School's Goals, the means were not significantly different, although the means fell into two different descriptive ranges. The principals felt they frequently were involved in this activity, but at the low end of that range. The teachers felt that principals were sometimes involved, but at the high end of that range. It is also possible that a significant difference could occur between the two group means, but within the same descriptive

range. In three areas, Protecting Instructional Time, Promoting Professional Development, and Providing Incentives for Learning, both principals and teachers felt that the principals had frequent involvement. Significant differences occurred in these three areas, however, due to the means being distanced within the range.

The one area where teachers and principals believed was the area of greatest principal involvement, was Providing Incentives for Learning. Although the mean scores of their perceptions were significantly different at the .05 level (4.17 principals, 3.81 teachers), both teachers and principals believed this was the area where the highest level of activity took place. The lowest level of activity from the principals' perspective was in Communicating the School's Goals (3.57). The teachers felt that was the principals' third lowest level of activity (3.36). From the teachers' perception, the lowest level of activity for principals was in Monitoring Student Progress (3.29). However, the principals' felt this area was their third lowest level of activity (3.65).

Item Analysis

An item analysis within each of the ten descriptors of the P.I.M.R.S. was conducted involving the responses of the sixty-two principals and the teachers in those sixty-two schools. This analysis did not involve determining

significant differences in the perceptions of teachers and principals in regard to the extent of the principals' involvement in instructional leadership. However, it does, by virtue of the mean score, indicate the perceptions of the principals and teachers as to the frequency with which each group believes the principal is involved in various activities of instructional leadership as measured by the P.I.M.R.S. A comparative analysis of the ranges in which the mean scores fell for both principals and teachers for each item on the P.I.M.R.S. was done to determine if the mean scores on each item in each category could help explain why significant differences occurred or did not occur in each area between the two groups.

In the area of Framing the School's Goals, there was no significant difference between the perceptions of principals and teachers on the subscale means. The mean item scores for the principals and the teachers fell within the same range on each item except Item 2. Although the difference between Item 2 means was not great, the teachers perceived that the principals frequently framed the school's goals in terms of staff responsibility in meeting them and the principals perceived that they sometimes carried out this function. This was the only item of the fifty on the instrument where the mean score of the principals was less than that of the teachers.

In the second area, Communicating the School's Goals, a comparative analysis of the mean scores indicates that the item means of the principals and the teachers fell within the same range on each of the five items. In this area, a significant difference on the subscale score did occur between the principals' and teachers' perceptions. Although the item mean scores of both groups fell within the same range for all items, the differences between the item means of all items collectively account for the significant subscale difference that occurred.

In Supervising and Evaluating Instruction, subscale significant differences occurred between the two groups. An item analysis indicates that on two of the five items the item mean scores of the two groups fell in different ranges. The principals felt they frequently ensured that the classroom priorities of teachers were consistent with stated school goals, whereas the teachers felt that the principals sometimes carried out this function. The principals felt they frequently carried out informal classroom visits and the teachers felt that occurred sometimes. The differences between the means on the remaining three items, although falling within the same range, were such that when combined with the differences on the other two items, accounted for significant differences on the subscale between the two groups. The principals perceived that they frequently

supervise and evaluate instruction and the teachers perceived that the principals were sometimes involved with this activity.

In the area of Coordinating the Curriculum, the mean scores of the principals and the teachers on two items fell in different ranges. The principals felt they frequently made it clear who had responsibility for coordinating the curriculum across grade levels and that they frequently were actively involved in evaluating curriculum materials. The teachers' perception was that principals were sometimes involved in these two activities. Although the mean scores for the remaining three items fell within the same range, the differences between the item means resulted in a significant difference for the subscale. The principals believed they frequently were involved in coordinating the curriculum and the teachers believed that principals were sometimes involved in this activity.

In the area of Monitoring Student Progress, the mean item scores of the two groups fell in different ranges on three of the five items. The principals felt they frequently met with teachers to discuss academic progress, used test results to assess progress toward school goals, and informed students of school test results. The teachers felt these activities sometimes occurred. The overall result was that the principals felt they were frequently

involved with monitoring student progress and teachers felt they were sometimes involved.

In the area of Protecting Instructional Time, the mean item scores of both groups fell within the same range on all items and both groups felt principals frequently were involved in protecting instructional time. Although the item means of both groups fell within the same range on each item and overall, the difference between the subscale means of both groups was significant, with the principals perceiving a higher level of involvement than the teachers.

In the area of Maintaining High Visibility, the item mean scores of the two groups fell in different ranges on four of the five items. The principals felt they frequently maintained high visibility which was higher than the teachers' perception, that principals sometimes maintained high visibility. The mean scores fell in different ranges on Items 32, 33, 34, and 35. The principals felt they frequently visited classrooms to discuss school issues with staff and students. The teachers felt that sometimes occurred. The principals felt they almost always attended co-curricular activities and the teachers felt they frequently attended these events. The principals felt they frequently covered classes for teachers until substitutes arrived and the teachers felt that sometimes principals covered classes. The principals felt that they sometimes

tutored students or provided instruction in classes, however the teachers felt that seldom occurred. The item mean differences on four of the five items in this area provide an explanation for the subscale significant differences in the perceptions of principals and teachers on the frequency with which principals maintain high visibility in the building.

In the area of Providing Incentives for Teachers, the item means of both groups fell into different ranges on four of the five items. The principals believe they almost always compliment teachers privately for their efforts, whereas the teachers believe principals frequently compliment them. The principals believe they frequently acknowledge teacher performance with written notes in their files, however teacher see this as sometimes occurring. The principals believe they frequently reward teacher efforts with professional recognition, whereas the teachers see this as sometimes happening. The principals believe they frequently provide professional growth opportunities as rewards to teachers and the teachers believe those opportunities are sometimes created. The differences on these items account for a significant subscale difference between the two groups on this subscale.

In the remaining two areas of Promoting Professional Development and Providing Incentives for Learning, the item

mean scores of the two groups fell in different ranges on two items, one in each area. The principals believe they frequently set aside time at faculty meetings for teachers to share information on in-service activities and the teachers feel that principals sometimes set aside time for this activity. The principals believe that they frequently recognize superior student performance by seeing the student in the office and the teachers believe that sometimes occurs. Although the item mean scores of the two groups fell in the same range on all other items and both teachers and principals felt the principal was frequently involved in these two areas, the difference in the subscale means for in both areas was significantly different.

Overall, an analysis of the item mean scores between the two groups did reveal that the mean scores fell in different ranges on some specific items. The results of these analyses are helpful in identifying which specific practices within certain aspects of instructional leadership, principals have a perception of involvement that is greater than the perception of teachers. This analysis also indicated that except for Item 2 under Framing the School's Goals, the principals perceive a higher level of involvement in specific practices related to one of the ten aspects of instructional leadership, than the perception of the teachers.

Factors Relating to the Level of Involvement

Organizational Factors

The organizational variables examined in this study were the size of the school, whether or not the principal had an administrative assistant, whether or not the principal had central office duties in addition to building duties, and middle school structure versus junior high school structure.

Question 1. Does the size of the school relate to the level of the principal's involvement in instructional leadership?

Hallinger, in his 1985 study, cited size as the only organizational variable he examined that had any significant impact on the extent to which the principal engaged in instructional leadership. As cited in Chapter Two of this study, Hallinger discovered that principals of schools with a mean size of 385 students or less tended to have greater involvement in instructional supervision than principals of schools with a mean size of 600 students. He indicated that this finding was consistent with the results of other research.

In this study, the buildings were divided into three groups; 1 = 0-500 students, 2 = 501 to 750 students and 3 = 751 students or more. The rationale for dividing the schools into these groups was to see if differences

occurred between small schools, medium sized schools and the very large schools. The size of the student body relates to the number of instructional staff assigned to the building.

Principals' Perspective

From the principals' perspective the only area that yielded an F probability less than .05 was the area of Maintaining High Visibility (.0497). Although the Scheffé post hoc analysis failed to indicate which groups were different, the two smaller groups yielded mean scores considerably higher (Group 1 = 4.03, Group 2 = 3.98) than the largest group size (3.49). Principals in buildings with less than 500 students and the principals in buildings of 501 to 750 students felt that they frequently maintained high visibility in the building, while the principals in buildings of more than 750 studnts sometimes maintained high visibility. With a mean score of 3.49, however, principals of buildings with more than 500 students were at the extreme top of that range. The results of analysis in the other areas of instructional leadership, Framing the School's Goals, Communicating the School's Goals, Supervising and Evaluating Instruction, Coordinating the Curriculum, Monitoring Student Progress, Protecting Instructional Time, Providing Incentives for Teachers, Promoting Professional Development and Providing Incentives for Learning yielded no significant differences, and patterns of

one group scoring consistently higher than other groups was not apparent.

Teachers' Perspective

From the teachers' perspective, size did make a significant difference in two areas. The teachers believed that size does made a significant difference in Maintaining High Visibility (F probability = .0274). The Scheffé post hoc analysis indicated that the source of the difference existed between the small schools, less than 500 students (3.39) and the large schools, more than 750 students (2.83). Although both groups' mean scores indicate the teachers believe the principals sometimes maintain high visibility, the means are significantly different within the range. As in the case of the principals' responses, the mean scores of schools with 501 to 750 students was also higher than the mean scores from the schools with more than 750 students and closer to the smaller schools.

In the area of Coordinating the Curriculum an F Probability of .0465 indicates that a significant difference exists relative to size. However, the Scheffé analysis failed to indicate which groups were different. Again, the largest schools had mean scores (3.15) lower than the smallest group of schools (3.19) and much lower than the schools with 501 to 750 students (3.58). Most likely the source of the difference was between the schools with 501 to

750 students and the schools with more than 750 students. The teachers in schools with a student population between 501 and 750 felt their principals frequently were involved with coordinating the curriculum, while the teachers in the other two groups felt their principals sometimes were involved in this activity.

Conclusion

Size does seem to relate to certain aspects of instructional leadership in terms of the extent of principal involvement. Based on the results of this study, size does relate to the principal maintaining high visibility in the building.

The other area where a significant difference occurred from the teachers' perspective indicates that principals from schools with student populations greater than 500 and less than 751 are involved in coordinating the curriculum with greater frequency than principals of smaller or larger schools. The results of this study indicate that size is a limited factor relating to the level of instructional leadership of the principal.

Question 2 Does having an assistant principal relate to the extent to which the principal is involved in instructional leadership?

Principals' Perspective

From the principals' perspective, significant differences occurred in two areas: Framing the School's Goals and Monitoring Student Progress. Group 1 represented principals with assistants and Group 2 represented principals without assistants. In Framing the School's Goals, principals with assistants indicated they were involved at a higher level (3.85), than principals with assistants without (3.43). The same held true for the area of Monitoring Student Progress where principals with assistants (3.86) felt they were involved to a greater extent than principals without assistants (3.52). In the remaining areas, although significant differences did not occur, the mean scores from principals with assistants were greater than from principals without assistants, in five of eight areas.

Teachers' Perspective

From the teachers' perspective, a significant difference occurred in the area of Providing Incentives for Teachers. The teachers felt that principals who had assistants frequently provided incentives for teachers, whereas principals without assistants only sometimes

provided incentives. The teachers of principals with assistants had mean scores greater than principals without assistants, in seven of the nine remaining areas of the P.I.M.R.S., although the difference was not statistically significant at the .05 level.

Conclusion

Having an assistant principal in the building is a limited factor relating to the extent to which the principal is involved in instructional leadership. Having an assistant principal did result in significant differences occurring in three areas from either the perspective of the principals or of the teachers. As a result of the means of principals with assistants being greater than the means of principals without assistants in several other categories, there would seem to be some indication that having an assistant principal does relate to increased involvement in instructional supervision. However, since these differences were not significantly different statistically on a consistent basis, the differences may be due to chance and it is difficult to conclude that having an assistant principal is anything more than a limited factor relating to the level of instructional leadership.

Question 3 Does having central office administrative responsibilities in addition to building administratative responsibilities relate to the level of instructional leadership by the principal?

Principals' Perspective

From the perspective of the principals, a significant difference was indicated in only one area relative to central office duties. In Monitoring Student Progress, principals without central office duties scored at a higher level of frequency of involvement (3.84) than principals with central office duties (3.46). In this area, principals with central office responsibilities sometimes were involved with monitoring student progress, while principals without central office duties felt they frequently monitor student progress. From the principals' perspective, except for monitoring student progress, it seems that having central office duties makes little difference in terms of the time the principal spends in instructional leadership.

Teachers' Perspective

From the teachers' perspective, there were no areas where significant differences occurred between the perspective of teachers of principals with central office duties and those without those duties. Although the differences were not significant, the teachers of principals

with central office duties had greater mean scores than teachers of principals without central office duties in all areas except Coordinating the Curriculum. This trend was in direct opposition to the perception of the principals. However, because these differences were not statisically significant, it is concluded that the differences may be due to chance.

Conclusion

The existence of central office duties for the principal is a very limited factor relating to the level of instructional leadership involvement by the principal. With significant differences occurring in only one of the ten dimensions of instructional leadership, and only from the principals' perspective, it would be difficult to conclude that having or not having central office duties is anymore than a very limiting factor.

Question 4 Does being the principal of a junior high as opposed to a middle school relate to the level of instructional leadership of the principal?

Principals' and Teachers' Perspective

From the perspective of the both the teachers and the principals, whether the building was characterized as a junior high school or a middle school made no significant difference in the level of instructional leadership of the

principal. From the perspective of either principals or teachers, the principals of junior high schools had mean scores higher, though not significantly higher, than middle school principals in the areas of Framing the School's Goals, Communicating the School's Goals, Supervising and Evaluating Instruction, Monitoring Student Progress, Providing Incentives for Learning, and Promoting Professional Development.

Conclusion

Neither the principals nor the teachers perceived that being the principal of a junior high as opposed to a middle school is a factor significantly relating to the level of instructional leadership of the principal.

Personal Factors

This study also examined personal variables of the principals as factors affecting the level of instructional leadership by the principals.

Question 1 Does having received training in an instructional supervisory model relate to the level of instructional leadership of the principal?

Principals' Perspective

From the perspective of the principals, significant differences occurred in two areas. In the area of Framing the School's Goals, the principals who had received training

scored significantly higher than those without training. The principals who received training believed that they frequently were involved with framing the school's goals, while the principals without training in instructional supervision believe they sometimes were involved with this activity.

The second area of significant difference was in the area of Communicating the School's Goals. The principals with training believed they frequently communicated the school's goals. In other aspects of instructional leadership, the mean scores of principals with training in instructional supervision were slightly higher, than the means of principals without training. The exceptions were the areas of Coordinating the Curriculum and Providing Incentives for Teachers, where the means of the principals without training were higher. However, the differences between the means in the area of Coordinating the Curriculum were almost negligible.

Teachers' Perspective

From the perspective of the teachers, there were no areas of instructional leadership where significant differences occurred between the two groups of principals. From the perspective of the teachers, the principals without training scored higher than those with training in the areas of Monitoring Student Progress, Maintaining High Visibility,

Providing Incentives for Teachers and Providing Incentives for Learning.

Conclusion

Training in any particular model of instructional supervision would seem to be factor from the principals' perspective in Framing and Communicating the School's Goals. Although not impacting other aspects of instructional leadership to the extent of creating a significant difference, training in instructional supervision does make a difference in the extent to which the principals believe they develop the school's goals and then communicate those goals to staff, students and community.

Question 2 Is the gender of the principal a factor that relates to the level of instructional leadership?

In the research literature portion of this study, Hallinger indicated that the one personal variable that tended to yield differences was the gender of the principal. It was also cited that research in the past has shown that female principals tend to be involved in instructional leadership more frequently than male principals.

In this study, sixty-four of the principals were males and twelve were females. The teacher responses represented fifty-two schools administered by males and ten administered by females.

Principals' Perspective

The results of analyzing the principals' responses yielded significant differences between male and female principals in three areas; Providing Incentives for Teachers, Promoting Professional Development, and Providing Incentives for Learning. In each of these areas, the mean scores of the female principals were significantly higher than for the male principals. The female principals believed that they almost always provide incentives for teachers and for learning, while the male principals believed they frequently provide those services. The female principals believed they frequently promote professional development, as did the male principals, but at a significantly lower rate. In all other areas except Maintaining High Visibility, although significant differences did not occur, female principals scored higher than male principals from the principals' perspective.

Teachers' Perspective

From the teachers' perspective, significant differences occurred in two areas. In the area of Supervising and Evaluating Instruction, significant differences occurred with the teachers of female principals believing their principals frequently are involved, while the teachers of male principals see their principals as sometimes supervising and evaluating instruction.

Significant differences also occurred in the area of Providing Incentives for Teachers, with teachers of female principals seeing their principals as frequently providing those incentives, and teachers of male principals seeing their principals as sometimes providing those incentives. In all other areas of instructional leadership, although the differences were not significant, the means of female principals were consistently greater than the means of male principals.

Conclusion

Based on the results of this study, gender is a factor that does impact significantly four of the ten areas of instructional leadership as defined by the P.I.M.R.S. from either the perspective of the principals or the teachers. The results of this study indicate that female principals have higher levels of involvement in instructional leadership than male principals in some aspects of instructional leadership. In this study both principals and teachers felt that the involvement of female principals in providing incentives for teachers is significantly higher than male principals.

Question 3 Does the number of years the principal has served in the building relate to his/her extent of involvement in instructional leadership?

There were four groupings for years of experience in the building; Group 1 = 2-5 years, Group 2 = 6-10 years, Group 3 = 11-15 years and Group 4 = 16 years or more. The sample size of Group 3 was very small (N = 3).

Principals' and Teachers' Perspective

The number of years the principal served in the building was not a significant factor affecting the level of instructional leadership of the principal from either the principals' or teachers' perspectives.

Conclusion

The number of years the principal has served in the building is not a factor relating to the level of instructional involvement of the building principal.

Question 4 Does the number of years of teaching experience for the principal relate to the extent of involvement in instructional leadership?

Principals' Perspective

The principals' self-assessment yielded no areas of instructional leadership where years of teaching experience of the principal significantly impacted the level of

instructional leadership of the principal.

Teachers' Perspective

From the teachers' perspective, there were two areas where significant differences occurred. The first area of significant difference was in Monitoring Student Progress. A post hoc Scheffé analysis failed to indicate which groups were different. The principals with sixteen or more years of teaching experience are involved in monitoring student progress to a greater extent than principals with less teaching experience. The teachers of principals with sixteen years or more of teaching experience indicated they feel their principals frequently monitor student progress, whereas the teachers of principals with less experience feel their principals sometimes are involved in this aspect of instructional leadership.

The second area where significant differences occurred was in Providing Incentives for Learning. A Scheffé post hoc analysis indicated that teachers of principals with two to five years of teaching experience differed significantly from the teachers of principals with more than ten years of experience. The teachers of principals with eleven or more years of teaching experience see their principals as frequently providing incentives for learning and at a rate significantly higher than principals with two to five years of teaching experience, who sometimes provide those

incentives.

Conclusion

The amount of teaching experience the principal has is a factor of limited impact on the extent to which the principal is involved in instructional leadership.

Question 5 Is the level at which the principal taught a factor that relates to the level of instructional leadership?

There were three groups in this study: Group 1, elementary experience only; Group 2, secondary experience only; and Group 3, experience at both levels. Fifty-nine principals in this study had teaching experience at the secondary level only, six had only elementary experience and eleven had teaching experience at both levels. Teacher responses were received from four principals in Group 1, forty-eight in Group 2 and ten in Group 3.

Principals' Perspective

From the principals' perspective, there were no significant differences in any of the ten areas of instructional leadership.

Teachers' Perspective

From the teachers' perspective, there were three areas where the level of teaching experience of the principal resulted in a significant difference as to the level of instructional leadership engaged in by the principal. In

Framing the School's Goals, a post hoc Scheffé analysis indicated that the nature of the difference was between principals with only elementary teaching experience and principals with only secondary experience or experience at both levels. The frequency with which principals engaged in framing the school's goals was at a lower rate for principals with only elementary teaching experience, than for principals with secondary teaching experience or experience at both levels. From the teachers' perspective, those principals with only elementary teaching experience sometimes engaged in framing the school's goals, while principals with secondary teaching experience or experience at both levels, frequently were involved with this activity.

In the area of Communicating the School's Goals, the Scheffé post hoc analysis indicated that the nature of the significant difference was between principals with only elementary teaching experience and principals with only secondary teaching experience or experience at both levels. In this area, the teachers' see those principals with only elementary teaching experience as seldom being involved with this aspect of instructional leadership. The teachers of principals with secondary teaching experience see their principals as sometimes being involved and teachers of principals with experience at both levels see their principals as being frequently involved with communicating

the school's goals.

The third area where a significant difference occurred between groups from the teachers' perspective was in Coordinating the Curriculum. Again the nature of the difference from the Scheffé analysis was that Group 1 differed from Groups 2 and 3. Teachers of principals with only elementary teaching experience see their principals as sometimes being involved with coordinating the curriculum, as did the teachers of principals with only secondary experience. However, the mean score from teachers of principals with only elementary experience was at the lower end of the range and the mean score of teachers of principals with only secondary experience was in the upper part of the range. Teachers of principals with experience at both levels see their principals as frequently being involved with coordinating the curriculum.

Conclusion

The level of teaching experience of the principal as a factor relating to the level of instructional leadership of the principal would seem to be a factor having some impact based on the results of this study. This study revealed that principals with teaching experience at the secondary level or at both secondary and elementary levels were involved in instructional leadership in three of the ten areas of instructional leadership, as measured by the

P.I.M.R.S., to a significantly greater degree than those principals with only elementary teaching experience.

Conclusions

Level of Involvement

The results of this study indicate that principals believe they are involved with all aspects of instructional leadership at high levels of frequency. The principals believe they frequently or almost always are involved with all ten areas of instructional leadership as defined by the P.I.M.R.S. However, that perception would seem to be overstated by the principals, when compared with the teachers' view. In all but one of the ten areas of instructional leadership, the teachers' perception of principal involvement was at a significantly lower rate of frequency than the principals' perceptions. Teachers generally view the principal as sometimes being involved with instructional leadership.

The item analysis provided insight into specific areas of agreement and disagreement between teachers and principals as to the level of involvement of the principal in instructional leadership. When examining all of the items, regardless of significant differences between groups, the teachers generally see the principal as sometimes or frequently being involved in instructional leadership

activities and the principals generally believe they are frequently or almost always involved with all aspects of instructional leadership.

Factors Relating to Levels of Instructional Leadership

Organizational Variables

Previous research indicated that there may be certain organizational factors which impact the principal's ability to engage in instructional leadership practices more frequently. This study concluded that in some areas of instructional leadership, size of the building, the presence of an administrative assistant, and having central office administrative responsibilities impact the extent to which the principal engages in instructional leadership.

Size

The results of this study indicate that size does seem to be a factor that has some impact. Significant differences were limited to a couple of areas of instructional leadership from either the perspective of the teachers or the principals. This study revealed that size was an inconsistent factor in accounting for instructional leadership of principals, but it was for maintaining high visibility in the building and coordinating the curriculum.

Assistant Principal

The principals or the teachers perceived that having an assistant made a significant difference in increasing the

level of instructional leadership of the principal in framing the school's goals, monitoring student progress and providing incentives for teachers. The presence of an assistant principal is a limited factor impacting instructional leadership.

Central Office Duties

From the perspective of the principals, central office duties was a variable of significant difference in one area of instructional leadership. Principals without central office duties felt they were able to monitor student progress to a greater extent than principals with central office duties. This variable was one of limited statistical impact on instructional leadership.

Junior High/Middle School

The results of this study indicate that being the principal of a junior high school or a middle school was an organizational factor of no significance as it relates to the level of instructional leadership by the principal.

Personal Factors

Training in Instructional Leadership

Having received training made a significant difference from the principals' perspective in Framing and Communicating the School's Goals. Principals with training in instructional supervision felt they were involved in these aspects of instructional leadership to a greater

extent then principals without specific training in instructional supervision.

Gender

The results of this study indicate that gender is a significant factor in four areas of instructional leadership. From the perspective of either the principals or the teachers, female principals were engaged in instructional leadership at significantly higher rates than male principals in Supervising and Evaluating Instruction, Providing Incentives for Teachers, Promoting Professional Development and Providing Incentives for Learning.

Years of Service in the Building

The results of this study indicate that the number of years of experience of the principal in the building is not a factor of significance in any areas of instructional leadership.

Years of Teaching Experience

The results of the teacher survey indicate that the teachers see significant differences in Monitoring Student Progress and Providing Incentives for Learning. The teachers feel that principals with sixteen years or more teaching experience monitor student progress to a greater extent than principals with less teaching experience and principals with more than ten years experience as a teacher provide incentives for learning at a higher rate than principals

with less experience. From the principals' perspective, there were no areas of significant difference.

Level of Teaching Experience

The results of the principals' survey did not reveal any areas of significant difference. From the teachers' perspective, there were three areas where significant differences occurred. In terms of Framing the School's Goals, Communicating the School's Goals, and Coordinating the Curriculum, the teachers felt that principal with only elementary teaching experience were involved in these aspects of instructional leadership at lower rates than principals with only secondary teaching experience or experience at both levels. The results of this study indicate that the level of teaching experience does impact some aspects of instructional leadership.

Discussion

Levels of Instructional Leadership

The results of this study indicate that there is a considerable discrepancy between the perceptions that principals have concerning their levels of involvement in instructional leadership and what the teachers, who are the beneficiaries of those efforts, perceive as the principals' level of involvement. With increasing demand for quality education happening across the country, there will come

increasing demands on principals to become more effective leaders in assisting teachers to become better instructors. The results of this study would indicate that principals need to assess their efforts in the instructional leadership aspects of administration by seeking staff input into those efforts. This researcher would speculate that very few, if any of the principals involved in this study have a formal process that would provide teachers an opportunity to constructively evaluate the principal's efforts in instructional leadership. This researcher speculates that the basis for the significant differences between the principals' and teachers' perceptions of principal involvement in instructional leadership in this study are, in part, due to the failure to use an effective process for evaluating the principal's instructional leadership efforts. The principal also must possess a desire to have his or her instructional leadership efforts constructively assessed on a regular basis. Most importantly, the principal must be willing to accept constructive criticism from teachers in order to become a more effective instructional leader. The results of this study provide a basis for principals to recognize the need to involve teachers more effectively in assessing the instructional leadership process, if substantial progress is to be made in raising the quality of education. If one accepts that sometimes being involved in instructional leadership processes is an average effort,

than we can expect little more than average quality schools.

Organizational Factors

This study examined four organizational variables as to the extent to which they impacted the level of instructional leadership of the principal. The four organizational variables made a significant difference from either the principals' or teachers' perspective on a total of five areas of instructional leadership, as measured by the P.I.M.R.S. Size of building was a factor of significant difference in Coordinating the Curriculum and Maintaining High Visibility in the building. This researcher speculates that the smaller the student population and thus the number of staff, the more opportunity the principal has to interact with teachers within and between disciplines, and is visible to students and faculty.

Having an assistant principal made a significant difference in Framing the School's Goals, Monitoring Student Progress, and Providing Incentives for Teachers. This researcher speculates that in buildings with assistant principals, discipline and attendance matters which are time consuming are likely handled by the assistant principal, thus allowing the principal more time to deal with aspects of instructional leadership.

Not having central office duties also made a significant difference in Monitoring Student Progress.

Being the principal of a middle or junior high school made no significant difference in the level of instructional leadership. This researcher speculates that it was not these chosen variables which either increased or inhibited the level of involvement in instructional leadership of the principals in this study. Although these variables had some limited impact on the level of instructional leadership, there is a need to look elsewhere for explanations as to what enhances or inhibits a principal's instructional leadership levels.

Size

Considerable discussions have gone on in political and educational circles as to whether large or small schools are better for students. The results of this study indicate that principals of small schools as opposed to very large schools are impacted in a limited way in terms of the frequency in which they engage in instructional leadership practices, based on the number of students in their building. The results of this study make it difficult to conclude that small schools provide more opportunity for the principal to engage in instructional leadership or that large schools inhibit a principal's opportunities for instructional leadership.

Assistant Principal

Buser, Gorton and McIntyre (1991) discussed restructuring the role of the assistant principal toward more involvement in instructional leadership and away from the stereotyped role of the disciplinarian and attendance officer. In this study, the presence of an assistant principal had some limited impact overall in the extent to which the principal engaged in instructional leadership. If the assistant principal is still traditionally involved with discipline and attendance matters as Buser, Gorton and McIntyre suggest, then the fact that a principal may have been relieved somewhat of those duties should leave more time for increasing involvement in instructional leadership areas. This researcher speculates that principals with assistants need to look at more effective ways of utilizing those individual's talents to enhance the instructional leadership process.

Central Office Duties

The results of this study indicated that having central office duties had limited significant impact on the extent to which the principal was involved in instructional leadership. This study involved a wide range of central office duties to include those that were related to some aspects of the instructional program and those which had little or no relationship to the instructional program.

Some central office duties not related to the instructional program, such as transportation and food service, may be time consuming for the principal and detract from the principal's time devoted to instructional leadership. On the otherhand some central office duties, such as test coordinating, are closely tied to various aspects of instructional leadership that may lead the principal to greater involvement in instructional leadership. It is left to research which attempts to separate central office duties into instructional and non-instructional related duties, to determine whether or not this variable is a factor of greater signficance than this study revealed.

Junior High/Middle School

The results of this study did not yield any significant differences in terms of principal involvement in instructional leadership resulting from being the principal of one or the other of these organizational entities. This researcher speculates that although the espoused philosophies of these two types of organizational structures differ, in reality the principals of those organizations involved in this study do not differ a great deal in terms of their emphasis on instructional leadership. Middle schools sprang from a shifting paradigm about the way young adolescents should be educated. The philosophical basis for the middle school would tend to lead one to

believe that there should be a greater concentration on instructional techniques and instructional leadership (Romano, Georgiady and Heald, 1973; Brown, 1981). This researcher is speculating that although there may have been a paradigm shift in philosophies, it does not mean that there was a equal parallel paradigm shift on the behavior of personnel, particularly principals.

Personal Variables

This study included an examination of five personal variables as to the impact on the extent to which the principal was involved in instructional leadership. The variables of Training in Instructional Supervision, Gender, Building Adminisrative Experience, Teaching Experience of the Principal and the Level of Teaching Experience of the principal collectively made a statistical significant difference on eight of the ten subscales from either the perspective of the principals or the teachers. Only the subscales Protecting Instructional Time and Maintaining High Visibility were not impacted by a statistical difference on any of the variables. Building experience was the only variable which made no statistical difference from either the perspective of the principals or the teachers. Individually, the personal variables had limited impact in determining what enhances or impedes the level of instructional leadership of the principal.

Training

From the perception of the principals, having received training in instructional supervision led the principal to be involved in Framing and Communicating the School's Goals to a greater extent than those without training. This researcher speculates that training is not the primary reason for increased involvement in these two areas, but that training provided the tools to accomplish the task. This researcher suggests that the primary reason impacting the principals in this study is Public Act 25 in Michigan, previously defined. The emphasis P.A. 25 has placed on core-curriclum and goal setting is the catalyst and the training principals have received in instructional leadership has provided the means to the end. Looking at all of the subscales of the P.I.M.R.S., these two subscales deal with areas of instructional leadership that are commanding the attention of principals due to P.A. 25. As the task of identifying core curriculum is accomplished, shifts will be made to other aspects of instructional leadership.

Gender

Of the personal variables examined in this study, gender was the variable that affected the most subscales of the P.I.M.R.S. The female principals were involved to a greater extent than male principals in Supervising and

Evaluating Instruction, Providing Incentives for Teachers, Promoting Professional Development and Providing Incentives for Learning. The findings in this study indicate that in some areas of instructional leadership, the difference between female and male administrators and their levels of involvement were significantly higher for females. However, on each subscale in this study, the means for the female administrators were higher than the male administrators, from both the perspective of the principals and the teachers. The methods used in this study did not include an examination of why female principals are more actively engaged in instructional leadership than male principals. The results, as in previous studies, only indicate that females tend to be more actively involved in instructional leadership than males. This researcher would speculate that the difference may lie in personality traits that are more prevalent in women as opposed to men. Suggestions for further research involving this variable will be discussed later.

Building Experience

At the onset of the study, this variable was chosen for examination because the researcher felt that the longer an administrator had worked in a building, the more familiar he or she would be with the routine operations of the building and would have more time to devote to instructional

leadership. The results of the study indicate that the length of time an administrator served in the building made no significant difference on any of the subscales of the P.I.M.R.S. This researcher speculates that devoting time to instructional leadership is not so much a factor of being on top of routine administrative procedures as it is a matter of priority. This researcher specultates that the principal who has high levels of involvement in instructional leadership sets that as a priority and finds ways to minimize the other distracting factors.

Teaching Experience

From the teachers' perspective on two subscales, principals with more than fifteen years teaching experience were more actively involved with instructional leadership than principals with less than five years experience. This variable had limited impact on the extent to which the principal engages in instructional leadership. As was stated earlier in this paper, some suppose that a principal brings from the teaching experience the knowledge and tools to be an effective instructional leader. This researcher again speculates that although the teaching experience may provide some insights for the principal to use in instructional leadership, the real motivation to be involved in instructional leadership comes from either a personal desire on the part of the individual to be more involved or

from some external force such as P.A. 25 in Michigan.

Level of Teaching Experience

On three subscales the teachers felt that principals with secondary teaching experience or teaching experience at both the elementary and secondary level were more actively involved in instructional leadership than principals with only elementary teaching experience. This variable also was limited in terms of its total impact on instructional leadership. Although there were some indications that the level at which the principal taught did make a difference in the extent to which the principal engaged in instructional leadership, this researcher suspects that in the case of this variable, as with the previous variable, it is external forces that are more likely to motivate a principal to be more involved in instructional leadership than any previous personal experiences .

As previously stated, studies in the past on this subject area have revealed that the responses of teachers have demonstrated reliability. Although the significant differences that certain variables made on the level of instructional leadership from the principals' view are important and cannot be discounted, this researcher believes that the significant differences variables made on the level of instructional leadership as viewed by the teachers are the basis for supporting the results of this study.

Implications for Future Research

The results of this study indicate that teachers do not feel that principals are involved in instructional leadership to the extent that principals believe they are involved. This researcher was not surprised that the principals' perceptions would be higher than the teachers' perceptions. However, this researcher is somewhat surprised that with the emphasis being placed on the principal to be an instructional leader, the level of involvement was not greater. This researcher believes that principals need to be better in tune with teachers in providing instructional leadership. Research is needed that focuses on the frequency with which principals seek teacher input and feedback regarding the principal's efforts in instructional leadership.

The results of this study indicated that the organizational variables had limited impact on the extent to which the principal was involved in instructional leadership. The size of the building only impacted levels of instructional leadership to a limited extent. This finding was surprising in that this researcher expected to find that principals of smaller buildings would have much higher levels of instructional leadership since they would have fewer staff members to supervise. This study termed small schools to include up to 500 students. Future studies

should include a group of buildings less than 350 students. Previous studies have indicated that buildings with less than 386 students have made some significant difference in the level of instructional leadership by the principal.

The presence of an assistant principal did make a significant difference on three of the subscales of the P.I.M.R.S. This researcher recommends that future research examine the role of the assistant principal as an instructional leader. This researcher expected to find that having an assistant principal would allow more time for instructional leadership on the part of the principal. Studies examining the role of the assistant principal could provide additional information on how administrative assistants impact the time principals have for administrative duties.

The other organizational variables had little or no impact on the principal's level of instructional leadership. This researcher expected that the organizational variables selected in this study would have greater impact on the levels of instructional leadership than the results indicate.

Of the personal variables involved in this study, gender was the variable with the greatest amount of impact. The results of this study and others have indicated that female principals have higher levels of instructional

leadership than male principals. This study did not examine what characteristics about females tend to make them more active instructional leaders. Research into what causes female administators to be more actively involved in instructional leadership could have far reaching implications on employment of female as well as male administrators.

The results of this study indicated that training in instructional supervision was a factor of limited impact. This finding was somewhat surprising. This researcher expected to find that principals who had received training in instructional supervision to have higher levels of involvement. This study was limited to training as a factor. It did not examine the quality of the training. Research that examines specific types of training and how principals utilize that training could provide useful information for determining the impact of training on levels of instructional leadership.

The results of this study make it difficult to point to any of the organizational and personal variables as having conclusive impact on the levels of instructional leadership of the principal. The organizational and personal variables in this study impacted certain aspects of instructional leadership, but it's difficult to conclude that any particular variable was a major factor impacting

levels of leadership. Collectively, all of the organizational and personal variables may make a significant difference. However, this researcher suggests that it is not so much the organization or personal variables that determine the levels of instructional leadership, but rather external forces or personal characteristics of the individual principal which lead to increased levels of instructional leadership. This researcher suggests that it is not a matter of what inhibits a principal's level of instructional leadership, but rather what motivates the principal to high levels of instructional leadership. The principal motivated to high levels of instructional leadership will not be inhibited by organizational or personal variables. Each principal has a personal set a values that influence behavior. Choices are made by principals based on those values. The value principals place on educational excellence for students will determine their level of involvement in instructional leadership.

Future research is needed which examines the external forces that impact principals and thus may motivate principals to higher levels of instructional leadership. Research is also needed which looks at the personal characteristics and values of principals whose teachers feel have high levels of instructional leadership as opposed to the personal characteristics and values of principals whose

teachers feel have less frequent levels of instructional leadership.

APPENDICES

APPENDIX A

TABLES

TABLE 4.18

ANALYSIS OF VARIANCE OF THE SIZE OF THE BUILDING AS A FACTOR AFFECTING THE LEVEL OF THE PRINCIPAL'S INSTRUCTIONAL LEADERSHIP FROM THE PRINCIPALS' VIEW

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.5578	2	.7739	1.1797	.3132
SS WITHIN	48.1996	73	.6603		
SS TOTAL	49.7574	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 0-500	37	3.54	.930	.153	1.00	5.00	3.23 to 3.85
2 501-750	28	3.76	.687	.130	2.20	5.00	3.49 to 4.02
3 751 +	11	3.93	.659	.199	2.80	5.00	3.48 to 4.37

Scheffé procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4881 p = .085
Bartlett Box F = 1.736 p = .177
Max. Var./Min. Var. = 1.990

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7553	2	.3776	.6459	.5271
SS WITHIN	42.6788	73	.5846		
SS TOTAL	43.4341	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 0-500	37	3.52	.818	.134	1.00	5.00	3.25 to 3.79
2 501-750	28	3.71	.683	.129	1.80	5.00	3.45 to 3.98
3 751 +	11	3.47	.776	.234	2.60	5.00	2.95 to 3.99

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3848 p = .749
Bartett Box F = .479 p = .620
Max. Var./Min. Var. = 1.433

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.18 (CONT'D)

PIMRS 3 Supervising and Evaluating Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.8970	2	.4485	1.4610	.2387
SS WITHIN	22.4083	73	.3070		
SS TOTAL	23.3053	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	3.90	.592	.097	2.60	5.00	3.71 to 4.10
2	501-750	28	4.09	.470	.089	3.00	5.00	3.91 to 4.28
3	750 +	11	3.80	.620	.187	3.20	5.00	3.38 to 4.22

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4021 p = .565
Bartlett Box F = .936 p = .392
Max. Var./Min. Var. = 1.740

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.0188	2	.0094	.0185	.9817
SS WITHIN	37.0507	73	.5075		
SS TOTAL	37.0695	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	3.74	.782	.129	2.20	5.00	3.47 to 4.00
2	501-750	28	3.75	.648	.122	1.80	4.60	3.50 to 4.00
3	751 +	11	3.78	.610	.184	2.80	5.00	3.37 to 4.19

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4358 p = .297
Bartlett Box F = .761 p = .467
Max. Var./Min. Var. = 1.645

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.18 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6501	2	.3250	.6538	.5324
SS WITHIN	37.3177	73	.5112		
SS TOTAL	37.9678	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	3.64	.792	.130	2.20	5.00	3.37 to 3.90
2	501-750	28	3.84	.584	.110	2.40	5.00	3.61 to 4.06
3	751 +	11	3.69	.745	.225	2.40	5.00	3.19 to 4.19

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4117 p = .477
Bartlett Box F = 1.357 p = .258
Max. Var./Min. Var. = 1.839

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.2078	2	.1039	.4908	.6141
SS WITHIN	15.4491	73	.2116		
SS TOTAL	15.6569	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-5	37	4.09	.543	.089	2.80	4.80	3.91 to 4.27
2	501-750	28	4.01	.346	.066	3.40	4.60	3.87 to 4.14
3	751+	11	3.95	.401	.121	3.00	4.60	3.68 to 4.21

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5120 p = .043
Bartlett Box F = 3.017 p = .049
Max. Var./Min Var. = 2.456

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.18 (CONT'D)

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.5737	2	1.2869	3.2916	.0497 *
SS WITHIN	30.0173	73	.4112		
SS TOTAL	32.5910	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	4.03	.545	.900	3.00	5.00	3.85 to 4.21
2	501-750	28	3.98	.681	.129	2.20	5.00	3.71 to 4.24
3	751 +	11	3.49	.826	.249	2.00	5.00	2.93 to 4.05

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4733 p = .126
Bartlett Box F = 1.687 p = .185
Max. Var./Min. Var. = 2.302

****

PIMRS 8 Providing Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.0724	2	.0362	.0709	.9316
SS WITHIN	37.3018	73	.5110		
SS TOTAL	37.3742	75			

	Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	37	3.99	.730	.120	2.80	5.00	3.75 to 4.23
2	501-750	28	4.04	.708	.134	2.60	5.00	3.76 to 4.31
3	751 +	11	4.07	.677	.204	3.40	5.00	3.62 to 4.53

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3573 p = 1.000
Bartlett Box F = .047 p = .954
Max. Var./Min. Var. = 1.164

****

LEVEL OF SIGNIFICANCE .05 = 3.15
*
SIGNIFICANT DIFFERENCE AT α = .05

TABLE 4.18 (CONT'D)

PIMRS 9 Promoting Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7587	2	.3794	1.0622	.3510
SS WITHIN	26.0707	73	.3571		
SS TOTAL	26.8294	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-50	37	4.14	.587	.096	2.40	5.00	3.94 to 4.34
2	501-750	28	4.01	.608	.115	2.20	5.00	3.78 to 4.25
3	751 +	11	3.85	.607	.183	3.20	5.00	3.45 to 4.26

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3418 p = 1.000
Bartlett Box F = .023 p = .977
Max. Var./Min. Var. = 1.076
****

PIMRS 10 Providing Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.7795	2	.8898	2.6967	.0741
SS WITHIN	24.0857	73	.3299		
SS TOTAL	25.8652	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-50	37	4.15	.585	.096	3.00	5.00	3.96 to 4.35
2	501-750	28	4.29	.580	.110	3.00	5.00	4.07 to 4.52
3	751 +	11	3.82	.517	.156	3.00	4.60	3.47 to 4.17

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3619 p = 1.000
Bartlett Box F = .115 p = .892
Max. Var./Min. Var. = 1.280
****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.19

ANALYSIS OF VARIANCE OF THE SIZE OF THE BUILDING AS A FACTOR AFFECTING THE LEVEL OF THE PRINCIPAL'S INSTRUCTIONAL LEADERSHIP FROM THE TEACHERS' VIEW

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.9694	2	.9847	2.6141	.0817
SS WITHIN	22.2249	59	.3767		
SS TOTAL	24.1944	61			

	Group	N	Mean	St. Dev	St. Err	Min	Max	95% Conf Int.
1	0-500	32	3.39	.746	.132	1.90	4.51	3.12 to 3.66
2	501-750	22	3.73	.406	.087	3.05	4.30	3.55 to 3.91
3	751 +	8	3.26	.467	.165	2.67	4.17	2.87 to 3.65

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variance
Cochrans C = .5922 p = .006
Bartlett Box F = 4.422 p = .012
Max. Var./Min. Var. = 3.379

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.9603	2	.9801	2.5185	.0892
SS WITHIN	22.9612	59	.3892		
SS TOTAL	24.9214	61			

	Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf Int.
1	0-500	32	3.28	.666	.118	1.93	4.13	3.04 to 3.52
2	501-750	22	3.58	.530	.113	2.69	4.47	3.34 to 3.81
3	751 +	8	3.06	.688	.243	2.00	4.17	2.49 to 3.64

Scheffé Procedure = Group 2 than Group 3 at .05 level
Tests for Homogeneity of Variance
Cochrans C = .3951 p = .692
Bartlett Box F = .687 p = .503
Max. Var./Min. Var. = 1.684

****

TABLE 4.19 (CONT'D)

PIMRS 3 Supervise and Evaluate Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.1194	2	.5597	2.2346	.1160
SS WITHIN	14.7777	59	.2505		
SS TOTAL	15.8971	61			

	Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.28	.562	.099	1.64	4.17	3.07 to 3.48
2	501-750	22	3.57	.423	.090	2.53	4.44	3.38 to 3.75
3	751 +	8	3.32	.417	.148	2.77	4.05	2.97 to 3.67

Scheffé Procedure = No two groups significantly different at .05 level
Tests for Homogeneity of Variance
Cochrans C = .4725 p = .173
Bartlett Box F = 1.155 p = .315
Max. Var./Min. Var. = 1.816

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.2625	2	1.1312	3.2325	.0465*
SS WITHIN	20.6470	59	.3499		
SS TOTAL	22.9095	61			

	Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.19	.696	.123	1.90	4.33	2.94 to 3.44
2	501-750	22	3.58	.401	.085	2.96	4.19	3.40 to 3.76
3	751 +	8	3.15	.568	.201	2.53	4.20	2.67 to 3.62

Scheffé Procedure = No two groups significantly different at the .05 level
Test for Homogeneity of Variance
Cochrans C = .5005 p = .091
Bartlett Box F = 3.321 p = .036
Max. Var./Min. Var. = 3.020

****

*SIGNIFICANT DIFFERENCE AT α = .05

TABLE 4.19 (CONT'D)

PIMRS 5 Monitor Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.8590	2	.4295	1.3966	.2555
SS WITHIN	18.1443	59	.3075		
SS TOTAL	19.0033	61			

	Group	N	Mean	St. Dev.	St. Err	Min	Max	95% Conf. Int.
1	0-500	32	3.24	.574	.102	2.00	4.17	3.03 to 3.44
2	501-750	22	3.42	.544	.116	2.30	4.28	3.18 to 3.67
3	751 +	8	3.07	.495	.175	2.47	4.03	2.66 to 3.49

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variance
Cochrans C = .3790 p =.865
Bartlett Box F = .127 p = .881
Max. Var./Min. Var. = 1.348

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.1088	2	.0544	.3130	.7324
SS WITHIN	10.2558	59	.1738		
SS TOTAL	10.3646	61			

	Group	N	Mean	St. Dev.	St. Err	Min	Max	95% Conf. Int
1	0-500	32	3.64	.399	.071	3.00	4.45	3.50 to 3.79
2	501-750	22	3.59	.463	.094	2.55	4.28	3.39 to 3.78
3	751 +	8	3.52	.413	.146	2.88	4.17	3.18 to 3.87

Scheffé Procedure - No two groups significantly different at .05 level

Test for Homogeneity of Variances
Cochrans C = .3730 p = .934
Bartlett Box F = .133 p = .876
Max. Var./Min. Var. = 1.231

****

TABLE 4.19 (CONT'D)

PIMRS 7 Maintain High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.0649	2	1.0324	3.8262	.0274*
SS WITHIN	15.9202	59	.2698		
SS TOTAL	17.9851	61			

	Groups	N	Mean	St. Dev.	St. Err	Min	Max	95% Conf. Int.
1	0-500	32	3.39	.489	.086	2.32	4.24	3.21 to 3.57
2	501-750	22	3.35	.576	.123	2.20	4.32	3.09 to 3.60
3	751 +	8	2.83	.473	.167	2.20	3.58	2.44 to 3.23

Scheffé Procedure - Group 3 significantly differs from Group 1

Test for Homegeneity of Variance
Cochrans C = .4173 p = .492
Bartlett Box F = .392 p = .676
Max. Var./Min. Var. = 1.479

****

PIMRS 8 Provide Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.7916	2	.8958	2.5722	.0849
SS WITHIN	20.5479	59	.3483		
SS TOTAL	22.3395	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.31	.600	.106	2.25	4.49	3.09 to 3.52
2	501-750	22	3.66	.590	.126	2.55	4.74	3.40 to 3.92
3	751 +	8	3.29	.545	.193	2.69	4.35	2.84 to 3.75

Scheffé Procedure - No two groups significantly different at the .05 level

Tests for Homogeneity of Variances
Cochrans C = .3585 p = 1.000
Bartlett Box F = .050 p = .951
Max. Var./ Min. Var. = 1.214

****

*SIGNIFICANT DIFFERENCE AT α .05

TABLE 4.19 (CONT'D)

PIMRS 9 Promote Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.2077	2	.1038	.3874	.6806
SS WITHIN	15.8156	59	.2681		
SS TOTAL	16.0232	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.7437	.543	.096	2.60	4.66	3.55 to 3.94
2	501-750	22	3.7441	.475	.101	2.75	4.32	3.53 to 3.95
3	751 +	8	3.57	.527	.186	2.90	4.38	3.13 to 4.01

Scheffé Procedure - No two groups significantly different at the .05 level

Tests for Homogeneity of Variances
Cochrans C = .3688 p = .984
Bartlett Box F = .210 p = .810
Max. Var./Min. Var. = 1.303

****

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.4816	2	.7408	2.5358	.0878
SS WITHIN	17.2367	59	.2921		
SS TOTAL	18.7184	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-500	32	3.87	.569	.101	2.57	4.75	3.67 to 4.08
2	501-750	22	4.02	.485	.104	2.97	4.86	3.80 to 4.23
3	751 +	8	3.52	.568	.201	2.40	4.12	3.04 to 3.99

Scheffé Procedure - No two groups significantly differ at the .05 level

Test for Homogeneity of Variances
Cochrans C = .3672 p = 1.000
Bartlett Box F = .319 p = .727
Max. Var./Min. Var. = 1.375

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.20

SUMMARY OF THE ANALYSIS OF VARIANCE FOR THE BUILDING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE PRINCIPALS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.8986	3	.2995	.4414	.7241
SS WITHIN	48.8587	72	.6786		
SS TOTAL	49.7573	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	30	3.59	.805	.147	1.00	5.00	3.29 to 3.89
2	6-10 yrs	22	3.65	.903	.193	1.40	5.00	3.25 to 4.06
3	11-15 yrs	3	4.07	.643	.371	3.60	4.80	2.47 to 5.66
4	16 + yrs	21	3.77	.778	.170	2.00	4.80	3.42 to 4.13

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .3287 p = .555

Bartlett Box F = .323 p = .874

Max. Var./Min. Var. = 1.974

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.1584	3	.7195	1.2550	.2963
SS WITHIN	41.2757	72	.5733		
SS TOTAL	43.4341	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	3.52	.618	.113	1.80	4.80	3.29 to 3.75
2	6-10 yrs	22	3.49	.983	.210	1.00	5.00	3.06 to 3.93
3	11-15 yrs	3	4.33	.306	.176	4.00	4.60	3.57 to 5.09
4	16 + yrs	21	3.67	.697	.152	2.00	5.00	3.35 to 3.99

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .5015 p = .004

Bartlett Box F = 2.426 p = .064

Max. Var./Min. Var. = 10.356

****

TABLE 4.20 (CONT'D)

PIMRS 3 Supervising and Evaluating Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7294	3	.2431	.7754	.5115
SS WITHIN	22.5759	72	.3136		
SS TOTAL	23.3053	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	3.94	.583	.106	2.60	5.00	3.72 to 4.16
2	6-10 yrs	22	3.99	.561	.120	3.20	5.00	3.74 to 4.24
3	11-15 yrs	3	4.40	.200	.116	4.20	4.60	3.90 to 4.90
4	16 + yrs	21	3.89	.550	.120	3.00	5.00	3.64 to 4.14

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3410 p = .432
Bartlett Box F = .774 p = 509
Max. Var./Min. Var. = 8.493

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.8258	3	.6086	1.2433	.3004
SS WITHIN	35.2437	72	.4895		
SS TOTAL	37.0695	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	3.62	.742	.135	2.20	5.00	3.34 to 3.90
2	6-10 yrs	22	3.86	.759	.162	1.80	5.00	3.53 to 4.20
3	11-15 yrs	3	4.33	.611	.353	3.80	5.00	2.82 to 5.85
4	16 + yrs	21	3.72	.567	.124	2.40	4.80	3.47 to 3.98

Scheffé Procedure - No two groups signficantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3165 p .700
Bartlett Box F = .656 p = .579
Max. Var./Min. Var. = 1.792

****

TABLE 4.20 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.3104	3	.4368	.8579	.4670
SS WITHIN	36.6574	72	.5091		
SS TOTAL	37.9678	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	30	3.67	.771	.141	2.20	5.00	3.38 to 3.95
2	6-10 yrs	22	3.75	.778	.166	2.40	5.00	3.41 to 4.10
3	11-15 yrs	3	4.33	.643	.371	3.60	4.80	2.74 to 5.90
4	16 + yrs	21	3.66	.543	.118	2.20	4.80	3.41 to 3.91

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3174 p = .689
Bartlett Box F = 1.016 p = .385
Max. Var./Min. Var. = 2.056

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6486	3	.2162	1.0371	.3814
SS WITHIN	15.0083	72	.2084		
SS TOTAL	15.6569	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	4.03	.481	.088	3.00	4.80	3.85 to 4.21
2	6-10 yrs	22	4.09	.448	.096	3.00	4.80	3.89 to 4.29
3	11-15 yrs	3	4.40	.400	.231	4.00	4.80	3.41 to 5.39
4	16 + yrs	21	3.94	.434	.095	2.80	4.80	3.75 to 4.14

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .2960 p = 1.000
Bartlett Box F = .104 p = .958
Max. Var./Min. Var. = 1.444

****

TABLE 4.20 (CONT'D)

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.2598	3	.4199	.9650	.4141
SS WITHIN	31.3313	72	.4352		
SS TOTAL	32.5911	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	4.02	.690	.126	2.00	5.00	3.76 to 4.28
2	6-10 yrs	22	3.86	.752	.160	2.40	5.00	3.53 to 4.20
3	11-15 yrs	3	4.40	.200	.116	4.20	4.60	3.90 to 4.90
4	16 + yrs	21	3.82	.529	.115	2.80	4.80	3.58 to 4.06

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4155 p = .067
Bartlett Box F = 1.737 p = .158
Max. Var./Min. Var. = 14.132

****

PIMRS 8 Providing Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.2995	3	.4332	.8646	.4636
SS WITHIN	36.0747	72	.5010		
SS TOTAL	37.3742	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	4.16	.583	.107	3.00	5.00	3.94 to 4.38
2	6-10 yrs	22	3.97	.803	.171	2.60	5.00	3.62 to 4.33
3	11-15 yrs	3	4.13	1.026	.593	3.00	5.00	1.58 to 6.68
4	16 + yrs	21	3.85	.726	.157	2.60	5.00	3.52 to 4.18

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4104 p = .078
Bartlett Box F = 1.057 p = .367
Max. Var./Min. Var. = 3.094

****

TABLE 4.20 (CONT'D)

PIMRS 9 Promoting Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7107	3	.2369	.6531	.5836
SS WITHIN	26.1187	72	.3628		
SS TOTAL	26.8294	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	4.08	.4.17	.076	3.00	4.80	3.92 to 4.24
2	6-10 yrs	22	4.15	.758	.162	2.20	5.00	3.81 to 4.49
3	11-15 yrs	3	4.07	1.447	.835	2.40	5.00	.47 to 7.66
4	16 + yrs	21	3.90	.492	.108	3.20	4.80	3.68 to 4.13

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .6789 p = .000
Bartlett Box F = 5.178 p. .001
Max. Var./Min. Var. = 12.122
****

PIMRS 10 Providing Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.9513	3	.3171	.9164	.4374
SS WITHIN	24.9140	72	.3460		
SS TOTAL	25.8653	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yr	30	4.29	.535	.098	3.00	5.00	4.09 to 4.49
2	6-10 yrs	22	4.05	.682	.145	3.00	5.00	3.74 to 4.35
3	11-15 yrs	3	4.27	.306	.176	4.00	4.60	3.51 to 5.03
4	16 + yrs	21	4.08	.578	.126	3.20	5.00	3.81 to 4.34

Scheffé Porcedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3944 p = .121
Bartlett Box F = .834 p = .475
Max. Var./Min. Var. = 4.977
****

LEVEL OF SIGNIFICANCE .05 = 2.76

TABLE 4.21

SUMMARY OF THE ANALYSIS OF VARIANCE FOR THE BUILDING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE TEACHERS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6330	3	.2110	.5194	.6706
SS WITHIN	23.5613	58	.4062		
SS TOTAL	24.1944	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.47	.662	.132	1.90	4.27	3.20 to 3.75
2	6-10 yrs	17	3.46	.703	.170	2.05	4.51	3.10 to 3.83
3	11-15 yrs	2	4.05	.106	.075	3.97	4.12	3.09 to 5.00
4	16 + yrs	18	3.49	.549	.129	2.28	4.30	3.21 to 3.76

Scheffé Procedure - No two groups significantly different at .05 level

Test for Homogeneity of Variances
Cochrans C = .3967 p = .161
Bartlett Box F = 1.096 p = .351
Max. Var./Min. Var. = 43.899

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6738	3	.2246	.5372	.6587
SS WITHIN	24.2477	58	.4181		
SS TOTAL	24.9214	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.42	.633	.127	1.93	4.40	3.16 to 3.68
2	6-10 yrs	17	3.24	.667	.162	2.03	4.17	2.89 to 3.58
3	11-15 yrs	2	3.76	.262	.185	3.57	3.94	1.40 to 6.11
4	16 + yrs	18	3.34	.662	.156	2.00	4.47	3.01 to 3.66

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3290 p = .630
Bartlett Box F = .307 p = .820
Max. Var./Min. Var. = 6.498

****

TABLE 4.21 (CONT'D)

PIMRS 3 Supervise and Evaluate Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.0119	3	.3373	1.3142	.2785
SS WITHIN	14.8853	58	.2566		
SS TOTAL	15.8971	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.36	.459	.092	2.52	4.12	3.17 to 3.54
2	6-10 yrs	17	3.49	.566	.137	2.53	4.44	3.20 to 3.79
3	11-15 yrs	2	3.90	.297	.210	3.69	4.11	1.23 to 6.57
4	16 + yrs	18	3.27	.522	.123	1.64	4.05	3.01 to 3.53

Scheffé Procedure - No two groups significantly different at .05 level

Test for Homegeneity of Variances
Cochrans C = .3593 p = .359
Bartlett Box F = .385 p = .764
Max. Var./Min. Var. = 3.629

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.5026	3	.1675	.4337	.7297
SS WITHIN	22.4069	58	.3863		
SS TOTAL	22.9095	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.25	.700	.140	1.90	4.19	2.96 to 3.54
2	6-10 yrs	17	3.37	.670	.163	1.90	4.33	3.02 to 3.71
3	11-15 yrs	2	3.73	.339	.240	3.49	3.97	.68 to 6.78
4	16 + yrs	18	3.34	.443	.104	2.53	4.12	3.12 to 3.56

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3922 p = .178
Bartlett Box F = 1.368 p = .253
Max. Var./Min.Var. = 4.259

****

TABLE 4.21 (CONT'D)

PIMRS 5 Monitor Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7573	3	.2524	.8024	.4976
SS WITHIN	18.2460	58	.3146		
SS TOTAL	19.0033	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	25	3.35	.593	.119	2.30	4.28	3.11 to 3.60
2 6-10 yrs	17	3.26	.546	.132	2.25	4.07	2.98 to 3.54
3 11-15 yrs	2	3.70	.014	.010	2.69	3.71	3.57 to 3.83
4 16 + yrs	18	3.16	.545	.129	2.00	4.16	2.89 to 3.43

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3711 p = .282
Bartlett Box F = 1.960 p = .120
Max. Var/ Min.Var. = 1756.137

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.5857	3	.1952	1.1580	.3336
SS WITHIN	9.7789	58	.1686		
SS TOTAL	10.3646	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	25	3.61	.295	.059	2.88	4.16	3.49 to 3.73
2 6-10 yrs	17	3.74	.521	.126	2.55	4.45	3.47 to 4.00
3 11-15 yrs	2	3.67	.707	.500	3.17	4.17	-2.68 to 10.02
4 16 + yrs	18	3.48	.410	.097	2.75	4.28	3.28 to 3.68

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4873 p = .013
Bartlett Box F = 2.184 p = .090
Max. Var./Min. Var. = 5.756

****

TABLE 4.21 (CONT'D)

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.3486	3	.4495	1.5672	.2071
SS WITHIN	16.6365	58	.2868		
SS TOTAL	17.9851	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.40	.610	.122	2.20	4.32	3.14 to 3.65
2	6-10 yrs	17	3.27	.557	.135	2.20	4.24	2.98 to 3.55
3	11-15 yrs	2	3.88	.021	.015	3.86	3.89	3.68 to 4.07
4	16 + yrs	18	3.14	.402	.095	2.58	4.04	2.94 to 3.34

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4415 p = .052
Bartlett Box F = 2.632 p = .050
Max. Var./Min Var. = 827.927

****

PIMRS 8 Provide Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.3049	3	.4350	1.1994	.3181
SS WITHIN	21.0346	58	.3627		
SS TOTAL	22.3395	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	0-5 yrs	25	3.57	.576	.115	2.50	4.74	3.34 to 3.81
2	6-10 yrs	17	3.23	.624	.151	2.25	4.36	2.91 to 3.55
3	11-15 yrs	2	3.65	1.195	.845	2.80	4.49	-7.09to 14.38
4	16 + yrs	18	3.39	.565	.133	2.55	4.40	3.11 to 3.67

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5787 p = .000
Bartlett Box F = .541 p = .655
Max. Var./Min. Var. = 4.477

****

TABLE 4.21 (CONT'D)

PIMRS 9 Promote Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.5458	3	.1819	.6818	.5668
SS WITHIN	15.4774	58	.2669		
SS TOTAL	16.0232	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	3.79	.475	.095	2.77	4.38	3.59 to 3.98
2	6-10 yrs	17	3.70	.646	.157	2.60	4.50	3.36 to 4.03
3	11-15 yrs	2	4.06	.849	.600	3.46	4.66	-3.56 to 11.68
4	16 + yrs	18	3.62	.396	.093	2.80	4.27	3.42 to 3.81

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4738 p = .020
Bartlett Box F = 1.465 p = .224
Max. Var./Min. Var. = 4.598

****

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.4283	3	.4761	1.5971	.1999
SS WITHIN	17.2901	58	.2981		
SS TOTAL	18.7184	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	25	4.02	.543	.109	2.40	4.86	3.79 to 4.24
2	6-10 yrs	17	3.70	.562	.136	2.84	4.70	3.41 to 3.99
3	11-15 yrs	2	4.29	.403	.285	4.00	4.57	.66 to 7.91
4	16 + yrs	18	3.81	.543	.128	2.84	4.75	3.54 to 4.08

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .2954 p = 1.000
Bartlett Box F = .053 p = .984
Max. Var./Min.Var. = 1.941

****

LEVEL OF SIGNIFICANCE .05 = 2.76

TABLE 4.22

ANALYSIS OF VARIANCE OF THE YEARS OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE PRINCIPALS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.3801	3	.1267	.1847	.9064
SS WITHIN	49.3773	72	.6858		
SS TOTAL	49.7574	75			

Group	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	16	3.64	.936	.234	1.00	5.00	3.14 to 4.14
2 6-10 yrs	30	3.76	.904	.165	1.40	5.00	3.42 to 4.10
3 11-15 yrs	18	3.59	.596	.141	2.20	4.40	3.29 to 3.89
4 16 + yrs	12	3.65	.768	.222	2.60	5.00	3.16 to 4.14

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .3319 p = .521

Bartlett Box F = 1.323 p = .265

Max. Var./Min. Var. = 2.466

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.4950	3	.4983	.8555	.4682
SS WITHIN	41.9391	72	.5825		
SS TOTAL	43.4341	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	16	3.34	.782	.196	1.80	5.00	2.92 to 3.75
2 6-10 yrs	30	3.71	.818	.149	1.00	5.00	3.41 to 4.02
3 11-15 yrs	18	3.61	.708	.167	1.80	4.60	3.26 to 3.96
4 16 + yrs	12	3.56	.663	.191	2.40	4.80	3.14 to 3.98

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .3014 p = .915

Bartlett Box F = .291 p = .832

Max. Var./Min. Var. = 1.525

****

TABLE 4.22 (CONT'D)

PIMRS 3 Supervising and Evaluating Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6575	3	.2192	.6967	.5571
SS WITHIN	22.6478	72	.3146		
SS TOTAL	23.3053	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	16	3.85	.647	.162	2.60	5.00	3.51 to 4.19
2 6-10 yrs	30	4.07	.544	.099	3.20	5.00	3.86 to 4.27
3 11-15 yrs	18	3.88	.491	.116	3.00	4.60	3.63 to 4.12
4 16 + yrs	12	3.95	.579	.167	3.00	5.00	3.58 to 4.32

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3243 p = .605
Bartlett Box F = .425 p = .735
Max. Var./Min. Var. = 1.740

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.1566	3	.3855	.7730	.5129
SS WITHIN	35.9128	72	.5		
SS TOTAL	37.0694	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yrs	16	3.66	.816	.204	2.20	5.00	3.23 to 4.10
2 6-10 yrs	30	3.89	.700	.128	2.40	5.00	3.63 to 4.15
3 11-15 yrs	18	3.60	.736	.173	1.80	4.60	3.23 to 3.97
4 16 + yrs	12	3.72	.478	.138	2.80	4.60	3.41 to 4.02

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3455 p = .393
Bartlett Box F = 1.094 p = .351
Max. Var./Min. Var. = 2.907

****

TABLE 4.22 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.0319	3	.0106	.0202	.9961
SS WITHIN	37.9358	72	.5269		
SS TOTAL	37.9677	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	16	3.71	.667	.167	2.40	4.80	3.35 to 4.06
2	6-10 yrs	30	3.74	.752	.137	2.20	5.00	3.46 to 4.02
3	11-15 yrs	18	3.71	.777	.183	2.40	5.00	3.32 to 4.10
4	16 + yrs	12	3.68	.646	.187	2.40	4.60	3.27 to 4.09

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .2970 p = .985

Bartlett Box F = .233 p = .873

Max. Var./Min. Var. = 1.444

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.2357	3	.0786	.3669	.7771
SS WITHIN	15.4211	72	.2142		
SS TOTAL	15.6568	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	16	4.00	.516	.129	2.80	4.80	3.72 to 4.28
2	6-10 yrs	30	4.10	.439	.080	3.00	4.80	3.94 to 4.26
3	11-15 yrs	18	4.02	.475	.112	3.20	4.80	3.79 to 4.26
4	16 + yrs	12	3.95	.428	.123	3.00	4.80	3.68 to 4.22

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .3075 p = .823

Bartlett Box F = .228 p = .877

Max. Var./Min. Var. = 1.459

****

TABLE 4.22 (CONT'D)

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7911	3	.2637	.5971	.6190
SS WITHIN	31.7999	72	.4417		
SS TOTAL	32.5910	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	16	3.79	.925	.231	2.00	5.00	3.29 to 4.28
2	6-10 yrs	30	3.91	.692	.126	2.20	5.00	3.65 to 4.17
3	11-15 yrs	18	3.98	.460	.108	3.00	4.80	3.75 to 4.21
4	16 + yrs	12	4.12	.366	.106	4.60	4.60	3.88 to 4.35

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5093 p = .003
Bartlett Box F = 4.343 p = .005
Max. Var./Min. Var. = 6.375

****

PIMRS 8 Providing Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.1064	3	.0355	.0685	.9765
SS WITHIN	37.2678	72	.5176		
SS TOTAL	37.3742	75			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	16	4.05	.782	.195	2.80	5.00	3.63 to 4.47
2	6-10 yrs	30	4.00	.761	.139	2.60	5.00	3.72 to 4.28
3	11-15 yrs	18	3.98	.643	.152	2.60	5.00	3.66 to 4.30
4	16 + yrs	12	4.08	.624	.180	3.20	5.00	3.69 to 4.48

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3065 p = .838
Bartlett Box F = .395 p = .757
Max. Var./Min. Var. = 1.571

****

TABLE 4.22 (CONT'D)

PIMRS 9 Promoting Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.9362	3	.3121	.8677	.4619
SS WITHIN	25.8933	72	.3596		
SS TOTAL	26.8295	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yr	16	3.94	.664	.166	3.20	5.00	3.58 to 4.29
2 6-10 yrs	30	4.15	.625	.114	2.40	5.00	3.92 to 4.39
3 11-15 yrs	18	3.92	.554	.131	2.20	4.80	3.65 to 4.20
4 16 + yrs	12	4.15	.498	.144	3.20	5.00	3.83 to 4.47

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variance
Cochrans C = .3181 p = .680
Bartlett Box F = .427 p = .733
Max. Var./Min. Var. = 1.778

****

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.9987	3	.3329	.9638	.4146
SS WITHIN	24.8666	72	.3454		
SS TOTAL	25.8653	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 2-5 yr	16	4.04	.701	.175	3.00	5.00	3.66 to 4.41
2 6-10 yrs	30	4.21	.543	.099	3.20	5.00	4.01 to 4.42
3 11-15 yrs	18	4.29	.514	.121	3.20	5.00	4.03 to 4.54
4 16 + yrs	12	3.98	.635	.183	3.00	5.00	3.58 to 4.39

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3381 p = .459
Bartlett Box F = .680 p = .564
Max. Var./Min. Var. = 1.859

****

LEVEL OF SIGNIFICANCE .05 = 2.76

TABLE 4.23

ANALYSIS OF VARIANCE OF THE YEARS OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE TEACHERS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.3600	3	.4533	1.1515	.3361
SS WITHIN	22.8344	58	.3937		
SS TOTAL	24.1914	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.25	.676	.239	2.40	4.17	2.68 to 3.81
2	6-10 yrs	26	3.41	.609	.119	2.05	4.51	3.16 to 3.65
3	11-15 yrs	17	3.61	.597	.145	2.32	4.30	3.30 to 3.91
4	16 + yrs	11	3.70	.683	.206	1.90	4.27	3.24 to 4.16

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .2825 p = 1.000
BARTLETT-BOX F = .112 P = .953
Max. Var/Min/Var. = 1.306

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.7597	3	.5866	1.4688	.2325
SS WITHIN	23.1618	58	.3993		
SS TOTAL	24.9214	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.15	.740	.262	2.20	4.17	2.53 to 3.76
2	6-10 yrs	26	3.23	.623	.122	2.00	4.35	2.97 to 3.48
3	11-15 yrs	17	3.51	.571	.139	2.55	4.47	3.22 to 3.81
4	16 + yrs	11	3.58	.663	.200	1.93	4.40	3.13 to 4.02

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3214 p = .716
Bartlett Box F = .240 P = .868
Max. Var./Min. Var. = 1.675

****

TABLE 4.23 (CONT'D)

PIMRS 3 Supervise and Evaluate Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.4033	3	.1344	.5032	.6816
SS WITHIN	15.4939	58	.2671		
SS TOTAL	15.8971	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.33	.462	.163	2.57	4.05	2.94 to 3.71
2	6-10 yrs	26	3.31	.567	.111	1.64	4.17	3.08 to 3.54
3	11-15 yrs	17	3.48	.500	.121	2.52	4.44	3.22 to 3.74
4	16 + yrs	11	3.46	.443	.133	2.53	4.12	3.17 to 3.76

Scheffé Procedure - No two groups significantly different at .05 level
Testsd for Homogeneity of Variances
Cochrans C = .3280 p = .641
Bartlett Box F = .352 p = .788
Max. Var./Min. Var. = 1.643

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.4224	3	.1408	.3631	.7798
SS WITHIN	22.4871	58	.3877		
SS TOTAL	22.9095	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.18	.704	.249	2.50	4.20	2.59 to 3.76
2	6-10 yrs	26	3.32	.583	.114	1.90	4.33	3.09 to 3.56
3	11-15 yrs	17	3.29	.579	.140	2.00	4.12	3.00 to 3.59
4	16 + yrs	11	3.47	.719	.217	1.90	4.19	2.99 to 3.95

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .3060 p = .916
Bartlett Box F = .339 p = .797
Max. Var./Min. Var. = 1.541

****

TABLE 4.23 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.5123	3	.8374	2.9452	.0403*
SS WITHIN	16.4911	58	.2843		
SS TOTAL	19.0033	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2- 5 yrs	8	3.11	.549	.194	2.40	4.03	2.65 to 3.57
2	6-10 yrs	26	3.13	.516	.101	2.00	4.07	2.92 to 3.33
3	11-15 yrs	17	3.35	.496	.120	2.53	4.20	3.10 to 3.61
4	16 + yrs	11	3.66	.616	.186	2.30	4.28	3.25 to 4.07

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances

Cochrans C = .3183 p = .753

Bartlett Box F = .221 p = .882

Max. Var./Min. Var. = 1.542

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7418	3	.2473	1.4903	.2267
SS WITHIN	9.6229	58	.1659		
SS TOTAL	10.3646	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.68	.408	.144	3.15	4.28	3.33 to 4.02
2	6-10 yrs	26	3.52	.495	.097	2.55	4.45	3.32 to 3.72
3	11-15 yrs	17	3.58	.330	.080	2.88	4.17	3.41 to 3.75
4	16 + yrs	11	3.82	.242	.073	3.23	4.16	3.65 to 3.98

Scheffé Procedure - No two groups significantly different at .05 level

Test for Homogeneity of Variances

Cochrans C = .4233 p = .084

Bartlett Box F = 2.363 p = .069

Max. Var./Min. Var. = 4.173

****

TABLE 4.23 (CONT'D)

PIMRS 7 Maintain High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.9157	3	.6386	2.3048	.0863
SS WITHIN	16.0694	58	.2771		
SS TOTAL	17.9851	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.06	.516	.182	2.20	3.80	2.63 to 3.49
2	6-10 yrs	26	3.21	.562	.110	2.20	4.32	2.98 to 3.43
3	11-15 yrs	17	3.35	.509	.123	2.32	4.08	3.09 to 3.62
4	16 + yrs	11	3.63	.467	.141	2.98	4.30	3.31 to 3.94

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .2982 p = 1.000
Bartlett Box F = .171 p = .916
Max. Var./Min. Var. = 1.450

****

PIMRS 8 Providing Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.6345	3	.8782	2.5848	.0618
SS WITHIN	19.7050	58	.3397		
SS TOTAL	22.3395	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.19	.692	.245	2.25	4.35	2.60 to 3.76
2	6-10 yrs	26	3.26	.523	.103	2.50	4.36	3.05 to 3.47
3	11-15 yrs	17	3.67	.600	.146	2.57	4.49	3.37 to 3.98
4	16 + yrs	11	3.62	.613	.185	2.65	4.74	3.21 to 4.03

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3219 p = .710
Bartlett Box F = .354 p = .786
Max. Var./Min. Var. = 1.754

****

TABLE 4.23 (CONT'D)

PIMRS 9 Promote Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.7172	3	.5724	2.3206	.0847
SS WITHIN	14.3061	58	.2467		
SS TOTAL	16.0232	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.60	.420	.149	3.09	4.18	3.25 to 3.95
2	6-10 yrs	26	3.56	.540	.106	2.60	4.50	3.35 to 3.78
3	11-15 yrs	17	3.87	.479	.116	2.88	4.66	3.62 to 4.12
4	16 + yrs	11	3.95	.459	.138	2.77	4.32	3.64 to 4.26

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C= .3216 p = .713
Bartlett Box F = .287 p = .835
Max. Var./Min. Var. = 1.654
****

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	4.0779	3	1.3593	5.3850	.0024*
SS WITHIN	14.6405	58	.2524		
SS TOTAL	18.7184	61			

	Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1	2-5 yrs	8	3.44	.744	.263	2.40	4.30	2.82 to 4.06
2	6-10 yrs	26	3.73	.542	.106	2.84	4.75	3.51 to 3.95
3	11-15 yrs	17	4.15	.351	.085	3.60	4.64	3.97 to 4.33
4	16 + yrs	11	4.14	.381	.115	3.60	4.86	3.88 to 4.39

Scheffé Procedure - Group 1 is significantly different from Groups 3 and 4
Tests for Homogeneity of Variances
Cochrans C = .4964 p = .010
Bartlett Box F = 2.488 p = .059
Max. Var./Min. Var. = 4.491
****

LEVEL OF SIGNIFICANCE .05 = 2.76
*SIGNIFICANT DIFFERENCE AT α = .05

TABLE 4.24

SUMMARY OF THE ANALYSIS OF VARIANCE FOR THE LEVEL OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE PRINCIPALS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.0593	2	1.5296	2.3912	.0987
SS WITHIN	46.6981	73	.6397		
SS TOTAL	49.7574	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	6	3.57	1.450	.592	1.00	5.00	2.04 to 5.09
2 Secondary	59	3.60	.765	.100	1.40	5.00	3.40 to 3.80
3 Both	11	4.16	.472	.142	3.40	5.00	3.85 to 4.48

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .7224 p = .000
Bartlett Box F = 4.659 p = .010
Max. Var./Min. Var. = 9.448

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.6193	2	1.3096	2.3424	.1033
SS WITHIN	40.8148	73	.5591		
SS TOTAL	43.4341				

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	3.33	.985	.402	1.80	4.40	2.30 to 4.37
2 Secondary	59	3.53	.725	.094	1.00	5.00	3.34 to 3.72
3 Both	11	4.02	.740	.223	2.80	5.00	3.52 to 4.52

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4749 p = .121
Bartlett Box F = .491 p = .612
Max. Var./Min. Var. = 1.847

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.24 (CONT'D)

PIMRS 3 Supervising and Evaluating Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.0648	2	.0324	.1018	.9033
SS WITHIN	23.2404	73	.3184		
SS TOTAL	23.3052	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	4.00	.820	.335	2.60	5.00	3.14 to 4.86
2 Secondary	59	3.94	.538	.070	3.00	5.00	3.80 to 4.08
3 Both	11	4.02	.555	.167	3.20	5.00	3.65 to 4.39

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5294 p = .025
Bartlett Box F = .987 p = .373
Max. Var./Min. Var. = 2.319

****

PIMRS 4 Coordinating the Curriculum

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.6827	2	.3413	.6848	.5074
SS WITHIN	36.3868	73	.4984		
SS TOTAL	37.0695	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	3.60	1.012	.413	2.20	5.00	2.54 to 4.66
2 Secondary	59	3.72	.710	.092	1.80	5.00	3.54 to 3.91
3 Both	11	3.96	.455	.137	3.40	4.60	3.66 to 4.27

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5905 p = .003
Bartlett Box F = 2.206 p = .110
Max. Var./Min.Var. = 4.958

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.24 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	2.1234	2	1.0617	2.1623	.1224
SS WITHIN	35.8443	73	.4910		
SS TOTAL	37.9677	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	3.80	.894	.365	2.40	4.80	2.86 to 4.74
2 Secondary	59	3.64	.718	.094	2.20	5.00	3.45 to 3.82
3 Both	11	4.11	.442	.133	3.40	5.00	3.81 to 4.41

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .5297 p = .025
Bartlett Box F = 1.898 p = .150
Max. Var./Min. Var. = 4.104

****

PIMRS 6 Protecting Instructional Time

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.3696	2	.1848	.8824	.4182
SS WITHIN	15.2873	73	.2094		
SS TOTAL	15.6569				

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	4.20	.633	.258	3.00	4.80	3.54 to 4.86
2 Secondary	59	4.00	.459	.060	2.80	4.80	3.88 to 4.12
3 Both	11	4.15	.324	.098	3.60	4.80	3.93 to 4.36

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .5588 p = .009
Bartlett Box F = 1.546 p = .213
Max. Var./Min. Var. = 3.819

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.24 (CONT'D)

PIMRS 7 Maintaining High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.3210	2	.1605	.3631	.6968
SS WITHIN	32.2700	73	.4421		
SS TOTAL	32.5910	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	3.73	1.243	.508	2.00	5.00	2.43 to 5.04
2 Secondary	59	3.94	.616	.080	2.20	5.00	3.78 to 4.10
3 Both	11	4.02	.502	.151	3.40	4.60	3.68 to 4.36

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .7101 p = .000
Bartlett Box F = 3.916 p = .020
Max. Var./Min. Var. = 6.146
****

PIMRS 8 Providing Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.0725	2	.0362	.0709	.9316
SS WITHIN	37.3017	73	.5110		
SS TOTAL	37.3742	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	4.03	.625	.255	3.40	4.80	3.38 to 4.69
2 Secondary	59	4.00	.704	.092	2.60	5.00	3.82 to 4.19
3 Both	11	4.09	.812	.245	2.60	5.00	3.55 to 4.64

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4264 p = .360
Bartlett Box F = .258 p = .772
Max. Var./Min. Var. = 1.687
****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.24 (CONT'D)

PIMRS 9 Promoting Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.3410	2	.1705	.4698	.6270
SS WITHIN	26.4885	73	.3629		
SS TOTAL	26.8295	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	4.20	.593	.242	3.60	4.80	3.58 to 4.82
2 Secondary	59	4.02	.618	.081	2.20	5.00	3.86 to 4.18
3 Both	11	4.16	.505	.152	3.40	4.80	3.82 to 4.50

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3867 p = .727
Bartlett Box F = .306 p = .736
Max. Var./Min. Var. = 1.503

****

PIMRS 10 - Providing Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7513	2	.3757	1.0920	.3410
SS WITHIN	25.1139	73	.3440		
SS TOTAL	25.8652	75			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem.	6	4.30	.603	.246	3.60	5.00	3.67 to 4.93
2 Secondary	59	4.11	.571	.074	3.00	5.00	3.96 to 4.25
3 Both	11	4.36	.662	.200	3.20	5.00	3.92 to 4.81

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .3886 p = .706
Bartlett Box F = .195 p = .823
Max. Var./Min. Var. = 1.345

****

LEVEL OF SIGNIFICANCE .05 = 3.15

TABLE 4.25

SUMMARY OF THE ANALYSIS OF VARIANCE FOR THE LEVEL OF TEACHING EXPERIENCE OF THE PRINCIPAL AS A FACTOR AFFECTING INSTRUCTIONAL LEADERSHIP AS VIEWED BY THE TEACHERS

PIMRS 1 Framing the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.9893	2	1.9946	5.8245	.0049*
SS WITHIN	20.2051	59	.3425		
SS TOTAL	24.1944	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.62	.336	.168	2.13	2.89	2.08 to 3.15
2 Sec	48	3.50	.637	.092	1.90	4.51	3.32 to 3.69
3 Both	10	3.79	.297	.094	3.33	4.24	3.58 to 4.01

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level
Tests for Homogeneity of Variances
Cochrans C = .6692 p = .000
Bartlett Box F = 3.555 p = .029
Max. Var./Min. Var. = 4.614

****

PIMRS 2 Communicating the School's Goals

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.7981	2	1.8991	5.3043	.0076*
SS WITHIN	21.1233	59	.3580		
SS TOTAL	24.9214	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.47	.311	.156	2.03	3.75	1.98 to 2.97
2 Sec	48	3.38	.631	.091	1.93	4.47	3.19 to 3.56
3 Both	10	3.61	.488	.154	3.00	4.35	3.26 TO 3.96

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level
Tests for Homogeneity of Variances
Cochrans C = .5429 p = .029
Bartlett Box F = 1.239 p = .290
Max. Var./Min. Var. = 4.107

****

*SIGNIFICANT DIFFERENCE AT α = .05

TABLE 4.25 (CONT'D)

PIMRS 3 Supervise and Evaluate Instruction

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.8224	2	.4112	1.6093	.2087
SS WITHIN	15.0748	59	.2555		
SS TOTAL	15.8971	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.00	.388	.194	2.57	3.35	2.38 to 3.62
2 Sec	48	3.38	.542	.078	1.64	4.44	3.23 to 3.54
3 Both	10	3.54	.305	.096	3.05	4.11	3.32 to 3.76

Scheffé Procedure - No two groups significantly different .05 level

Tests for Homogeneity of Variance
Cochrans C = .5464 p = .027
Bartlett Box F = 1.961 p = .142
Max. Var./Min. Var. = 3.158

****

PIMRS 4 Coordinating the Curriculum.

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	3.0569	2	1.5284	4.5423	.0146*
SS WITHIN	19.8526	59	.3365		
SS TOTAL	22.9095	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.53	.189	.095	2.26	2.70	2.23 to 2.83
2 Sec	48	3.34	.617	.089	1.90	4.33	3.16 to 3.52
3 Both	10	3.55	.456	.144	2.59	4.15	3.22 to 3.88

Scheffé Procedure - Group 1 differs significantly from Groups 2 and 3 at the .05 level

Tests for Homogeneity of Variances
Cochrans C = .6092 p = .003
Bartlett Box F = .2.478 p = .085
Max. Var./Min. Var. = 10.653

****

*SIGNIFICANT DIFFERENCE AT α = .05

TABLE 4.25 (CONT'D)

PIMRS 5 Monitoring Student Progress

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.0704	2	.5352	1.7609	.1808
SS WITHIN	17.9329	59	.3039		
SS TOTAL	19.0033	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	2.80	.251	.125	2.50	3.10	2.40 to 3.19
2 Sec	48	3.30	.580	.084	2.00	4.20	3.13 to 3.47
3 Both	10	3.39	.466	.147	2.73	4.28	3.06 to 3.72

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .5456 p = .027
Bartlett Box F = 1.421 p = .242
Max. Var./Min. Var. = 5.348

****

PIMRS 6 Protect Instructional Time.

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.2919	2	.1459	.8548	.4306
SS WITHIN	10.0728	59	.1707		
SS TOTAL	10.3646	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.44	.125	.063	3.30	3.57	3.24 to 3.64
2 Sec	48	3.64	.410	.059	2.75	4.45	3.52 to 3.76
3 Both	10	3.50	.487	.154	2.55	4.17	3.15 to 3.85

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .5634 p = .016
Bartlett Box F = 2.327 p = .098
Max. Var./Min. Var. = 15.099

****

TABLE 4.25 (CONT'D)

PIMRS 7 Maintain High Visibility

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.3939	2	.1969	.6605	.5204
SS WITHIN	17.5912	59	.2982		
SS TOTAL	17.9851	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.14	.402	.201	2.57	3.50	2.50 to 3.78
2 Sec	48	3.35	.527	.076	2.20	4.32	3.19 to 3.50
3 Both	10	3.16	.673	.213	2.20	4.00	2.68 to 3.64

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .5082 p = .075
Bartlett Box F = .697 p = .498
Max. Var./Min. Var. = 2.808

****

PIMRS 8 Provide Incentives for Teachers

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.5446	2	.7723	2.1912	.1208
SS WITHIN	20.7949	59	.3525		
SS TOTAL	22.3395	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.02	.471	.235	2.50	3.62	2.27 to 3.76
2 Sec	48	3.40	.593	.086	2.25	4.74	3.23 to 3.58
3 Both	10	3.72	.631	.200	2.55	4.49	3.27 to 4.17

Scheffé Procedure - No two groups significantly different at .05 level

Tests for Homogeneity of Variances
Cochrans C = .4101 p = .551
Bartlett Box F = .163 p = .850
Max. Var./Min. Var. = 1.801

****

TABLE 4.25 (CONT'D)

PIMRS 9 Promote Professional Development

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	1.4509	2	.7255	2.9373	.0608
SS WITHIN	14.5723	59	.2470		
SS TOTAL	16.0232	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.20	.287	.143	2.90	3.58	2.74 to 3.65
2 Sec	48	3.73	.501	.072	2.60	4.50	3.58 to 3.87
3 Both	10	3.91	.531	.168	2.90	4.66	3.53 to 4.29

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .4579 p = .234
Bartlett Box F = .643 p .526
Max. Var./Min. Var. = 3.420
****

PIMRS 10 Provide Incentives for Learning

SOURCE	SS	DF	MS	F RATIO	F PROB.
SS BETWEEN	.7650	2	.3825	1.2570	.2920
SS WITHIN	17.9534	59	.3043		
SS TOTAL	18.7184	61			

Groups	N	Mean	St. Dev.	St. Err.	Min	Max	95% Conf. Int.
1 Elem	4	3.49	1.177	.588	2.40	4.70	1.62 to 5.37
2 Sec	48	3.88	.499	.072	2.84	4.86	3.74 to 4.03
3 Both	10	4.01	.485	.153	3.30	4.60	3.66 to 4.35

Scheffé Procedure - No two groups significantly different at .05 level
Tests for Homogeneity of Variances
Cochrans C = .7412 p = .000
Bartlett Box F = 3.412 p = .034
Max. Var./Min. Var. = 5.897
****

LEVEL OF SIGNIFICANCE .05 = 3.15

APPENDIX B

PRINCIPAL SURVEY

November 28, 1990

Dear Colleague:

I am completing a doctoral degree at Michigan State University. My dissertation work involves a survey of middle level principals in Michigan, concerning the extent to which they involve themselves in instructional supervision in their buildings. In addition, I will be examining factors which may hinder or enhance the principal's efforts in instructional supervision. Your assistance in completing and returning the enclosed questionaire is very important. As a practicing middle school principal, I know that your time is valuable. Completing the survey should take approximately 15 to 20 minutes of your time. I believe that the results of this survey will have a significant impact on principals in terms of managing instructional supervision in their buildings.

I am also surveying a select group of faculty members in each building in order to develop a profile of principal instructional supervisory practices from a faculty point of view. The faculty survey is not to be an evaluation of your efforts at instructional supervision, but merely to compare, statewide, how faculty views and principal views may differ in regards to instructional supervision. The faculty surveys will be sent to you in a few weeks. I need your assistance in distributing the surveys to not more then ten teachers, who taught for you last year.

Your responses and those of the faculty are anonymous and will be kept confidential. You indicate your voluntary agreement to participate in this study, by completing and returning the survey. If you would like a copy of the results of the study, please include a return address with the survey. I plan to complete the study by the Spring of 1991.

Thank you for your assistance.

Sincerely,

Daniel C. Pratley, Principal

THE PRINCIPAL INSTRUCTIONAL MANAGEMENT RATING SCALE

PART I. Please provide the following information about yourself.

A. Male Female (circle one)

B. Years experience as principal of this building (circle one)

0-1 yrs / 2-5 yrs. / 6-10 yrs / 11-15 yrs / 16+ yrs

C. Write in the number of years teaching experience at each level

____yrs. elementary ____yrs. middle/jh. ____yrs. high

D. Your building is generally characterized as a:

middle school / junior high (circle one)

E. Indicate the number of students enrolled in your school

250 or less / 251-500 / 501-750 / 751+ (circle one)

F. Circle any of the following instructional models you have been trained in or write in a model if not listed.

I.T.I.P. / P.E.T. / T.E.S.A. _____ other

G. Do you have an assistant-principal? yes / no (circle one)

H. Do you have central office duties? yes / no (circle one)

PART II. This questionnaire is designed to provide a profile of instructional leadership. It consists of 50 behavioral statements that describe principal job practices and behaviors. You are asked to consider each question in terms of your instructional leadership behavior during the past school year. Read each statement carefully. Then circle the number which indicates the extent to which you feel you have demonstrated the specific job behavior or practice during the past year.

5 represents - Almost Always
4 represents - Frequently
3 represents - Sometimes
2 represents - Seldom
1 represents - Almost Never

Use your judgment in selecting the most appropriate response. Please circle only one number per question. Please answer every question.

Thank you.

PRINCIPAL INSTRUCTIONAL MANAGEMENT

RATING SCALE

Published by:

Leading Development Associates
Box 183 Colonel Greene Rd.
Yorktown Heights N.Y. 10598
(914) 962-5314

Principal Form 1.3

To what extent do you ...?

I. FRAME THE SCHOOL GOALS

	ALMOST NEVER				ALMOST ALWAYS
1. Develop a focused set of annual school-wide goals	1	2	3	4	5
2. Frame the school's goals in terms of staff responsibilities for meeting them	1	2	3	4	5
3. Use needs assessment or other systematic methods to secure staff input on goal development	1	2	3	4	5
4. Use data on student academic performance when developing the school's academic goals	1	2	3	4	5
5. Develop goals that are easily translated into classroom objectives by teachers	1	2	3	4	5

I. _____

II. COMMUNICATE THE SCHOOL GOALS

6. Communicate the school's mission effectively to members of the school community	1	2	3	4	5
7. Discuss the school's academic goals with teachers at faculty meetings	1	2	3	4	5
8. Refer to the school's academic goals when making curricular decisions with teachers	1	2	3	4	5
9. Ensure that the school's academic goals are reflected in highly visible displays in the school (e.g. posters or bulletin boards emphasizing reading or math)	1	2	3	4	5
10. Refer to the school's goals in student assemblies	1	2	3	4	5

II. _____

III. SUPERVISE & EVALUATE INSTRUCTION

11. Ensure that the classroom priorities of teachers are consistent with the stated goals of the school	1	2	3	4	5
12. Review student work products when evaluating classroom instruction	1	2	3	4	5

To what extent do you ...?

	ALMOST NEVER				ALMOST ALWAYS	
13. Conduct informal observations in classrooms on a regular basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference)	1	2	3	4	5	
14. Point out specific strengths in teacher's instructional practices in post observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5	
15. Point out specific weaknesses in teacher instructional practices in post observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5	
						III. _____

IV. COORDINATE THE CURRICULUM

16. Make clear who is responsible for coordinating the curriculum across grade levels (e.g., the principal, vice principal or teacher-leader)	1	2	3	4	5	
17. Draw upon the results of school-wide testing when making curricular decisions	1	2	3	4	5	
18. Monitor the classroom curriculum to see that it covers the school's curricular objectives	1	2	3	4	5	
19. Assess the overlap between the school's curricular objectives and the school's achievement tests	1	2	3	4	5	
20. Participate actively in the review of curricular materials	1	2	3	4	5	
						IV. _____

V. MONITOR STUDENT PROGRESS

21. Meet individually with teachers to discuss student academic progress	1	2	3	4	5	
22. Discuss the item analysis of tests with the faculty to identify curricular strengths and weaknesses	1	2	3	4	5	
23. Use test results to assess progress toward school goals	1	2	3	4	5	
24. Inform teachers of the school's performance results in written form (e.g., in a memo or newsletter)	1	2	3	4	5	
25. Inform students of school's test results	1	2	3	4	5	
						V. _____

To what extent do you ...?

VI. PROTECT INSTRUCTIONAL TIME

	ALMOST NEVER				ALMOST ALWAYS
26. Limit interruptions of instructional time by public address announcements	1	2	3	4	5
27. Ensure that students are not called to the office during instructional time	1	2	3	4	5
28. Ensure that tardy and truant students suffer specific consequences for missing instructional time	1	2	3	4	5
29. Encourage teachers to use instructional time for teaching and practicing new skills and concepts	1	2	3	4	5
30. Limit the intrusion of extra- and co-curricular activities on instructional time	1	2	3	4	5

VI. _____

VII. MAINTAIN HIGH VISIBILITY

31. Take time to talk with students and teachers during recess and breaks	1	2	3	4	5
32. Visit classrooms to discuss school issues with teachers and students	1	2	3	4	5
33. Attend/participate in extra- and co-curricular activities	1	2	3	4	5
34. Cover classes for teachers until a late or substitute teacher arrives	1	2	3	4	5
35. Tutor students or provide direct instruction to classes	1	2	3	4	5

VII. _____

VIII. PROVIDE INCENTIVES FOR TEACHERS

36. Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos	1	2	3	4	5
37. Compliment teachers privately for their efforts or performance	1	2	3	4	5
38. Acknowledge teachers' exceptional performance by writing memos for their personnel files	1	2	3	4	5
39. Reward special efforts by teachers with opportunities for professional recognition	1	2	3	4	5
40. Create professional growth opportunities for teachers as a reward for special contributions to the school	1	2	3	4	5

VIII. _____

To what extent do you ...?

IX. PROMOTE PROFESSIONAL DEVELOPMENT

	ALMOST NEVER				ALMOST ALWAYS
41. Ensure that in-service activities attended by the staff are consistent with the school's academic goals	1	2	3	4	5
42. Actively support the use of skills acquired during in-service training in the classroom	1	2	3	4	5
43. Obtain the participation of the whole staff in important in-service activities	1	2	3	4	5
44. Lead or attend teacher in-service activities concerned with instruction	1	2	3	4	5
45. Set aside time at faculty meetings for teachers to share ideas or information from in-service activities	1	2	3	4	5

IX. _____

X. PROVIDE INCENTIVES FOR LEARNING

46. Recognize students who do superior academic work with formal rewards such as an honor roll or mention in the principal's newsletter	1	2	3	4	5
47. Use assemblies to honor students for academic accomplishments or for behavior or citizenship	1	2	3	4	5
48. Recognize superior student achievement or improvement by seeing students in the office with their work	1	2	3	4	5
49. Contact parents to communicate improved or exemplary student performance or contributions	1	2	3	4	5
50. Support teachers actively in their recognition and/or reward of student contributions to and accomplishments in class	1	2	3	4	5

X. _____

ABOUT THE AUTHOR

Leading Development Associates (LDA), creator and publisher of the *Principal Instructional Management Rating Scale (PIMRS)*, is a consulting firm specializing in educational research, evaluation, and leadership development.

Dr. Philip Hallinger, director of LDA, received his doctorate in administration and policy analysis from Stanford University. He has worked as a teacher, administrator, college professor, and as the director of a principals' center. He has consulted to education and health care organizations throughout the United States and Canada and has developed several personnel and school assessment instruments.

The *PIMRS* was developed with the cooperation of the Milpitas (CA) Unified School District, Richard P. Mesa, superintendent. As a research instrument, it meets professional standards of reliability and validity, and has been used in over 30 studies of principal instructional leadership in the United States, Canada, Australia, Europe, and Asia.

The scale is also used by school districts for evaluation and professional development purposes. It surpasses legal standards for use as a personnel evaluation instrument, and has been recommended by researchers interested in professional development and district improvement (see for example Edwin Bridges, *Managing the Incompetent Teacher*, ERIC, 1984). Articles on the development and use of the *PIMRS* have appeared in *The Elementary School Journal, Administrators Notebook, NASSP Bulletin, and Educational Leadership*.

APPENDIX C

LETTER TO PRINCIPALS

January 10, 1991

Dear Colleague:

Thank you very much for your prompt reply to the survey form I sent you recently concerning my doctoral dissertation work on the middle level principal's involvement in curriculum management. As I indicated in my initial letter to you, I need to survey 10 teachers in your building as part of the data collection to determine what differences may exist between the principal's and the teachers' points of view on curriculum management on a statewide basis. I have enclosed the teacher survey forms. I would appreciate your assistance in distributing these surveys to teachers who taught in your building last year. I have enclosed an addressed and stamped envelope for them to return the survey to me.

Please encourage them to complete and return the survey. Their input is vital to the successful completion of this study. I appreciate your assistance in this study.

Thank you.

Sincerely,

Daniel C. Pratley, Principal

APPENDIX D

TEACHER SURVEY

January 15, 1991

Dear Faculty Member:

I am completing a doctoral degree at Michigan State University. My dissertation work involves a survey of middle level principals in Michigan, concerning the extent to which they involve themselves in instructional supervision in their buildings. In addition, I will be examining factors which may hinder or enhance the principal's efforts in instructional supervision.

I am also surveying a select group of faculty members in each building in order to develop a profile of principal instructional supervisory practices from a faculty point of view. The faculty survey is intended to compare, statewide, how faculty views and principal views may differ in regards to instructional supervision. Your principal completed and returned the principal survey form, and I need your assistance in completing and returning the teacher survey. I know that your time is valuable, but your input is critical and may have a great impact on how principals in the future manage instructional supervision. The survey will take approximately 15 to 20 minutes to complete. Your responses are anonymous and will be kept confidential. Your principal will not know how you responded to the survey, since the results will be reported on a statewide basis and not on a building basis. You indicate your voluntary agreement to participate in this study by completing and returning the survey. Please return this survey within 10 days of receiving it.

Thank you for your assistance.

Sincerely,

Daniel C. Pratley, Principal

THE PRINCIPAL INSTRUCTIONAL MANAGEMENT RATING SCALE

PART 1: Please provide the following information about yourself.

A. Male Female (circle one)

B. Indicate the number of years you have worked with your current principal in this building. (circle one)

1 yr / 2-5 yrs / 6-10 yrs / 11-15 yrs / 16+ yrs

C. Indicate the number of years you have been a teacher (circle one)

1 yr / 2-5 yrs / 6-10 yrs / 11-15 yrs / 16+ yrs

D. The middle level grade you teach (circle all that apply)

4th / 5th / 6th / 7th / 8th / 9th

E. Circle any of the following instructional models you have received training in or write in the model if not listed.

I.T.I.P. / P.E.T. / T.E.S.A. _____ other

PART II. This questionnaire is designed to provide a profile of principal instructional leadership. It consists of 50 behavioral statements that describe principal job practices and behaviors. You are asked to consider each question in terms of your principal's job-related behavior over the past school year.

Your particular responses are anonymous and will be kept confidential. AT NO TIME WILL YOUR INDIVIDUAL QUESTIONNAIRE BE SHARED WITH YOUR PRINCIPAL. Your responses will be combined with the responses of other teachers in order to develop a profile.

Read each statement carefully. Then circle the number that indicates the extent to which you feel your principal has demonstrated the specific job behavior or practice during the past school year.
5 represents - Almost Always
4 represents - Frequently
3 represents - Sometimes
2 represents - Seldom
1 represents - Almost Never

Use your judgment in selecting the most appropriate response. Circle only one number per question. Please answer each question.

Thank you.

PRINCIPAL INSTRUCTIONAL MANAGEMENT

RATING SCALE

Published by:

Leading Development Associates
Box 183 Colonel Greene Rd.
Yorktown Heights N.Y. 10598
(914) 962-5314

Teacher Form 1.3

To what extent does your principal ...?

I. FRAME THE SCHOOL GOALS

	ALMOST NEVER				ALMOST ALWAYS
1. Develop a focused set of annual school-wide goals	1	2	3	4	5
2. Frame the school's goals in terms of staff responsibilities for meeting them	1	2	3	4	5
3. Use needs assessment or other systematic methods to secure staff input on goal development	1	2	3	4	5
4. Use data on student academic performance when developing the school's academic goals	1	2	3	4	5
5. Develop goals that are easily translated into classroom objectives by teachers	1	2	3	4	5

I. _____

II. COMMUNICATE THE SCHOOL GOALS

6. Communicate the school's mission effectively to members of the school community	1	2	3	4	5
7. Discuss the school's academic goals with teachers at faculty meetings	1	2	3	4	5
8. Refer to the school's academic goals when making curricular decisions with teachers	1	2	3	4	5
9. Ensure that the school's academic goals are reflected in highly visible displays in the school (e.g. posters or bulletin boards emphasizing reading or math)	1	2	3	4	5
10. Refer to the school's goals in student assemblies	1	2	3	4	5

II. _____

III. SUPERVISE & EVALUATE INSTRUCTION

11. Ensure that the classroom priorities of teachers are consistent with the stated goals of the school	1	2	3	4	5
12. Review student work products when evaluating classroom instruction	1	2	3	4	5

To what extent does your principal ...?

	ALMOST NEVER				ALMOST ALWAYS
13. Conduct informal observations in classrooms on a regular basis (informal observations are unscheduled, last at least 5 minutes, and may or may not involve written feedback or a formal conference)	1	2	3	4	5
14. Point out specific strengths in teacher's instructional practices in post observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5
15. Point out specific weaknesses in teacher instructional practices in post observation feedback (e.g., in conferences or written evaluations)	1	2	3	4	5

III. _____

IV. COORDINATE THE CURRICULUM

16. Make clear who is responsible for coordinating the curriculum across grade levels (e.g., the principal, vice principal or teacher-leader)	1	2	3	4	5
17. Draw upon the results of school-wide testing when making curricular decisions	1	2	3	4	5
18. Monitor the classroom curriculum to see that it covers the school's curricular objectives	1	2	3	4	5
19. Assess the overlap between the school's curricular objectives and the school's achievement tests	1	2	3	4	5
20. Participate actively in the review of curricular materials	1	2	3	4	5

IV. _____

V. MONITOR STUDENT PROGRESS

21. Meet individually with teachers to discuss student academic progress	1	2	3	4	5
22. Discuss the item analysis of tests with the faculty to identify curricular strengths and weaknesses	1	2	3	4	5
23. Use test results to assess progress toward school goals	1	2	3	4	5
24. Inform teachers of the school's performance results in written form (e.g., in a memo or newsletter)	1	2	3	4	5
25. Inform students of school's test results	1	2	3	4	5

V. _____

To what extent does your principal ...?

VI. PROTECT INSTRUCTIONAL TIME

	ALMOST NEVER				ALMOST ALWAYS
26. Limit interruptions of instructional time by public address announcements	1	2	3	4	5
27. Ensure that students are not called to the office during instructional time	1	2	3	4	5
28. Ensure that tardy and truant students suffer specific consequences for missing instructional time	1	2	3	4	5
29. Encourage teachers to use instructional time for teaching and practicing new skills and concepts	1	2	3	4	5
30. Limit the intrusion of extra- and co-curricular activities on instructional time	1	2	3	4	5

VI. _____

VII. MAINTAIN HIGH VISIBILITY

31. Take time to talk with students and teachers during recess and breaks	1	2	3	4	5
32. Visit classrooms to discuss school issues with teachers and students	1	2	3	4	5
33. Attend/participate in extra- and co-curricular activities	1	2	3	4	5
34. Cover classes for teachers until a late or substitute teacher arrives	1	2	3	4	5
35. Tutor students or provide direct instruction to classes	1	2	3	4	5

VII. _____

VIII. PROVIDE INCENTIVES FOR TEACHERS

36. Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos	1	2	3	4	5
37. Compliment teachers privately for their efforts or performance	1	2	3	4	5
38. Acknowledge teachers' exceptional performance by writing memos for their personnel files	1	2	3	4	5
39. Reward special efforts by teachers with opportunities for professional recognition	1	2	3	4	5
40. Create professional growth opportunities for teachers as a reward for special contributions to the school	1	2	3	4	5

VIII. _____

To what extent does your principal ...?

IX. PROMOTE PROFESSIONAL DEVELOPMENT

	ALMOST NEVER				ALMOST ALWAYS
41. Ensure that in-service activities attended by the staff are consistent with the school's academic goals	1	2	3	4	5
42. Actively support the use of skills acquired during in-service training in the classroom	1	2	3	4	5
43. Obtain the participation of the whole staff in important in-service activities	1	2	3	4	5
44. Lead or attend teacher in-service activities concerned with instruction	1	2	3	4	5
45. Set aside time at faculty meetings for teachers to share ideas or information from in-service activities	1	2	3	4	5

IX. _____

X. PROVIDE INCENTIVES FOR LEARNING

46. Recognize students who do superior academic work with formal rewards such as an honor roll or mention in the principal's newsletter	1	2	3	4	5
47. Use assemblies to honor students for academic accomplishments or for behavior or citizenship	1	2	3	4	5
48. Recognize superior student achievement or improvement by seeing students in the office with their work	1	2	3	4	5
49. Contact parents to communicate improved or exemplary student performance or contributions	1	2	3	4	5
50. Support teachers actively in their recognition and/or reward of student contributions to and accomplishments in class	1	2	3	4	5

X. _____

APPENDIX E

LETTER OF PERMISSION TO USE SURVEY INSTRUMENT

George Peabody College for Teachers
VANDERBILT UNIVERSITY
NASHVILLE, TENNESSEE 37203 TELEPHONE (615) 322-7311

Center for the Advanced Study of Educational Leadership • Direct phone 343-7092

April 12, 1989

Mr. Daniel Pratley
P.O. Box 44
Lawton
MI 49097

Dear Mr. Pratley:

Please find enclosed master copies of the **Principal Instructional Management Rating Scale.** The **PIMRS** is a copyrighted test instrument. You have obtained the right to make unlimited copies of the **PIMRS** for your research and for this purpose only (the right to use the **PIMRS** for staff development purposes is provided under separate terms). The enclosed **PIMRS** Users Manual should be useful as you prepare to conduct your investigation. I will be in touch with you from time to time to provide you with updates on other **PIMRS** users' research.

I ask your consideration in remembering that a condition of your use of the **PIMRS** is that you forward a full copy of the study results to me upon completion. This makes it possible for me to share the results with other **PIMRS** users.

Feel free to call me at 1-800-288-3357 or 1-615-343-7092 if you have any questions. Good luck with your study.

Sincerely,

Philip Hallinger
Director
Center for the Advanced Study of Educational Leadership

Enclosure
Mac-pimr2.let

APPENDIX F

LETTER OF APPROVAL FROM THE UNIVERSITY COMMITTEE ON RESEARCH INVOLVING HUMAN SUBJECTS

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

October 9, 1990

RE: IRB# 90-401

Mr. Daniel Pratley
Lawton Middle School
Lawton, MI 49065

RE: A STUDY OF MICHIGAN MIDDLE LEVEL PRINCIPALS AND THE EXTENT OF THEIR INVOLVEMENT IN INSTRUCTIONAL SUPERVISION WITHIN THEIR BUILDINGS

Dear Mr. Pratley:

The above project is exempt from full UCRIHS review. The proposed research protocol has been reviewed by another committee member. The rights and welfare of human subjects appear to be protected and you have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to October 9, 1991.

Any changes in procedures involving human subjects must be reviewed by UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,

David E. Wright

David E. Wright, Ph.D.
Chair, UCRIHS

DEW/deo

cc: Frederick Ignatovich

APPENDIX G

FOLLOW-UP POSTCARD TO PRINCIPALS

January 16, 1991

Dear Colleague:

A few weeks ago, I sent you a survey I am using to collect data on the role of the middle level principal in instructional supervision as part of my doctoral program at Michigan State University. I have not received your completed survey. I need your input into this study. Please take a few minutes to complete the survey and return it to me.

Thank you.

Sincerely,

Daniel C. Pratley
Principal

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