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# The relationships of teacher perceptions and administrator time on instructional leadership with school learning climate

Karyn Meacham Dzyacky  
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**The relationships of teacher perceptions and administrator time  
on instructional leadership with school learning climate**

**Dzyacky, Karyn Meacham, Ph.D.**

**Iowa State University, 1988**

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The relationships of teacher perceptions and  
administrator time on instructional leadership  
with school learning climate

by

Karyn Meacham Dzyacky

A Dissertation Submitted to the  
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Ames, Iowa

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## CHAPTER I. INTRODUCTION

The research on effective schools and teaching effectiveness and their links to instructional leadership tend to advocate simple, tidy, and neat answers to a very complex problem of school leadership. Most of the studies have proposed the role of a strong principal in the creating of "effective schools" (Brookover et al., 1979; Edmonds, 1979; Rutter et al., 1979; Lipham, 1981) and some have called for a new relationship between teachers and administrators (Willower, 1983; Peterson, 1986; Shanker, 1986; Sergiovanni, 1987). The role of the principal as the instructional leader is the recent "hot topic"--a popular prescription for reforming schools.

### The Nature of Principals' Work

Similar to other managers, principals' work activities are observed to have characteristics of brevity, variety, fragmentation, and unexpected demands (Mintzberg, 1973; Willower & Martin, 1981). Their work has constant interruptions and occurs in face-to-face, verbal interactions with others. Although the nature of the job appears to make it impossible for the principal to focus activities, Peterson's research (1982) has observed that even though there are brief encounters, the principal is the constant, linking the entire subunit (building) and he calls for further research on the "mundane properties of the tasks of principals."

### Instructional Leadership and Effective Schools

A survey of major theories and concepts in the area of leadership addresses several responses to what it takes to be a good leader.

Recently, as the demand for better schools surges on, new studies are searching for new understandings on this complex phenomena. Russell et al. (1985) have taken a behaviorist approach as they examined the activities of principals linked to improving instruction. Effective schools research has linked characteristics (responsibilities of principals) to improvements in student outcomes (Brookover et al., 1979; Edmonds, 1979). Research on school climate has linked the principal's performance of various functions (human resource management, instructional leadership, learning environment management, noninstructional management, pupil personnel, and school and community relations) to measurements of school effects. School effects contribute to the overall climate of a school and include measures of school learning environment, goal orientation, teacher expectations for student achievement, student attitudes toward learning, cohesiveness, and esprit (Pinckney, 1982). More research is needed to translate the leader behaviors, functions, and responsibilities into competencies necessary to perform instructional leadership.

#### Building Climate and Principal/Teacher Interactions

"A positive learning climate and a principal who supports the establishment and maintenance of this climate" were described as two essential elements by Mueller (1987). A school building appears to take on a personality depending upon the sense of "family" held by its teachers, administrators, and students (Sweeney, 1987). Sergiovanni (1987) observed that significant changes are taking place in how school leadership is viewed, understood, and practiced. He states that



interactions with others influence the process of perceiving leadership and that it is teacher, student, and administrator perceptions which shape school culture. This view of leadership puts more emphasis upon the ability to communicate values and ideals than on how the leaders behave. The current literature advises as to what principals should do to build effective schools, but little attention is given to how effective principals go about being effective (Donmoyer, 1985; Achilles, 1987).

#### Statement of the Problem

The problem is to study the relationships, if any, of teacher perceptions, administrator time on instructional leadership, and school learning climate, in regards to school effects and communication effects as measured by the School Improvement Inventory (SII). This survey has been used to measure school climate in hundreds of schools nationwide and has been validated by the research of Pinckney (1982). This study centers on measuring the relationship of administrator behaviors, teacher perceptions, and school learning climate. The literature pertaining to the dynamics of instructional leadership, organizational climate, and communication research, if applied to school settings, supports the following assumptions:

1. Teachers place a high value on administrators' activities which enhance their satisfaction with teaching (Pinckney, 1982).
2. The time which administrators spend on important activities is related to the administrators' perception of the relative importance (Pinckney, 1982).

3. The administrators' perception of the relative importance is influenced by the teachers' perception of the relative importance (Sergiovanni, 1987).
4. The time which administrators spend with teachers on important activities is influenced by both their own and the teachers' perception of relative importance (Steinfatt & Miller, 1974).
5. Teachers' perception of administrators' effectiveness on important activities is influenced by the time with teachers that administrators spend on important activities (Grunig & Hunt, 1984).
6. An increase in the amount of communication behavior will increase the communication effects such as awareness, comprehension, or action (Grunig & Hunt, 1984).
7. Perceptions of the relative importance of information influences which information a person seeks and how frequently they will seek the information (Grunig & Hunt, 1984).
8. Time plays a necessary role in communication for information processing and normalizing (Massaro, 1984).
9. School leaders rely on normative power when seeking coordination order and compliance (Etzioni, 1961).

These theoretical assumptions can be conceptualized as a model (see Fig. 1) and suggest empirical research regarding the dynamics of instructional leadership. The theoretical framework within the context of this model poses specific questions for this study:

1. Are teachers' perceptions of the importance of instructional leadership able to influence their own perception of the

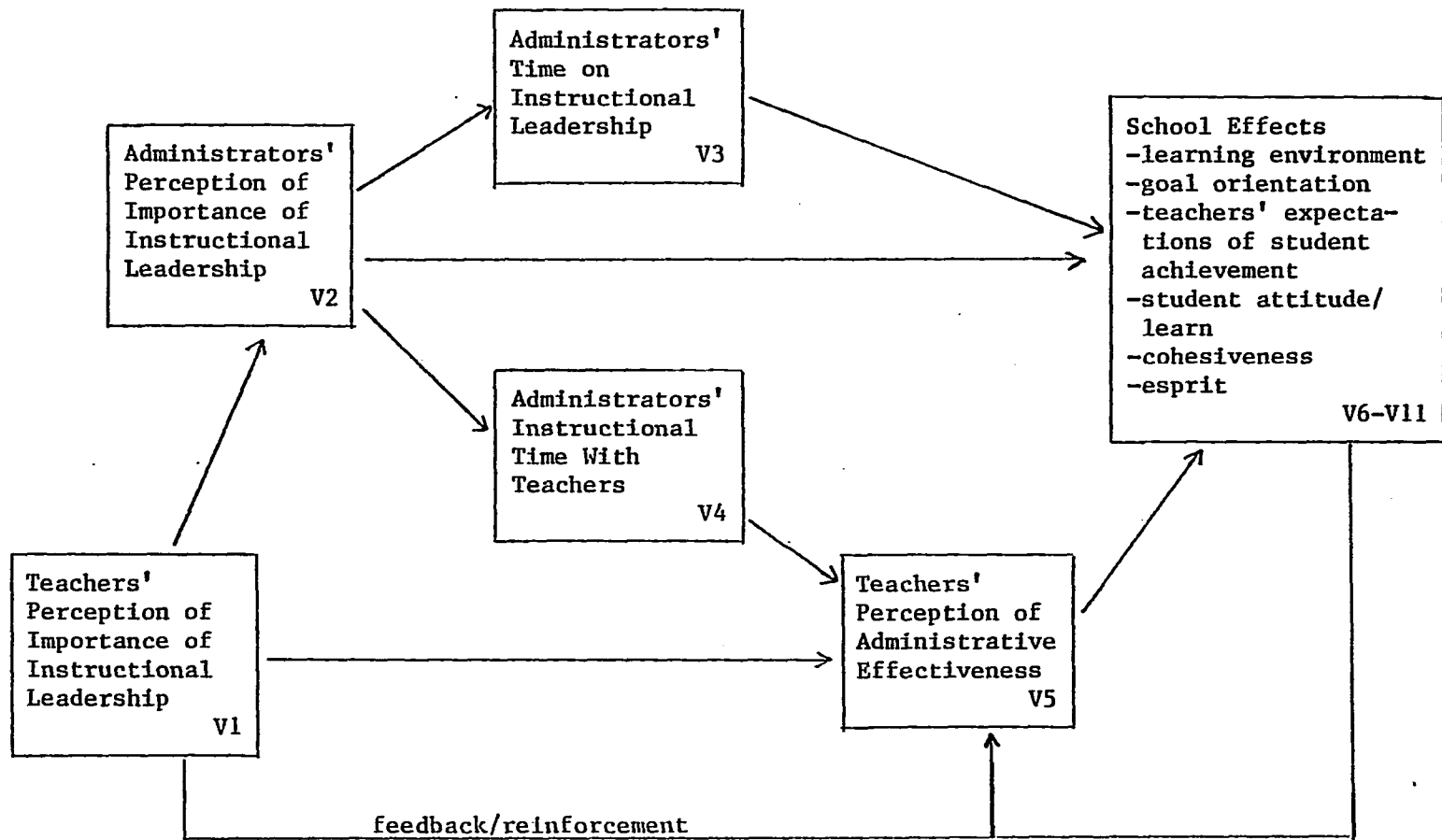


Figure 1. Model of instructional leadership dynamics (Author, 1988)

- administrators' effectiveness and also the administrators' perception of the importance of instructional leadership?
2. Does the administrators' perception of the importance of instructional leadership influence the amount of time they spend on instructional leadership and also the amount of time they spend with teachers on instructional leadership?
  3. Does the amount of administrators' time spent on instructional leadership influence school effects, viz., teacher expectations for student achievement, cohesiveness, esprit, goal orientation, school learning environment, and student attitudes toward learning?
  4. Does the amount of time administrators spend with teachers on instructional leadership together with teachers' perception of the importance of instructional leadership influence teachers' perceptions of administrators' effectiveness?
  5. Do teachers' perceptions of the administrators' effectiveness influence any school effects?
  6. Do the school effects reinforce as feedback and influence teachers' perceptions of administrator effectiveness and/or importance of instructional leadership?
  7. Do administrators' perceptions, together with teachers' perceptions and amount of time spent on instructional leadership activities, predict school effects relative to instructional outcomes?

### Purpose

Current literature has been calling for the understanding of the dynamics of instructional leadership. The intricacies and complexities of instructional leadership need to be clarified. Behaviors the effective principal exhibits have received some attention, but how an effective principal goes about being effective has had little attention. Therefore, the intention of this study is to:

1. Determine the relationship, if any, of administrator time spent on instructional leadership behaviors to school effects.
2. Determine the relationship, if any, of administrator time spent with teachers on instructional leadership behaviors to school effects.
3. Develop a conceptual framework (Marx, 1966) which shows the relationship between the variables representing leadership behaviors, perceptions of teachers and administrators, administrator time spent with teachers, and school effects. Test the model in order to discover possible cause-and-effect patterns among several variables.
4. Contribute information which will help explain the complex phenomenon of instructional leadership which will enhance administrator training for improving schools.

### Objectives

In order to accomplish the purposes of this study, it will be necessary to:

1. To examine the literature and select variables which are attributed to instructional leadership.
2. To construct a model which illustrates the relationship of the variables contributing to instructional leadership and school effects.
3. To develop a data base that includes time logging of administrator work activities critical to instructional leadership, interaction time between administrators and teachers, perceptions of administrators and teachers, and school effects.
4. To develop a method of calculating means of time spent, perception scores, and school effect scores.
5. To select and use appropriate statistical tests for each hypothesis.

#### Research Hypotheses

In order to fulfill the purposes of this study, hypotheses for relationships between perceptions of administrators and teachers, time on instructional leadership behaviors, time with teachers, and school effects were developed and tested. The following hypotheses are correlational:

1. Hypotheses: Reports of the importance of instructional leadership behaviors by teachers and administrators will be positively related to:
  - a. administrators' time on instructional leadership,
  - b. administrators' instructional time with teachers,
  - c. teachers' perception of administrator effectiveness, and
  - d. school effects.

The overall theoretical model previously proposed suggests the path analytic hypotheses for prediction of school effects from combinations of perceptions of administrators and teachers, time on instructional leadership behaviors, time with teachers, and school effects.

The following hypotheses concern the prediction of school effects from other variables in this study.

2. Hypotheses: Reports of the importance of instructional leadership by both teachers and administrators combined with time on instructional leadership behaviors, time with teachers, and teachers' perceptions of administrator effectiveness will predict these school effects:
  - a. learning environment,
  - b. goal orientation,
  - c. teachers' expectations of student achievement,
  - d. student attitudes for learning,
  - e. cohesiveness, and
  - f. esprit.

Portions of the overall theoretical model suggest path analytic subhypotheses for prediction of school effects.

- a. Subhypothesis: Reports of the importance of instructional leadership by administrators combined with the administrators' time on instructional leadership behaviors will predict school effects.
- b. Subhypothesis: Reports of the importance of instructional leadership by administrators and the administrators' time

with teachers and teachers' perceptions of the importance of instructional leadership and administrator effectiveness will combine to predict school effects.

- c. Subhypothesis: Measurements of school effects variables will function as feedback/reinforcement to teachers' perceptions of importance of instructional leadership and teachers' perception of administrator effectiveness which will function as feedback/ reinforcement to perceptions of administrators about the importance of instructional leadership.

The model proposed from the theoretical framework also suggests hypotheses for analysis of causality.

The following hypotheses concern the causality of school effects by other variables in this study.

3. Hypotheses: Reports of the importance of instructional leadership by both teachers and administrators combined with time on instructional leadership behaviors, time with teachers, and teachers' perceptions of administrator effectiveness will demonstrate a causal relation to these school effects:
  - a. learning environment,
  - b. goal orientation,
  - c. teachers' expectations of student achievement,
  - d. student attitudes for learning,
  - e. cohesiveness, and
  - f. esprit.



### Basic Assumptions

This study was based upon the following assumptions:

1. That each administrator will record time on work activities accurately.
2. That each administrator will categorize his/her work activities in a consistent manner.
3. That the climate survey of school effects will be free of interfering events such as teacher layoffs, collective bargaining, etc.

### Delimitations

This study was intended to generate knowledge about the relationships of administrator behavior, teacher perceptions, and the school learning climate effects. Schools participating in this study were from four public school districts: Waterloo, Iowa; Fruitport, Michigan; East Allen County, Fort Wayne, Indiana; and Liberal, Kansas. Each of these districts had sought assistance for school reform from the Iowa State University School Improvement Model (SIM) Projects. Building principals (K-12) and their assistants were the only administrators from whom data were collected on critical work activity time logs. All data were gathered during 1986 and 1987.

Critical work activity logs were kept to show the administrators' time for twenty work days. The School Improvement Inventory was administered after the critical work activity logging period. Teachers and building administrators responded to the School Improvement Inventory.

## Definition of Terms

School climate: The teaching/learning atmosphere as measured by the School Improvement Instrument.

School effects: Defined concepts associated with the climate of the school. Measures of the effects from subscales of the School Improvement Instrument are used to define and measure the climate and include goal orientation, cohesiveness, esprit, school learning environment, student attitudes toward learning, and teacher expectations for student achievement.

Communication effects: Defined concepts such as awareness, understanding, attitude, and behavior resulting from the communication process.

Goal orientation: The extent to which teachers are committed to "making a difference."

Esprit: The extent to which teachers experience a sense of accomplishment in their work.

Cohesiveness: The extent to which teachers are able to work together on important school matters.

Teacher expectations: The extent to which teachers expect students to do their best.

Student attitudes: The extent to which students display a positive general attitude.

Learning environment: The extent to which teachers perceive the school environment to be conducive to learning.

Instructional leadership activities: Administrator performance which enhances learning.

Critical work activities: Administrator behaviors which are linked by research to effective schools.

Supports teachers: The extent to which building administrators provide: information about policies and procedures, positive reinforcement for efforts and accomplishments, assistance in establishing effective relationships with individual students to their teachers.

Assists with instructional strategies: The extent to which building administrators emphasize student achievement, serve as a facilitator for instructional programs, and promote activities to identify, analyze, and solve instructional problems.

Supervises the curriculum: The extent to which building administrators monitor the implementation of curriculum, evaluate the curriculum offerings, and work toward articulation of curriculum goals and objectives.

Evaluates student progress: The extent to which building administrators use the results of the testing program, collect/organize/interpret data about student progress, and discuss student progress with teachers.

Supports improvement of instruction: The extent to which building administrators supervise and evaluate teachers' performance.

Provides orderly environment: The extent to which building administrators schedule instructional space, arrange for materials and resources that are needed for instructional programs, and institute high standards of conduct.

## CHAPTER II. REVIEW OF LITERATURE

## Introduction

"Humans are communicators by nature. Their sense of well-being is largely determined by the quality of their interactions with others" (Huseman et al., 1976, p. vi).

Not unlike other organizations, schools depend upon certainty and direction to achieve organizational goals, but the enigma is that the very organization which thrives upon communication at the same time has built-in communication constraints and inhibitions which threaten the organization's survival. The administrator's task is to weave the processes of communication and perception together with the desired school outcomes and, in so doing, reach mutual satisfaction of individuals and the organization.

This review of literature and related research is organized to explain the variables of teacher perceptions, administrator behaviors, and school effects which combine to shape instructional leadership.

## Communication: Individuals and Organizations

The ancient Greek intellectual, Aristotle, focused almost entirely on the source of the message when discussing communication. A later view of communication, which became accepted by many, was the consideration of two communication components--A, the speaker, and B, the listener. Recently, attention to additional communication variables such as receivers, feedback, and message channels has further explained the process of communication with more detail. Miller and Steinberg (1975) propose that

a "relational perspective" on communication is necessary when considering individuals and organizations. The basis for a relational view of communication is that any time two or more persons communicate, they form a communication relationship and that communication variables comprise a whole communication system; i.e., in order for two or more persons to communicate, they must form a mutual system.

Understanding communication is likened to "...understanding life's most complex event--a face-to-face encounter with another person" (Pease, 1984, p. 3). In an attempt to sort out the complexities of communication, Birdwhistell's (1952) and Mehrabian's (1969) research resulted in similar estimates: the verbal component of face-to-face encounters is less than 35 percent, while the nonverbal portion of communication is over 65 percent. The accuracy of interpretations is keyed from congruence of verbal and nonverbal channels.

The importance of face-to-face encounters increases considerably when one considers that more than 65 percent of communication effects are derived from the nonverbal component and that accuracy of interpretation depends on congruence of verbal with nonverbal messages. There are two schools of thought about bodily behavior or nonverbal communication. The psychological school considers it as the expression of emotion accompanying language (a historical point of view as far back as Darwin (1872)). The communications school (primarily anthropologists) considers nonverbal communications in relation to social processes such as group cohesion and group regulation. Schefflen (1972) suggests that these two views are not incompatible in that behavior is seen as an expression when

observing one member of a group; but when observing what behavior "does" in the larger group, a communicational view is apparent. Schefflen goes on to suggest that communication behaviors (nonverbals) function as social cohesion or bonding, understanding of social order, preserving internal organization through reciprocals, and other various regulatory functions.

Miller and Steinberg (1975) distinguish interpersonal communication from the cultural and sociological levels of noninterpersonal. Organizations exhibit two kinds of sociological communication relationships, a formal type which has a narrow range of communication alternatives carefully specified for communicators, and the informal type which has the same characteristics, but to a lesser degree. The latter has a fair degree of latitude on times, places, and ways with more communication behaviors available. Miller and Steinberg also observe that sometimes the informal communication relationship may be so open that this sociological level may move to the interpersonal (psychological level) rapidly. Interpersonal relationships evolve from noninterpersonal foundations. A comparison of these communication relationships is explained in this way:

When compared to interpersonal communication relationships, personal choice in noninterpersonal relationships is relatively restricted. In noninterpersonal relationships, individual expression is discouraged, since it detracts from the stability of the relationship. Emphasis is placed on similarities, on how well people can follow previously established rules, conversely, in interpersonal relationships, the emphasis is on expression of individual differences. Not only is personal freedom accepted, it is encouraged and nurtured (pp. 56-57).

Since communication relationships depend on some opportunity for face-to-face contact, it follows that "any kind of communication relationship involves the intersection of two or more individuals in space, in time, and in the context of some information about each other" (Miller & Steinberg, 1975, p. 202). The length of time individuals share mutual space is an important factor in relational development. More time increases the likelihood that more information will be acquired pertinent to the development. Frequently, the degree of trust (constant, increase, or decrease) is relational to the time spent in communication relationships. That is to say, the more time the participants spend together, the more they come to trust one another until a trying incident where one person lets the other down (sudden de-escalation of trust) or the one person comes through (sudden escalation of trust). The escalation of an interpersonal relationship is correlated to the degree of trust.

The effects of rapid change in our society on personal identities is another aspect of the time dimension often overlooked. Toffler (1970) raised an alarm concerning the increased rate of change in our society which will likely cause persons to urgently search for stability and continuity in their environment. Time, then, in the form of longevity of relations, may become more important when evaluating relationships that create an organization's climate which survive a dynamic environment.

Steinfatt and Miller (1974) described various research results of communication studies concerning individuals within group activities. Several studies such as that of Oskamp and Perlman (1965) revolved around conflict games. In this study, half the subjects were allowed to see each

other before playing the game and half were not. "...given the opportunity for considerable prior interaction, pre-nonverbal communication may lead to higher levels of cooperation than complete anonymity..." (p. 39). When Todd, Hammond, and Wilkins (1966) allowed all subjects to communicate freely, the major findings showed that conflicts were resolved by compromise through use of feedback. Vincent and Tindell's (1969) findings suggest that the opportunity for communication mediates aggressive behavior. In each of three conditions (cooperative, individualistic, and competitive), communication attempts produced increased cooperation (Deutsch, 1957, 1958, 1960). Loomis (1959) found that as communication increased from absolute zero to written messages stating exact expectations for both parties, the level of mutual trust increased significantly. In addition, Cheney, Harford, and Solomon (1972) concluded that positive communication subjects sent twice as many messages as their negative counterparts, and research by Swingle and Santi (1972) found that where subjects could use their discretion about exchanging messages, they produced a greater increase in cooperation than when forced to communicate.

In summary, communications findings reflect the strong tendency for communication factors (availability of information, the length of time, the frequency, the openness, and the opportunity for communication) to produce more cooperation whenever it is introduced. The quality of cooperation or motivation is dependent upon the quality of communication, and they are viewed by researchers as equal in importance to organizational effectiveness. "Thus,...the two processes [motivation and



cooperation] are so entwined as to make concentration on one--if not impossible--extremely impractical" (Huseman, Lahiff, & Hatfield, 1976). Effective training is dependent on two-way communication, upon the regular give and take of information.

It seems that the frequency of interaction is among the best researched behavioral correlates of performance expectations. Brophy and Good (1984) recorded similar results when they cited twenty studies assessing teacher-student academic interactions. Also, the model for "Expectation Communication and Behavior Influence" by Cooper and Good (1983, p. 17) draws from recent social-psychological formulations of communication factors such as perceptions, feedback, length of time, and frequency which impact student attitudes and behaviors.

Contemporary research such as those mentioned have examined the teaching process via the intermediate variable of pupil in-class activities. Measures of time are frequently used in these studies. Smyth (1985) explains that there are two advantages of time as a classroom research variable: it can be measured with precision and the time measurements have equality of units and an absolute zero which allow comparability between individuals.

#### The Role of Time

Research on teaching takes an economic perspective (Smyth, 1985) as the concern for productivity is examined and time is conceptualized as a resource used to optimize outputs. The allocating of time has an important impact for school personnel because it is one of the few resources over which they have discretionary control. Time is more than

something to be used up or a void to be filled. Academic learning time (Berliner, 1980) has long-term potential for predicting outcomes. It is theoretically sound and practically based. Smyth concludes that using time to understand the myriad of events that constitute daily routines has "implication for practitioners and for design of future research studies...(research is) only just beginning to uncover the complex web of interrelationships" (p. 21). The context suggested by Smyth reminds us that time marks the expenditure of a precious commodity and that the goal may not be to simply add hours, but make better use of the time we already have.

While time serves multiple roles in our interactions with our environment, Massaro (1984) selects the most obvious role in terms of information; "the duration of an event provides a cue to the identity of the event...(secondly), time is necessary for perceptual processing...(and) finally...the issue of normalizing the information available to this perceptual process" (p. 372). He further explains these three roles of time by describing a stimulus as a function of not only its physical characteristics, but also the amount of time spent processing it and that any given stimulus will have a variety of perceptions, dependent upon the amount of time available for processing.

Medin (1984) summarized several papers on time, perceptions, etc. and concluded that once time is viewed as an attribute, one is led to ask whether time makes an independent contribution to performance. The consensus reached from his review of the literature was that time interacts with other attributes. It may be an advantage in the short run

to study time independently; over the long run, time enters into and is influenced by other processes. Leinhardt (1985) also expresses a similar warning when writing perspectives on instructional time. The singular attribute of time-on-task is too simplistic in his view and he suggests that time be incorporated as a descriptor of an activity and explains that time is a useful concept when considered as a metaphor.

The Model for School Learning (MSL) developed by Carroll (1963) traced the resource flow from the school district to the school building, to the classroom, and to the individual focus of teacher-pupil interaction time. Carroll felt that more parsimonious descriptions of learning may be obtained by the use of time as a variable. Brown and Saks (1985) criticized the MSL by commenting that "no fancy thinking nor formal observation is needed to establish the point that it takes longer to learn more" (p. 40). When defending the underlying theory of the MSL, Carroll does not claim that time is the only variable in learning, or even the most important and further, "Although several of the model's variables are expressed in terms of time, what goes on in time is more important.... Time is undoubtedly necessary, but not sufficient" (1985, p. 47). Berliner and Rosenshine (1977) agree with this concept of time also as they describe the paradox that time may be viewed as both disarmingly simple and frightfully complex at the same moment. Berliner is even pessimistic as he authors a paper with Fisher (Berliner & Fisher, 1985) about using time for feedback to individual teachers about their performance. They caution that the increase of quantity of time alone will fail to provide useful feedback to teachers.

Barr and Dreeban (1985) differentiate time according to its two manifestations found within schools. The "making of time available" to students is an organizational process, i.e., curricular time allotments and temporal constraints established by high level decisions. The "using of time" (p. 115) is an individual process for the administrator, teacher, and student, i.e., the conception that time must have a referent that pertains to different kinds of activities performed by the individual. They see the decisions made about time and content as representing "the resolution of competing claims over school resources" (p. 116). They summarize with a contention that the closer schools come, in organizational terms, to the level of individuals, the greater the relevance of the amount and use of time to learning.

Studies centered on time as symbolic interaction and as an interesting abstraction (Lawrence & Lorsch, 1967; Hall, 1987; Cardwell, 1971; and Henley, 1977) speculate on time as a political and a psychological effect. This understanding makes a complete analogy to the use of space. Since there is a limited amount of time as there is of space, the power to annex other people's time reinforces hierarchal relationships. The issues in this analysis are control over one's time and access to other people's time, as well as the quality of one's time. Schwartz explains that "far from being a coincidental by-product of power, then, control of time comes into view as one of its essential properties" (p. 868).

Henley speculates that time-segments are appropriate to particular types of encounters and theorizes that the extent of the time-segments (or "time zones") is directly proportional to the intimacy of the situation:

Public Time: A few seconds to a few minutes  
 Social Time: 15 minutes or so  
 Personal Time: 15-30 minutes  
 Intimate Time: 50 minutes plus.

Henley also refers to temporal imposition as an analogy to space in that the powerful have the privilege of getting as close as they wish to us, they also have the privilege of taking up as much of our time as they wish. In this way, time is a dual system of power and intimacy. Time is equally shared with peers, but asymmetrically distributed with nonequals.

Time is a measure of administrative functions (Scriven, 1985; and Peterson, 1986) when considered as behavioral identification for motivation and goal reaching. Motivation is the willingness to spend time and effort--a commitment beyond valuing. The ways that managers spend time depends on the goals they hold for themselves and the organization (formative controls). Likewise, the clear communication, rewards, and support of goals increase the amount of time spent reaching the goals (output controls) (Turcotte, 1974; Natriello & Dornbusch, 1980-81). "...a subtle balance of controls and autonomy...could provide the right conditions for high principal motivation focused on instructionally relevant actions, decisions, and plans" (Peterson, 1986, p. 148).

The benefits of communication and the amount of time spent in two-way exchange of information are significant enough to warrant attention. As with other organizations, schools are seeking to attain leadership effectiveness through maximum employee performance. Leadership in

Organization (1985) describes the Vertical Dyad Linkage Theory (VDL) which points to the interpersonal nature of leadership. It lists two-way communication as a leader behavior contributing to subordinate linkages of both stewardship and leadership. The effective leader takes individual differences into account to optimize performance of each subordinate and therefore the entire group. Two-way communication establishes mutual trust, shares resources, facilitates negotiation, and increases reciprocal feedback. The VDL model assumes that the increase in leadership linkages (two-way communication behavior) and the decrease of supervisory linkages (one-way communication behavior) will lead to more effective leader performance. Stewardship is a middle group linkage using modified two-way communication behavior.

#### Perceptions/Communication Effects

The congruence of perceptions to reality determines the success of accomplishing organizational goals (Huseman, Lahiff, & Hatfield, 1976). It is likely that principals are no more effective than their teachers think they are (Pinckney, 1982). Communication research (Chaffee, 1980; and Grunig, in process) has developed tools for measuring the effects of different attempts at communicating. The effects may range from perceptions of awareness, understanding, and attitudes to behaviors. The effect may be anywhere along the continuum and may not match the intent of the communicator. Probability formulas which forecast effects involve the analysis of the receiver's involvement, the communicator's desired effect, the type of message, and the receiver's linkage to the communicator. Perceptions are the effects of communication.

Sergiovani (1987) reiterates the role of communication in forming perceptions by boldly stating that "the meaning of the leadership behavior and events to teachers is more important than the behavior or events themselves.... This process of sensemaking is influenced by interactions with others.... Therefore the ability to communicate values and ideals in a meaningful way is more important than how they behave" (pp. 116-117). Communication research evidences the necessity of face-to-face interactions in order for any values, ideals, or other effects to be transmitted. In this light, Sergiovani's theory could be extended to imply that principals and teachers who spend time in face-to-face interactions will have perceptions of the principal's effectiveness as higher than teachers who do not have that communication.

The significance of teachers' perceptions regarding the effectiveness of their principal as an instructional leader has recently been enhanced by Andrews' and Soder's (1987) research which correlates teacher perceptions with student academic achievement. Results indicate a powerful relationship between the teachers' perception of the principal's instructional leadership and learning environment with student outcomes. Andrews includes four dimensions of instructional leadership which shape teachers' perceptions; the principal as a (1) resource provider, (2) instructional resource, (3) communicator, and (4) visible presence.

What the leader stands for and communicates to others is more important than the leader's style. Gaps widen and the "us and them" syndrome appears as face-to-face contacts are too infrequent (Redfern, 1980). These serious attitudinal implications affect performance

negatively. Principals and teachers are more often than not required to have face-to-face interactions for performance evaluation. "Because of close contact required between evaluator and evaluatee, performance evaluation helps managers avoid many major communication problems while strengthening the bonds of teamwork. Improved mutual understanding of problems, concerns, aspirations, and expectations that results creates a highly desirable union of management components" (p. 65).

Cooper and Good introduced teacher perceptions of control over performance as one independent variable in the "Model for Expectation Communication and Behavior Influence" which centers on teacher/student interactions with student attitude and outcomes. Teacher perceptions, beliefs, and values are variables recommended by them for future consideration. Among the best-researched behavioral correlates of performance expectations is the frequency of interaction (Brophy & Good, 1984).

With the perceptions of teachers so significantly linked to student achievement, it is evident that a vital task of leadership is to link people and events, bond them together in a common culture, as Sergiovani puts it, to facilitate perceptions of a shared covenant; and as Shanker puts it, to facilitate perceptions of teacher empowerment; and as Brophy and Good put it, to facilitate perceptions that all students can learn.

#### The Nature of Principals' Work

Analysis of individual work behaviors has an increased importance for orienting to new work behavior and improving work performance. In the past, apprenticeship training was heavily relied upon with the premise



that observing expert work behavior over time is a valid learning method. However, in today's world, neither the worker nor the organization may be able to afford the luxury of the time it takes for the apprenticeship system to produce results. Much of our labor today involves performance systems and sub-systems. Swanson and Gradous (1986) classify these as "people-to-machine systems, people-to-process systems, or people-to-people systems" and stress that whatever the size, all work is interrelated, therefore encouraging that small performance improvement in one segment can yield big gains overall (pp. 3-4). The prices paid for not understanding and using competent work behaviors is failure to grow personally and ultimate failure in the marketplace. Obviously, analysis of work behaviors and the system in operation will support all the efforts to perform old or new work behaviors more easily and more efficiently.

Principals' work, like other managers, is characterized by brevity, variety, fragmentation, and unexpected demands (Mintzberg, 1973; and Peterson, 1978, 1982). This factor makes it difficult for managers to learn from experience. Most of the principals' work occurs in face-to-face, verbal interactions with others, particularly subordinates as they solve pressing crises and unexpected problems through the rain of constant interruption. Peterson's observational study noted that the role expectations and broad job functions are a contrast to the brevity of the work activities. Many principals average less than five (5) minutes per activity. While it is useful to understand the broad aspects of principals' work, one would likely miss the central, crucial feature of the actual work. The variety of content, purpose, complexity, and

affective components shape the principals' basic function. The principal functions as the primary linking mechanism for an entire subunit (building). Often, through brief encounters, the principal is constantly linking organization-to-people, people-to-organization, people-to-people, and organization-to-organization. Difficulties develop when "principals in highly demanding districts may spend more time and energy surviving day-to-day demands on them than analyzing the complexities of their work and trying out new approaches" (Peterson, 1978, p. 3).

Considering that principals themselves are in the best position to describe their jobs, a national survey of principals was conducted by Gottfredson and Hybl (1987) using a job analysis inventory that asked principals to rate the most important elements of their jobs. The research identified staff direction, visibility, observation, and feedback on teacher performance, and planning for school improvement as key dimensions. Gottfredson summarizes that "when you integrate the observational studies and this structured analysis, the dual role of the principal becomes clear. Maintaining effective operations through routine behaviors is unquestionably an important aspect of the principal's work. Creating change or improvement when improvement is needed is equally important. A balanced view of the principal's work must include both aspects or phases of performance" (p. 4).

Studies of the school administrator subculture have not received much attention, although Willower (1983) and Licata (1985) emphasize how the nature of work is reflected in the principals' subculture beliefs. Principals see themselves as busy people with little time to give or seek

advice of peers. Therefore, the grapevine interaction between principals is limited by availability of time. Barnett and Long (1986) observed that principals believe that they are isolated from other principals. This belief is fostered by logistical problems (physical distance and infrequent contacts with peer principals) and the emphasis of school organizations on client control that often leads to regular student-teacher conflict mediated by principals which frequently leaves them as the lone decision-maker. Peterson (1982) and Willower (1983) both call for need of more research on principal work activities (however mundane) to gain understanding and insights.

#### Instructional Leadership

In their review of the major approaches to the study of leadership, Associates from the Department of Behavioral Sciences and Leadership of the United States Military Academy (Leadership in Organizations, 1985) observe that, "... , there appears to be a network of ideas and concepts that explain the developmental nature of the leadership process." The theoretical framework and current research studies each add a unique dimension. Their summary portrays how the major variables are involved in the process of leadership (Fig. 2). The conclusion stresses that, while much remains to be learned, the past research and theory will help unravel some of the remaining mysteries. Much of the literature on school leadership supports this point of view by explaining behaviors of principals within the social system of the school organization and incorporating personal attributes along with school outcomes.

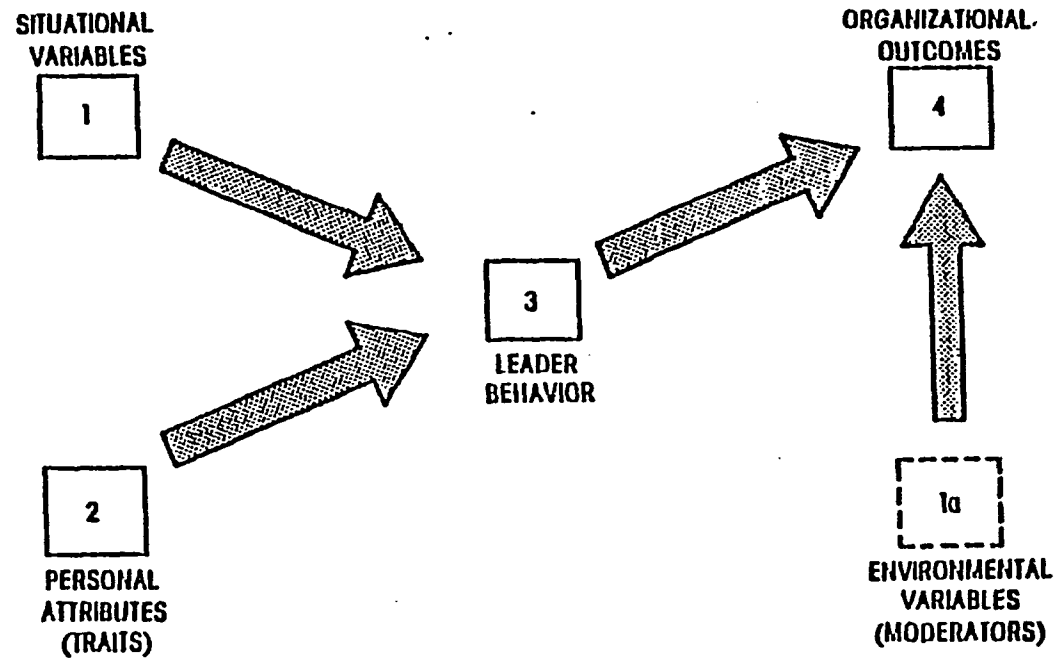


Figure 2. Systematic presentation of variables used in leadership research (Leadership in Organizations, 1985)

While Kmetz and Willower's study (1982) mirrored the observations of other researchers on the nature of work for principals and managers, they also observed that principals often differ one from another as to how they allocate time for instructional tasks, or to administrative tasks. Lortie (1975) and Peterson (1986) noted these differences were frequently due to the socialization of principals into the organization, the support from within the organization for principals and the administrative-level control over principals. Systems that purposely establish shared attitudes, habits, and values are likely to share a common goal. Control systems that promote development of skills and knowledge and provide opportunities to reach immediate goals which make it possible to attain the long-term goals of the organization, are likely to increase levels of motivation. Peterson (1986) explains that "with high levels of motivation principals are more likely to have a commitment to the vision of their school, take greater initiative in leading faculty, be more adept at discretionary decision-making and actively managing the resources available to foster school improvement." The explanation further states, "(control systems)...that inculcate norms and values related to instructional leadership, high levels of student learning, and ongoing improvement will increase the motivational level of school leaders" (p. 150).

Barnett and Long (1986) derived a framework from earlier research which describes the principal's role in instructional management. This framework (see Fig. 3) organizes the complex set of factors within the school setting influencing and influenced by instructional management.

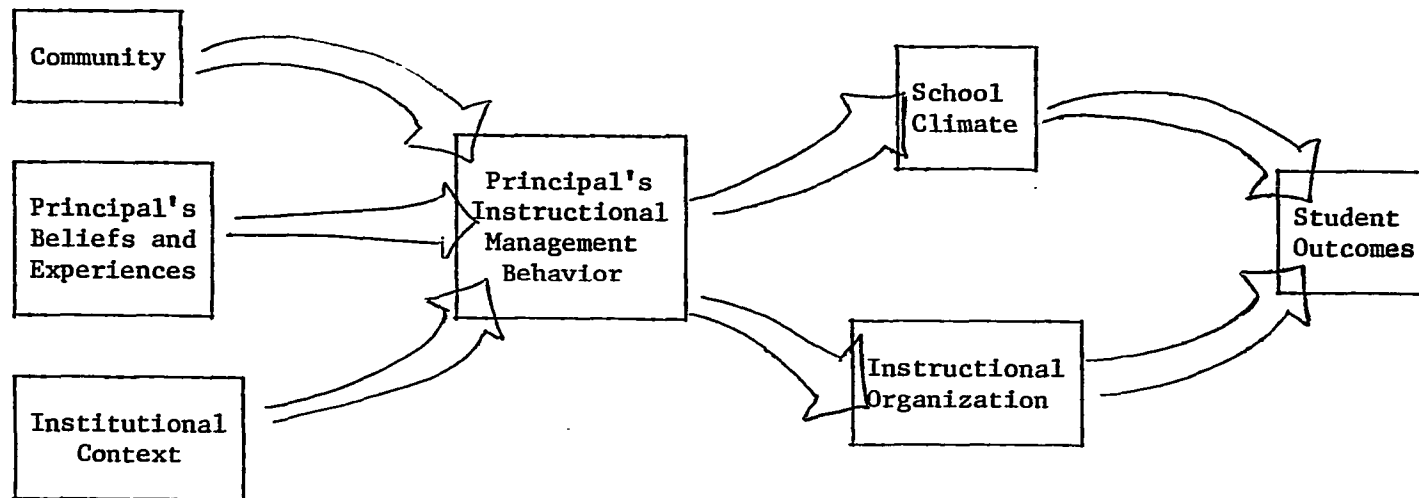


Figure 3. The principal's role in instructional management (Barnett & Long, 1986)

Their model demonstrates the relationship of the principal's beliefs and experiences with the behaviors of the principal. It also reflects the impact of the organization upon the behaviors of the principal. The Barnett and Long framework substantiates Peterson's explanation of the principal's motivation to perform as an instructional leader. If principals do not have strong internal beliefs and organizational support, they may spend time in less challenging and less demanding activities perhaps focusing on keeping the public satisfied rather than on program improvement.

Greater emphasis has been placed recently on the administrator's role in creating an effective school environment. Numerous changing forces in education have called for the principal to be the instructional leader, but the frequent description of instructional leadership refers to the broad characteristic of leadership. One attribute often called for is the ability to create a culture by communicating, emphasizing commitment, practicing leadership through purposing (creating a compelling vision), and by inspiring others toward effective group efforts through a set of attitudes, behaviors, and activities (Burns, 1978; Peters, 1982; Lightfoot, 1983; MacKenzie, 1983; Murphy et al., 1983; and Bennis, 1984).

Cawelti (1987) describes instructional leadership as a "complex phenomenon" demanding new studies searching for new understanding. The appropriate skills for instructional leadership range from technical tasks to broader leadership skills. The contention made by Cawelti in 1982 was that there are four major instructional improvement processes which will be given priority if the principal is an instructional leader. These are

technical processes which help teachers teach: curriculum development, clinical supervision, staff development, and teacher evaluation. The leadership part of instructional leadership would be vision, resourcefulness, positive attitude of confidence, and the ability to analyze school needs, but Cawelti sees these traits as tough to measure.

The structured inventory that Gottfredson and Hybl analyzed after principals responded to what were the most important elements of their jobs provides a concrete, univocal definition of instructional leadership. Several distinct dimensions of leadership are displayed "when principals observe teachers in the classroom and provide formal and informal feedback about performance...when principals assess the needs of their schools and lead faculty in school improvement, (and)...instructional management" (p. 3). These results are very different from the views on leadership reported by principals less than ten years ago. Historically, principals were reported to avoid instructional leadership because there was a lack of consensus on how to improve teaching and learning and principals respected the teachers' individual style (Dornbusch and Scott, 1975; and Hallinger et al., 1983). Cawelti reported in 1982 that approximately 90 percent of the leadership topics mentioned by principals were behaviors other than those related to improving productivity of teachers or students.

The characteristic of instructional leadership was researched in relation to effective schools by Russell et al., as they linked the behaviors and activities of secondary principals to school effectiveness and developed a model which demonstrates the relationships between



behaviors and school effects (1985). The research generated behavior for each characteristic was divided into types and classified under three leadership actions: setting an agenda, establishing a network, and implementing the agenda. The culminating analysis was to have an expert jury format to judge the effectiveness or ineffectiveness of the behaviors collected under each characteristic.

The characteristic of instructional leadership generated the second largest number of behaviors which were divided according to five different types. The behaviors researched for instructional leadership fitted under all three leadership actions (pp. 40-41):

Characteristic 7: Providing Instructional  
Leadership for Teachers

Effective

1. Has active involvement in planning, conducting, and evaluating inservice (12 behaviors).
2. Provides direction and support for individual teachers in order to eliminate poor instructional performance (10 behaviors).
3. Provides direct instructional leadership in one-on-one sessions with teachers (7 behaviors).
4. Has each teacher's classroom performance evaluated in specifics (7 behaviors).
5. Hires effective staff (2 behaviors).

The study identified eight characteristics in the literature review, and in order to gain specific examples of behaviors, the Critical Incident Technique (CIT) was employed with the sample of 18 secondary schools in Oregon and Kentucky. Observers were required to have had expertise in education, and data including behavioral description rather than trait descriptions were retained.

### Effective Schools Research

School effectiveness literature has commonly identified successful schools (schools effective in teaching basic skills to all students) (Brookover, 1987) and subsequently examined those schools for what processes are taking place (how and why a school organization behaves the way it does) (Sweeney, 1982). Effective schools research examined these processes in order to identify the variables and propose general characteristics (Lezotte et al., 1975; Brookover et al., 1979; Purkey and Smith, 1982; and Sweeney, 1982). The classification of the characteristics suggested by Brookover (Brookover et al., 1982; Brookover, 1987) is organized as three areas: the ideology of the school (beliefs and school learning climate), the organizational structure of the school (roles, rewards, stratification, and differentiation), and the instructional practices (school goals, objectives, direct instruction with mastery strategies, academic engaged time, peer learning, orderly work oriented atmosphere, reinforcement, and assessment).

Taking Goodlad's advice that little hope for school improvement should rest with political moves in school reform, Cawelti (1982) organized a framework for the growing body of research which showed a positive relationship between the student growth in basic skill achievement (p. 328) (see Fig. 4). His leader behaviors are general (task and relationship) and specific (instructional improvement process), all focused upon eight research-based characteristics of teacher and school effectiveness: (1) high expectations for students, (2) frequent monitoring of student progress, (3) favorable climate for learning,

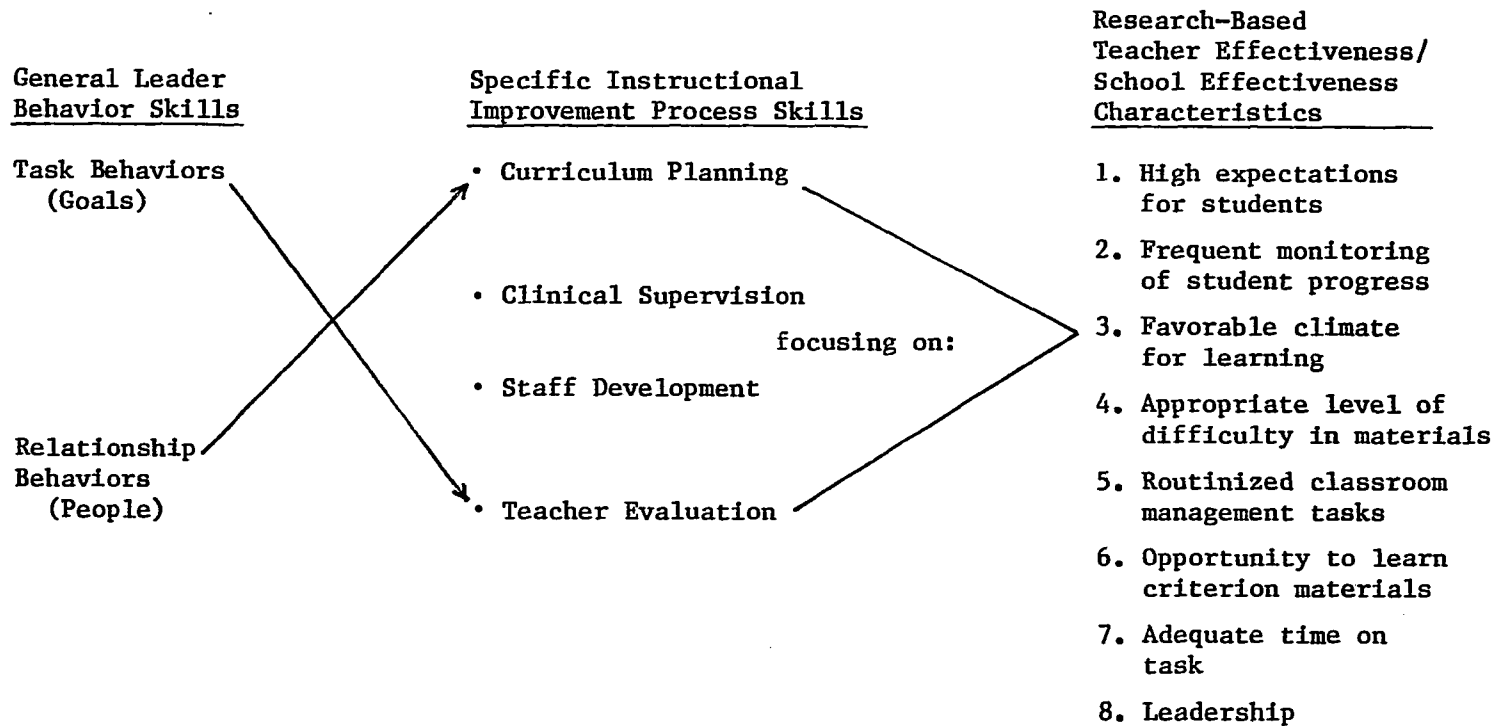


Figure 4. Research-based focus for instructional leadership (Cawelti, 1982)

(4) appropriate level of difficulty in materials, (5) routinized classroom management tasks, (6) opportunity to learn criterion materials, (7) adequate time on task, and (8) leadership.

Highlights from research on effective schools were summarized after synthesis of studies which reported significant positive relationships between school achievement and instructional leadership behavior. Six leadership behaviors included (1) emphasize achievement, (2) set instructional strategies, (3) provide an orderly atmosphere, (4) frequently evaluate student progress, (5) coordinate instructional programs, and (6) support teachers (Sweeney, 1982).

Eight variables from the school effectiveness literature served as the school characteristics that are influenced by principal behavior for Russell et al.'s (1985) study which linked observational data of secondary school principal behaviors to school effectiveness. Drawing from Purkey and Smith's (1988) synthesis of research on effective schools, two leadership behaviors were added to the Sweeney characteristics of an effective school leader: (1) collaborative planning with staff and (2) parental involvement and support. The eight behaviors of school leaders are linked to the key characteristics of effective schools and "...to help clarify how specific principal behaviors affect various aspects of a secondary school system," a framework for examining principal behaviors that foster each school characteristic (pp. 1-3). A model of secondary school dynamics grounded in organizational effectiveness theory (Kotter, 1982) represents the relationship of the leader behaviors, key processes, student outcomes, and effects (see Fig. 5).

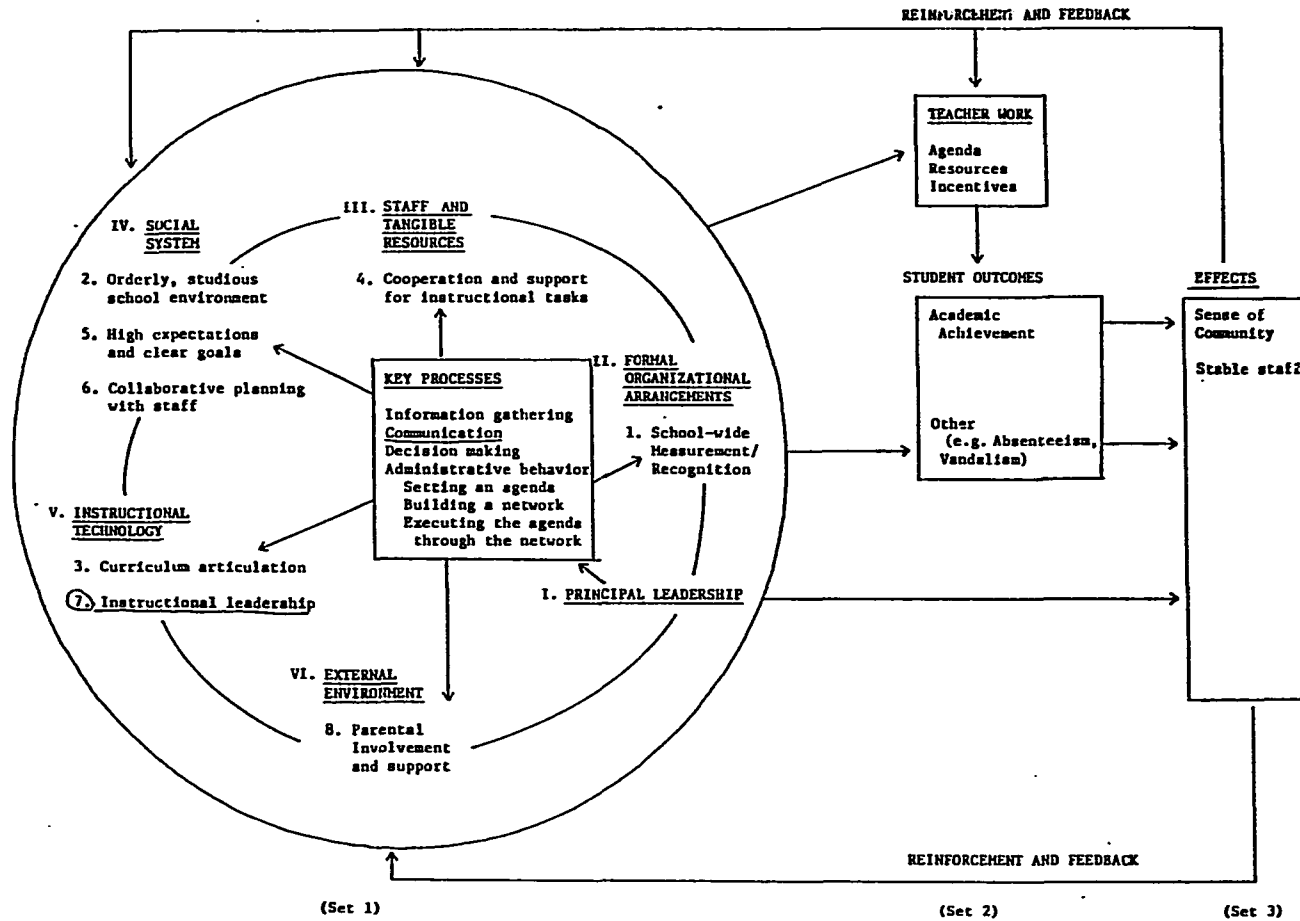


Figure 5. Model of secondary school dynamics (Russell, White, & Maurer, 1985)

The outcomes from the school organization include such variables as reading and math achievement and attendance and are the various criteria associated with the school effectiveness literature. The outcomes are immediate measures of success. The term effects is used by Russell et al. (1985) to distinguish the long-term results, a sense of community and staff stability, that are produced by effective schools. These long-term results, or effects in Set 3, are conceptualized as part of a reinforcement and feedback loop within the model. The school effects influence or affect the six model components in Set 1--principal leadership, formal organizational arrangements, staff and tangible resources, social system, instructional technology, and external environment--which in turn influence student outcomes in Set 2 and eventually school effects in Set 3. This is a complex, causal relationship which is not under the direct influence of the principal behavior alone. "The principal behavior influences variables that, in turn, influence both outcomes and effects" (p. 14).

One example of an effect and its feedback loop is the characteristic sense of community. A sense of community is an outgrowth of a school's reputation for excellence; it is also influenced by elements of the organization itself; and it symbiotically feeds back to the model's six components of Set 1.

#### School Effects/Climate

The effect characteristics are those commonly grouped under the culture or climate which enhances student learning. The literature repeatedly stresses the important role of the principal to provide

leadership, motivation, and vision to build a cultural context within the school organization. The climate seems to be a determining factor in a school's success or failure as it provides a rationale facilitated by the principal's leadership (Brookover et al., 1982; Purkey & Smith, 1982; Sweeney, 1982; Dwyer, 1984; Sizer, 1984a; and Andrews, 1987). The school effect characteristics are with the variables measured and reported as "school improvement measures" by the School Improvement Inventory (SII).

The vast majority of literature on school climate in relation to school principals' behavior and effective schools research focus on behaviors which function as linkages, transmit adequate information, promote collegiality, introduce consistency across hundreds of interactions, communicate a positive deployment, encourage all personnel to share opinions, take an interest in teachers and their problems, and influence through trust and cooperation rather than control (Stallings & Mohlman, 1981; Fullan, 1982, 1985; Little, 1982; Sweeney, 1982; NASSP, 1988; Lehmann & Checkoway, 1985; Andrews & Soder, 1987; and Wilson & Firestone, 1987).

The implications are that the interactions between the principal and the teacher comprise the most powerful behaviors linked to school effectiveness. Training materials and programs for effective school leaders stress behaviors which create a learning environment by promoting positive school attitudes and sharing ownership (NASSP, 1988), journal articles stress how principals can influence the working pattern of teachers (AASA, 1987), and evaluation forms for principals reflect a priority for behaviors which require time spent with teachers (Look, 1983;

and Bowman & Valentine, 1986). Theodore Sizer's quote from the New York Times emphasizes the same concept: "In effective schools...the key is the people, not the program.... The agenda for effectiveness, then, should focus primarily on the human dimensions--the teachers and the principals..." (1984b).

#### Related Research

Survey research by Feistritter (1988) gathered information from 5,322 randomly selected elementary and secondary school administrators about educational improvement and other current issues. Responses to the survey indicate that, "School administrators are overwhelmingly white, male, and older than managers in other professions." In addition, the responses portray a homogeneous point of view with 84 percent to 92 percent identical responses to vouchers, busing, sex education, federal influence, and the status of school improvement. Generalizing across a homogeneous group offers fewer obstacles to school leadership researchers, but implications from research for improving and training administrators may be hindered by inflexible mind sets and resistance to change.

A recent report of research about the teacher's perspective on effective school leadership (Blase, 1987) describes factors teachers identified with effective school principals. The data for this study were collected from formal and informal interviews with teachers in one urban high school in the southeastern United States. Two dimensions of leadership, task and consideration, were selected from the literature to organize and present data after it were collected. Nine factors classified as task-related were: "accessibility, consistency,



knowledge/expertise, clear and reasonable expectations, decisiveness, goals/direction, follow-through, ability to manage time, and problem-solving orientation." Five consideration-related factors were cited in the data: "support in confrontations/conflict, participation/consultation, fairness/equitability, recognition (praise/reward), and willingness to delegate authority" (p. 594).

The summary and conclusions of Blase's study accentuates the interdependency of leadership factors supporting the complexity of the leadership phenomenon. Also, the effective principals described in this research appeared to exhibit behaviors which contributed to school cultures described as cohesive, by interacting with teachers in a cooperative, empathetic, supportive, respectful, equitable, and productive way. Less importance was relegated by teachers to administrative competencies associated with the technical aspects of work. "..., it was evident that personal qualities (e.g., honesty, security, compassion, respect for others) and competencies (e.g., listening skills, feedback skills, analytical and conceptual skills, problem-solving skills, and knowledge of curriculum) were perceived as essential to effective school leadership" (pp. 607-8).

In studies designed to select discriminating items for principal evaluation (Look, 1983) and to develop performance improvement commitments for principals (Mueller, 1987), leadership skills and school management activities were analyzed in relation to effective school literature. Three principal behaviors were selected as most significant to increased student achievement: (1) takes a strong interest in teachers'

professional development; (2) monitors the curriculum and identifies progress toward goals; and (3) promotes activities to solve instructional problems. Areas of principal responsibilities judged to be appropriate for classification of performance criteria were: (1) sets instructional strategies/emphasizes achievement; (2) supports teachers; (3) coordinates instructional program; (4) provides orderly atmosphere; (5) promotes professional growth; (6) maintains plant facilities; (7) performs administrative duties; (8) maintains school-community relations; (9) evaluates pupil progress; and (10) supervises student personnel.

#### Summary

Pinckney's research (1982) found that principals spent time on functions of administration that were related to the principals' perception of the relative importance of those functions. This same study also indicated that teachers value those administrative functions which they see as enhancing their satisfaction with teaching, i.e., managing human resources, rather than the function of instructional leadership, which enhances student learning.

Current leadership theory often portrays leadership as a process which is explained as interactions with subordinates to influence their performance toward effective outcomes. The perceptions of both administrators and teachers will influence the amount of time spent on these interactions. Communication research supports the interrelatedness of perceptions, interactions, and amount of communication behavior.

Leader behaviors and teacher perceptions are two variables often relied upon to research the climate of schools. The teachers' perceptions

of principals' actions is theorized by Sergiovanni to be more significant to leadership than the actions themselves. Research to understand the complex nature of leadership in terms of its effect on teachers is limited. Blase's study of effective school leadership through the eyes of teachers points to the conclusion that a change in leadership can be expected to make dramatic change in the sociocultural context of a school (behaviors, values, and norms).

The question remains that given the nature of the principal's work activities, how do principals fit in the specific behaviors which help create the climate of an effective school? How do effective principals go about being effective? The process of building a school culture is flooded with interactions between the teachers and principals. The key appears to be how successfully those interactions communicate, how frequently messages about the importance of teaching and learning are repeated, and how the perceptions of the teachers, the behaviors of the principal, and school effects form a reciprocal relationship.

### CHAPTER III. METHODS AND PROCEDURES

The design of this study was to develop and test a model which is a conceptual analog of instructional leadership and school climate. This chapter describes the data sources, the instruments used to collect the data, and the study population and samples. It also provides a description of the variables, how they were measured, and the methods of data analysis.

#### Data Sources and Collection

The data used in this study were collected from ongoing research projects conducted by the School Improvement Model Project (SIM) at Iowa State University. An inventory survey was used to collect data from teachers and administrators in four K-12 public school districts and critical work activity log sheets were used to collect data from building administrators of those same districts. The surveys and time logging were conducted between January 1, 1987 and December 31, 1987. The inventory surveys followed procedures which guarantee anonymity of teachers within each building unit. No identification code for individual teachers labeled the inventory instruments and the inventory surveys were distributed and collected by lead teachers in each building.

Building administrators received training on the use of critical work activity time logging sheets from personnel of the School Improvement Model. A critical work activity handbook was distributed to each building administrator which gave direction, explanation, and examples for using the critical work activity log sheets. A field coordinator within each

district and a research associate of the School Improvement Model provided assistance during the time logging period of 20 workdays. Both the critical work activity log sheets and the school improvement inventory have received approval from the Iowa State University Committee on the Use of Human Subjects in Research.

#### Sequence of Collection

The sequence of data collection began with the inservice of administrators on using the critical work activity (CWA) log sheets. Richard Manatt, director of SIM, presented information and instructions in small group sessions of administrators with like positions. The participants each received a CWA kit which included samples of typical work activities for various positions and examples of log sheets already filled out. Explanation of log results and future reports of summaries was made to assure volunteers that their responses would be anonymous to superiors.

During the time logging period of 20 work days, questions were answered by the field coordinator in the district, SIM office staff, and by consultation with peer administrators. Time logs were collected and mailed to SIM for processing on microcomputers which analyzed the activities by number of hours, frequencies, and rank. Individual reports were produced for return to each administrator during a feedback interview held within a month of completing the time logging. The interviews each lasted approximately 20 minutes and were held in a private manner, one-on-one, with an interviewer from the SIM project. The individual feedback report was explained and the administrator signed agreement to

accuracy of the data on one copy of the report kept by the interviewer. Another copy of the report was kept by the administrator. Another phase of the interview involved answering a structured questionnaire which asked for additional information about their job, the logging activity, and suggestions for additions/deletions of activities considered critical to their job. Later, a comparison chart was produced after CWA data were keyed into the mainframe computer to build a data base for future comparisons to national norms. Only principals and assistant principals were analyzed for comparison, and identification was limited to principal "A," "B," "C," etc. These comparison charts were presented to the district in a booklet format and were organized around the critical work activities which were identified as behaviors of principals in effective school research.

Approximately one to two months after CWA logging, and during the same semester, teachers and administrators were surveyed using the School Improvement Inventory (SII). Special care was taken to keep all responses to the survey anonymous and voluntary. The packets of instructions and instruments were handled only by teachers if teachers were filling them out, and only by administrators if administrators were responding. The instruments were collected and mailed to the SIM office by teachers or administrators as appropriate in envelopes provided by SIM. The SII were scanned and the data were entered into the mainframe computer at Iowa State University for production of district and building reports and for addition to a national norm data bank. Results and reports of school

improvement measures were presented by Dr. Jim Sweeney (ISU), co-creator of the instrument in 1982.

### Instruments

The "School Improvement Inventory" was administered during the same semester, but after the time logging period of the building administrators. Teachers and administrators of each building responded in order that "information which can be used for school improvement" could be gathered. The sections from the inventory that provided data relevant to this study asked subjects (1) to indicate their expectations, or relative importance of six major functions which are the responsibility of building administrators, (2) to indicate the level of effectiveness at which their building administrator carries out each of the six functions, and (3) to report their perceptions of the climate of their school and instructional leadership behaviors.

The first two sections, administrator importance and effectiveness, used rating scales which range from very low (1) to very high (5) for each of the six functions: (a) human resource management, (b) instructional leadership, (c) learning environment management, (d) noninstructional management, (e) pupil personnel, and (f) school-community relations. This study used the data from both sections which indicated importance of and effectiveness at (b) instructional leadership.

The third section of the inventory requires respondents to use an eight-point Likert scale as the indication of the extent to which these conditions exist in their school: (a) goal orientation, (b) esprit, (c) cohesiveness, (d) teacher expectations, (e) student attitudes, and (f)

learning environment. This study used these data as school effects within the model.

The third section of the inventory also includes items which report teacher perceptions of the extent to which their building administrator (a) exhibits dedication and enthusiasm, (b) supports teachers, (c) evaluates pupil progress, (d) coordinates instruction, and (e) emphasizes achievement. These data are used as measures of teacher perceptions within the model.

As discussed earlier, a time logging instrument was used by building administrators for a 20 day time period. All work activities were recorded for the 20 day period, including a log entry called "circle time" which describes time spent on critical work activities outside the regular school hours. This designation was necessary since no overtime is designated for school administrators. The log sheet guided administrators to record time under categories referred to as critical work activities. These categories designate work activities crucial to the function of a building administrator rather than all activities while at work. There were three main categories labeled as (A) Public Relations which includes (1) maintains school/community relations, (2) supports teachers, and (3) supervises students; (B) Instructional Leadership which includes (1) assists with instructional strategies which emphasize student achievement, (2) supervises the curriculum, (3) evaluates student achievement, (4) promotes professional activities, and (5) supports improvement of instruction; and (C) Management which includes (1) provides orderly



environment, (2) maintains physical facilities, and (3) fulfills other management duties.

The primary category, Instructional Leadership, and its five subheadings had additional designations beyond administrator time alone for time spent on those particular activities (a) with central office administrators, (b) with teachers, and (c) with peer administrators.

All categories of critical work activities were recorded in minutes spent during the regular workday and beyond the workday which allowed for distinguishing the administrator time spent during evenings and weekends.

After the original log sheets were submitted and totaled for ranking the various activities for each individual administrator, a feedback interview was held with each administrator. The interviewers were trained to use a standard questionnaire which gathered additional information pertinent to the time logging period. A feedback report reflecting the original log sheet was given to the administrator as the report was discussed and additions and/or corrections were recorded. Time logging data were then prepared for computer entry.

### The Subjects

This study focused mainly on educational professionals within building units, that is, principals and teachers from various buildings of K-12 districts. The target group consisted of 101 administrators and 1,847 teachers from 62 buildings of four public school districts: Waterloo Community Schools, Iowa; Fruitport Community Schools, Michigan; East Allen County Schools, Indiana; and Liberal Public Schools, Kansas.

The Waterloo District was involved in a reorganization process during the 1986-87 school year which required the closing of some school buildings. Even though all administrators participated in time logging, the School Improvement Inventory was presented as an optional facet of the School Improvement Model Project. Consequently, only five buildings administered the instrument to teachers and administrators. Therefore, this sample was comprised of 10 principals and 169 teachers. This changes the number of administrators to 56, teachers to 1077, and buildings to 41.

#### Measures

This section presents a discussion of the measurement of the variables examined in the study. The five independent variables included administrator and teacher perceptions along with administrator time. Their method of measurement is presented first, followed by the measurement of the six school effects which function as the dependent variables within this model.

#### Importance of instructional leadership

Perceptions of both teachers and administrators are measured by the respondents indicating "the relative importance of each of the six functions for promoting effectiveness in your school by rating each function from 1 to 5. (Keep in mind that the total must equal 20.)" The six functions are: human resource management, instructional leadership, learning environment management, noninstructional management, pupil personnel, and school-community relations. Importance of each function is measured in relation to the other functions. Tables 1 and 2 contain

information about the measurement of importance of instructional leadership. The means and standard deviations for each district as well as the number of missing cases are included for both teachers' and administrators' perceptions.

Administrators' time on instructional leadership

Time measurements for all activities categorized as instructional leadership were the data describing this variable.

Administrators' instructional time with teachers

Time measurements specified "with teachers" for all activities categorized as instructional leadership were the data describing this variable. Time logging information for each district is presented in Tables 3 and 4. The means, percentage of work time, and ranking when compared to all work activities are included.

Table 1. Mean and standard deviation of the importance of instructional leadership as perceived by teachers<sup>a</sup>

N	Mean	S.D.
1077	3.59	.99
Missing cases = 21		

<sup>a</sup>Range of responses, 1 (low) to 5 (high).

Table 2. Mean and standard deviation of the importance of instructional leadership as perceived by administrators<sup>a</sup>

N	Mean	S.D.
56	3.95	.81
Missing cases = 3		

<sup>a</sup>Range of responses, 1 (low) to 5 (high).

Table 3. Mean and standard deviation of the administrator time on instructional leadership<sup>a</sup>

N	Mean (Hours)	S.D.
56	59.26	27.35
Missing cases = 0		

<sup>a</sup>Range of responses, 4.09 hours to 85.75 hours.

Table 4. Mean and standard deviation of the administrator time with teachers on instructional activities<sup>a</sup>

N	Mean	S.D.
56	29.18	18.55
Missing cases = 0		

<sup>a</sup>Range of responses, 0 hours to 70.83 hours.

### Teachers' perception of administrator effectiveness

Administrator effectiveness is measured by teachers' responses to one item. This item asks the respondents "to indicate the level of effectiveness at which the six major functions described previously have been carried out by your building administrator." Response categories and the scores assigned to each were "very low" (1), "low" (2), "moderate" (3), "high" (4), or "very high" (5). The function included in this study is instructional leadership. Information about the measurement of the administrator effectiveness indicator is presented in Table 5. Included is the means and standard deviation as well as the number of missing cases.

### Learning environment

One item requested "How would you describe the learning environment in your school?" and had responses "not at all positive" (1) (2), "somewhat positive" (3) (4), "quite positive" (5) (6), and "very positive" (7) (8).

### Goal orientation

Four of the six items which measured goal orientation used responses "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), and "very great" (7) (8). These four items were "To what extent does your school strive for excellence?" "In your school to what extent do most teachers agree on the major instructional objectives of your school?" "To what extent do teachers in your school have a feeling that they can make a significant contribution to improving the classroom performance of

Table 5. Mean and standard deviation of teachers' perception of administrator effectiveness<sup>a</sup>

N	Mean	S.D.
1077	3.36	.97
Missing cases = 33		

<sup>a</sup>Range of responses, 1 (low) to 5 (high).

students?" and "To what extent do the teachers in your school work at improving the quality of educational program?" A fifth item, "How likely are you to expend efforts to raise student achievement?" requested a response of "not very likely" (1) (2), "somewhat likely" (3) (4), "quite likely" (5) (6), or "very likely" (7) (8), and the final item was "How would you describe the commitment of teachers to high performance goals in your school?" which was responded to with "very weak" (1) (2), "somewhat strong" (3) (4), "quite strong" (5) (6), or "very strong" (7) (8).

#### Teacher expectations of student achievement

Five items combine to measure teacher expectations. Three items requested responses of "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), and "very great" (7) (8). These items ask "To what extent do teachers in your school convey to students that learning is important?" "To what extent do teachers in your school set challenging goals for students?" and "To what extent do teachers in your school expect students to do their best?" A fourth item, "How many teachers in your school feel that all their students should be taught to read well and master other academic subjects even though some students may not appear to

be interested?" was responded to by "very few" (1) (2), "some" (3) (4), "many" (5) (6), and "most" (7) (8). The final item requested responses "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), and "very much" (7) (8) to the question, "To what extent do teachers in your school challenge low-ability students?"

#### Student attitudes for learning

One item, "How would you describe the general attitude of students toward your school?" was responded to by "poor" (1) (2), "fair" (3) (4), "good" (5) (6), or "very good" (7) (8).

#### Cohesiveness

This measure combined responses to five items on the questionnaire. Responses of "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), or "very much" (7) (8) were required for two items, "In your school, to what extent do different grade levels, departments, and curriculum areas plan and coordinate their efforts together?" and "To what extent do teachers in your school work together as a smoothly functioning team?" A third item, "In your school is it every person for himself or do teachers work together as a team?" was responded to by "no teamwork" (1) (2), "some but not enough team work" (3) (4), "adequate but more is needed" (5) (6), or "great amount of teamwork" (7) (8). Another item responded to by "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), or "very great" (7) (8) was, "To what extent do teachers in your school give help to one another on important school matters?" The last item for this measure asked, "How would you describe the sense of belonging in this school?" and

had these responses, "no sense of belonging" (1) (2), "some sense of belonging" (3) (4), "considerable sense of belonging" (5) (6), or "great sense of belonging" (7) (8).

### Esprit

Four items measure this effect asking: "In your school, do most teachers feel it is worthwhile or a waste of time to do their best?" and responding, "waste of time" (1) (2), "somewhat worthwhile" (3) (4), "worthwhile" (5) (6), or "very worthwhile" (7) (8); "How satisfying is teaching in your school?" and responding, "not satisfying" (1) (2), "somewhat satisfying" (3) (4), "quite satisfying" (5) (6), or "very satisfying" (7) (8); "To what extent do teachers look forward to teaching each day?" and responding, "very little" (1) (2), "some" (3) (4), "quite a bit" (5) (6), or "very much" (7) (8); and lastly, "To what extent do you feel that what you do is not important?" with responses, "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), or "very great" (7) (8).

The mean responses and standard deviations for each of the six school effects (dependent variables) are presented in Table 6.

### Empirical Hypotheses

The empirical hypotheses presented in this section were translated from the theoretical hypotheses presented in a previous chapter. The three empirical hypotheses are presented below:

1. There is a significant relationship between the scores of administrator and teacher perceptions of importance of instructional leadership, administrator time on instructional



Table 6. Means and standard deviations of the school effect (dependent) variables as perceived by teachers<sup>a</sup>

N	<u>Learning environment</u>		<u>Goal orientation</u>		<u>TESA</u>		<u>Student Att./ learning</u>		<u>Cohesiveness</u>		<u>Esprit</u>	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1077	5.42	1.44	5.63	1.05	5.82	1.05	5.39	1.46	5.07	1.36	5.75	1.16
Missing cases =												
	5		1		1		3		1		2	

<sup>a</sup>Range of responses, 1 (low) to 8 (high).

- leadership, administrator instructional time with teachers, teacher perception of administration effectiveness, and each school effect (learning environment, goal orientation, teacher expectations, student attitude, cohesiveness, and esprit).
2. The independent variables presented in the theorized model will both directly and indirectly predict school effects as explained by these subhypotheses and partial models:
    - a. Teachers' perception of importance of instructional leadership (V1) was predicted to lead to an increase in school effects (V6-V11) by indirectly increasing administrator perception of importance of instructional leadership (V2), administrator instructional time with teachers (V4), and teachers' perception of administrator effectiveness (V5) (see Fig. 6).
    - b. Administrators' perception of importance of instructional leadership (V2) was predicted to lead to an increase in school effects (V6-V11), both directly and indirectly by increasing administrator time on instructional leadership (V3) (see Fig. 7).
  3. After path analysis, the total theoretical model proposed a priori will represent a causal pattern between the variables. (This method assumes a linear relationship among causal variables and that there is no reciprocal causation between any two variables (Pedhazur, 1982). Therefore, the theorized feedback

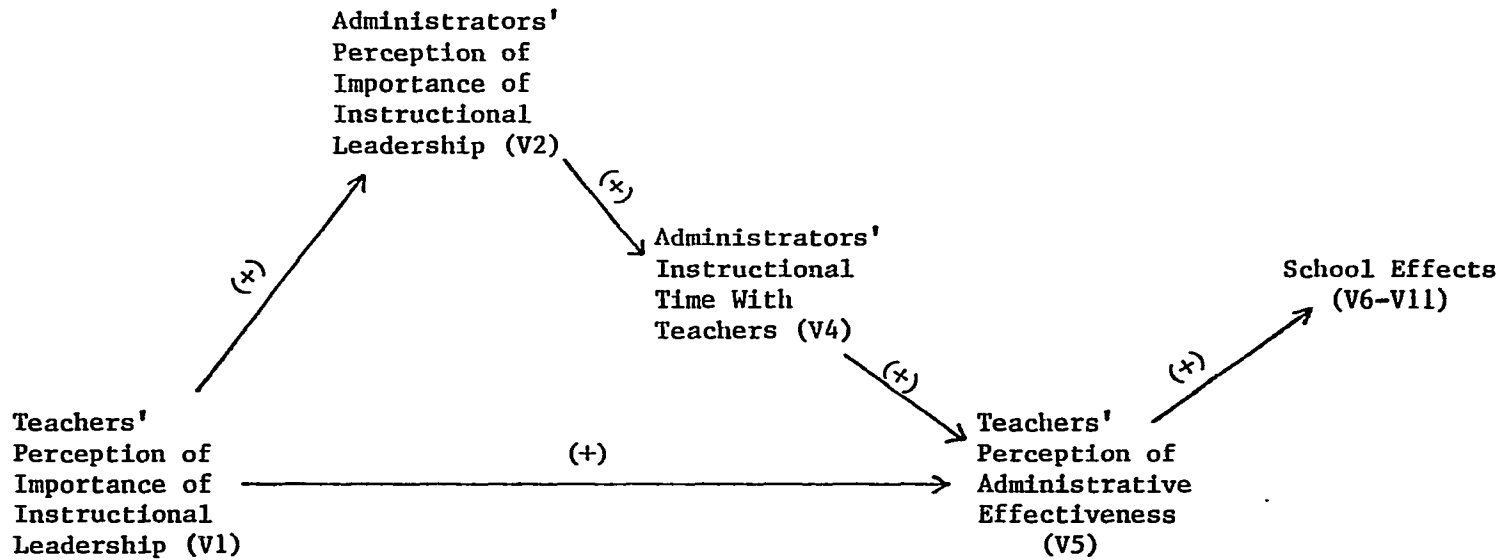


Figure 6. Hypothesized partial model of the impact of teacher perception of importance of instructional leadership (V1) on school effects moderated by V2, V4, and V5

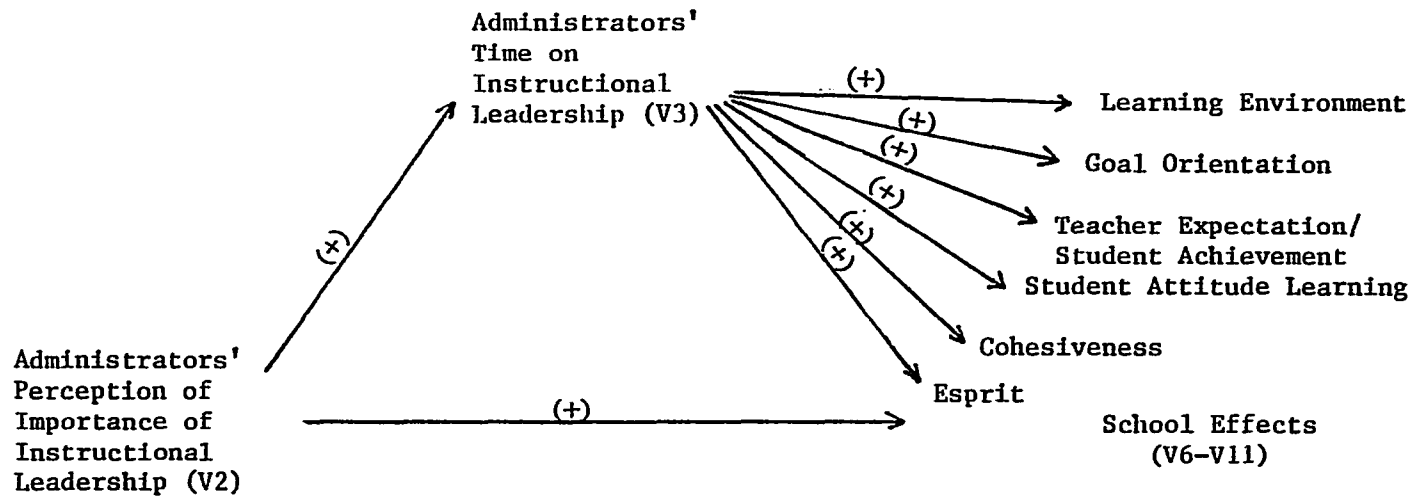


Figure 7. Hypothesized partial model of the impact of administrator perception of importance of instructional leadership (V2) on school effects moderated by V3

loop between school effects and teacher perception will not be analyzed.) (See Fig. 8.)

#### Data Analysis

This section discusses the statistical techniques employed in testing the hypotheses examined in this study. Each variable in the model was described in terms of its average score (mean) and variability (standard deviation). Pearson correlation coefficients were computed to test Hypothesis 1 and measure the relationships between each variable and every other variable along with the dependent variable. The data were analyzed to determine colinearity between the independent variables. This step is necessary to fit the requirements for path analysis. The correlation coefficients and scatterplots were examined for this step. The predictive portions of the model, Hypotheses 2a and 2b, were tested with multiple regression including stepwise regression. This technique analyzes the collective and separate contributions of the independent variables to the variation of the dependent variables. Hypothesis 3 was tested by synthesis of all previously described analyses to determine resultant significant paths which form a model corroborating the theoretical model proposed a priori. In testing all hypotheses, the data were analyzed using the SPSSX computer program.

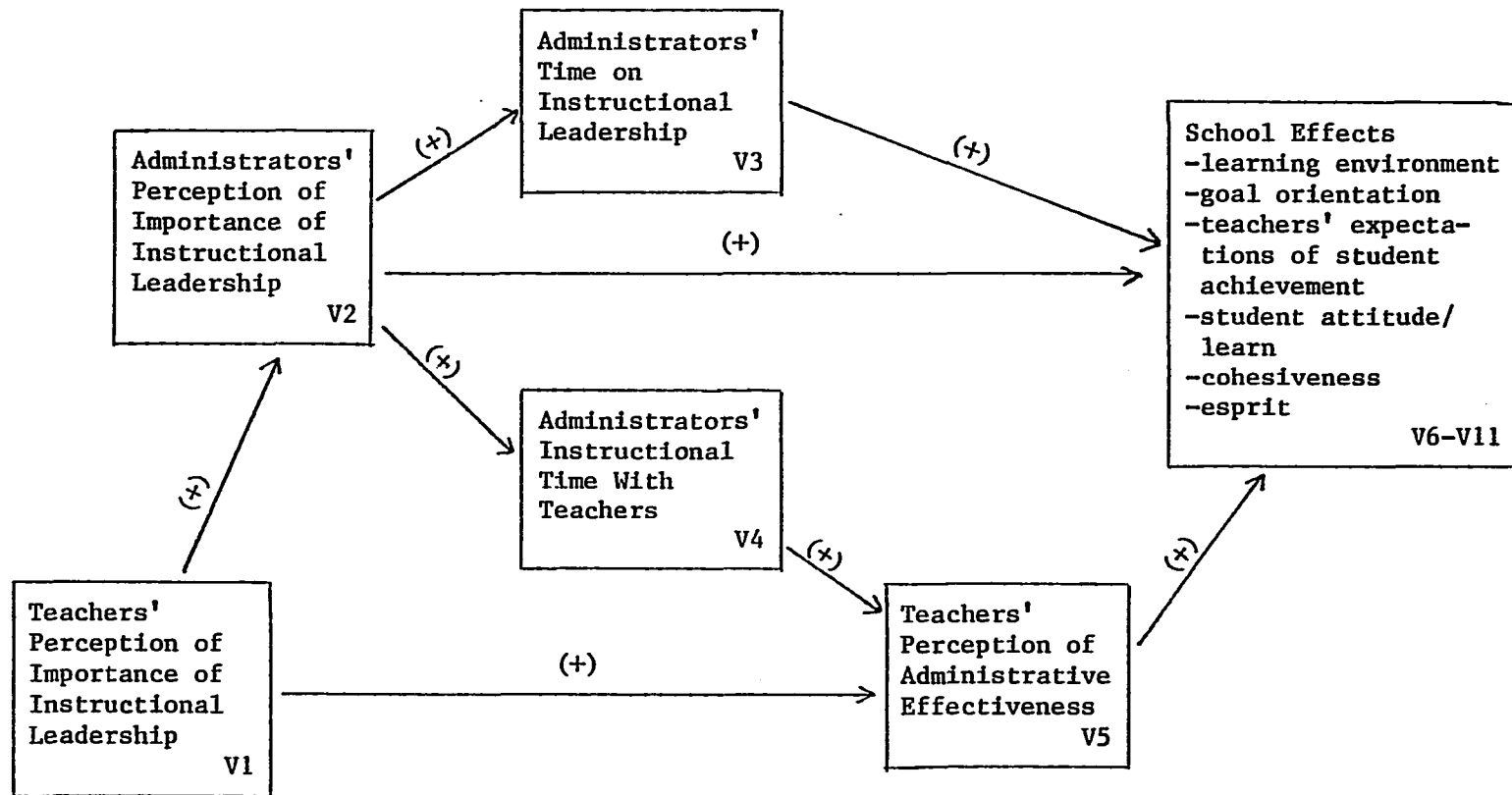


Figure 8. Hypothesized total causal model of the impact of the independent variables (V1-V5) on school effects (V6-V11)

## CHAPTER IV. RESULTS

## Descriptive Data

The four districts in this study are signified by anonymous labels of "A," "B," "C," and "D." Means and standard deviations are displayed in Tables 7 to 10. The data are organized to display comparisons between teacher and administrator perceptions of the importance of instructional leadership, Table 7; comparisons between total time spent by principals on instructional leadership and time spent with teachers on instructional leadership, Table 8; comparisons of measures of principals' effectiveness as perceived by teachers, Table 9; and comparisons of the school effects measures (dependent variables), Table 10.

## Correlational Data

Table 11 presents correlational data of all independent variables of the model. The importance of instructional leadership as perceived by teachers (V1) is positively related to the importance of instructional leadership as perceived by administrators (V2). Administrators' time on instructional leadership (V3) was positively related to the administrators' perception of the importance of instructional leadership (V2); however, there was not a significant relationship between administrators' time on instructional leadership (V3) and teachers' perception of the importance of instructional leadership (V1). Administrators' instructional time with teachers (V4) was found to be positively correlated to both administrators' and teachers' perceptions of the importance of instructional leadership (V1 and V2).

Table 7. Means and standard deviations of the importance of instructional leadership as perceived by teachers and administrators<sup>a</sup>

District	Teachers			Administrators		
	N	Mean	S.D.	N	Mean	S.D.
A	518	3.52	1.00	26	3.90	.80
B	149	3.72	1.05	11	4.09	.83
C	254	3.80	.87	13	4.17	.72
D	169	3.51	1.02	10	3.57	.98
Total	1077	3.59	.99	60	3.95	.81

<sup>a</sup>Range of responses, 1 (low) to 5 (high).

Table 8. Means and standard deviations of administrator time on instructional leadership activities and time with teachers about instruction

District	Hours on instructional leadership activities <sup>a</sup>			Hours with teachers <sup>b</sup>	
	N	Mean	S.D.	Mean	S.D.
A	26	52.77	23.35	24.65	17.67
B	11	37.72	25.09	17.52	7.69
C	13	79.44	26.57	42.29	17.73
D	10	61.64	27.61	32.75	18.17
Total	60	59.26	27.35	29.18	18.55

<sup>a</sup>Range of responses, 4.09 hours to 85.75 hours.

<sup>b</sup>Range of responses, 0 hours to 70.83 hours.



Table 9. Means and standard deviations of teacher perceptions of administrator effectiveness measures (V5)<sup>a</sup>

District	N	Mean	S.D.
A	518	3.31	.95
B	149	3.16	1.02
C	254	3.79	.93
D	169	3.33	.93
Total	1077	3.36	.97

<sup>a</sup>Range of responses, 1 (low) to 5 (high).

Table 11 also presents correlations of teachers' perceptions of the administrators' effectiveness of instructional leadership (V5) with all other independent variables within the model. A positive relationship was found between teachers' perceptions of effectiveness of administrator instructional leadership (V5) and three other variables; (1) administrator time on instructional leadership (V3), (2) administrator instructional time with teachers (V4), and (3) teachers' perception of the importance of instructional leadership (V1), while no significant relationship was found between teachers' perceptions of the effectiveness of their administrator as an instructional leader and administrators' perception of the importance of instructional leadership (V2).

Correlations of all independent variables of the instructional leadership model with all school effects variables are presented in Table 12. No significant relationships were found between teachers' and

Table 10. Means and standard deviations of the school effects as perceived by teachers<sup>a</sup>

District	N	Learning environment		Goal orientation		TESA		Student attitude/ learning		Cohesive-ness		Esprit	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
A	518	5.27	1.41	5.43	1.02	5.67	1.04	5.31	1.49	4.79	1.31	5.62	1.16
B	149	4.99	1.44	5.30	1.07	5.53	1.14	4.99	1.53	4.67	1.33	5.45	1.17
C	254	6.16	1.46	6.24	.99	6.27	.96	6.08	1.21	5.88	1.24	6.34	1.04
D	169	5.69	1.26	5.99	.95	6.18	.90	5.39	1.31	5.54	1.23	5.95	1.05
Total	1077	5.42	1.44	5.63	1.05	5.82	1.05	5.39	1.46	5.07	1.36	5.75	1.16

<sup>a</sup>Range of responses, 1 (low) to 8 (high).

Table 11. Correlation coefficients between independent variables in model (N=41)

	Teachers' perception of importance of instructional leadership (V1)	Administrators' perception of importance of instructional leadership (V2)	Administrators' time on instructional leadership (V3)	Administrators' time with teachers (V4)	Teachers' perception of effectiveness of administrators' instructional leadership (V5)
V1	X				
V2	.28*	X			
V3	.10	.22 <sup>+</sup>	X		
V4	.32*	.27*	.05	X	
V5	.31*	.18	.42**	.21 <sup>+</sup>	X

<sup>+</sup>p<.10.

\*p<.05.

\*\*p<.01.

Table 12. Correlations of all independent variables with dependent variables in model (N=41)

School effects	Teachers' perceptions of importance of instructional leadership (V1)	Administrators' perceptions of importance of instructional leadership (V2)	Administrators' time on instructional leadership (V3)	Administrators' time with teachers (V4)	Teachers' perceptions of effectiveness of administrators' instructional leadership (V5A)
(V6) Learning environment	.10	.10	.34*	.19	.65***
(V7) Goal orientation	.17	.10	.36*	.32*	.59***
(V8) Teacher expectations for student achievement	.07	.02	.25 <sup>+</sup>	.32*	.38**
(V9) Student attitudes for learning	.14	.17	.29*	.33*	.55***
(V10) Cohesiveness	.05	-.07	.31*	.31*	.54***
(V11) Esprit	.15	.04	.31*	.25 <sup>+</sup>	.62***

<sup>+</sup>p<.10.

\*p<.05.

\*\*p<.01.

\*\*\*p<.001.

administrators' perceptions of the importance of instructional leadership and all school effects. There was also no significant relationship found between administrators' instructional time with teachers and the school effect of learning environment. Administrators' time on instructional leadership was positively related to all six school effects; (1) learning environment, (2) goal orientation, (3) teachers' expectations for student achievement, (4) student attitudes for learning, (5) cohesiveness, and (6) esprit; as was teachers' perceptions of administrators' effectiveness as an instructional leader. Administrators' instructional time with teachers was found to be positively related to five school effects; (1) goal orientation, (2) teacher expectations for student achievement, (3) student attitudes for learning, (4) cohesiveness, and (5) esprit.

#### Exploratory Analysis Augmenting this Study

The measure of administrator effectiveness as perceived by teachers was operationalized by a single response to one section of the questionnaire which asked respondents to rate on a scale of 1 (low) to 5 (high) the effectiveness of their administrators' performance on each of the six major functions of building administrator. The SII includes other measures of teacher perceptions about administrator effectiveness beyond the effectiveness of function. The literature supports the inclusion of all these measures for the whole view of what instructional leadership involves. They were: (1) administrator enthusiasm and dedication, (2) supports teachers, (3) evaluates pupil progress, (4) coordinates curriculum and instruction, and (5) emphasizes curriculum and instruction.

The respondents were asked to use an 8-point scale of 1 (very low) to 8 (very high).

In order to explore this angle, the data were revised. The effectiveness of function scores (range of one to five) were adjusted by multiplying each score by eight-fifths ( $8/5$ ). This score was then combined with the other five scores and a mean score representing the combined measure was used to explore the relationships. All relationships of the separate and combined variables were found to be positive and statistically significant ( $p < .05$  to  $p < .001$ ). See Appendix B.

#### Analysis of Data for Linearity Within Model

One necessary assumption that underlies path analysis is that the relations among variables in the model are linear, additive, and causal. Curvilinear or interaction relations are excluded (Pedhazur, 1982). Linearity is the tendency of points to locate along a straight line. That is, if a scattergram displays a random scatter about a straight line, the trend of the data is then linear. The Pearson  $r$  is the index of the linear relationship between two variables.

A high correlation between independent variables making up one path of a model indicates colinearity. If two independent variables interact strongly before reaching the dependent variable, the path is not linear and additive. Examination of correlation coefficients and scatterplots indicate some colinearity between teachers' perception of the effectiveness of the function of instructional leadership (V5) and the administrators' time on instructional leadership (V3). The correlation

coefficient is .42\*\*. Further investigation of the time variable will continue with the regression analysis of the model.

Another assumption that underlies path analysis is that there is a one-way causal flow in the system. No reciprocal causation between variables is accepted. For this reason, the feedback loop between school effects and teacher perceptions was removed from the original hypothesized model.

#### Tests of Proposed Models

A series of path analyses was conducted to test the hypothesized model for prediction of school effects from perceptions of teachers and administrator time on instructional leadership. The first partial model tested hypothesized the impact of teachers' perception of the importance of instructional leadership (V1) with administrators' perceptions of the importance of instructional leadership (V2), administrators' instructional time with teachers (V4), and teachers' perception of administrator effectiveness (V5). Figure 9 presents the path coefficients for the partial model. There is no summary of regression analysis for V1 and V4 on V5 because no significant contribution was made by V4.

The second partial model tested the hypothesized impact of administrators' perception of the importance of instructional leadership with administrators' time on instructional leadership on school effects. Figure 10 presents path coefficients for this partial model. There is no summary of regression analysis for V2 and V3 on V6-V11 because V2 (administrators' perception of the importance of instructional leadership) had no significant path coefficient.

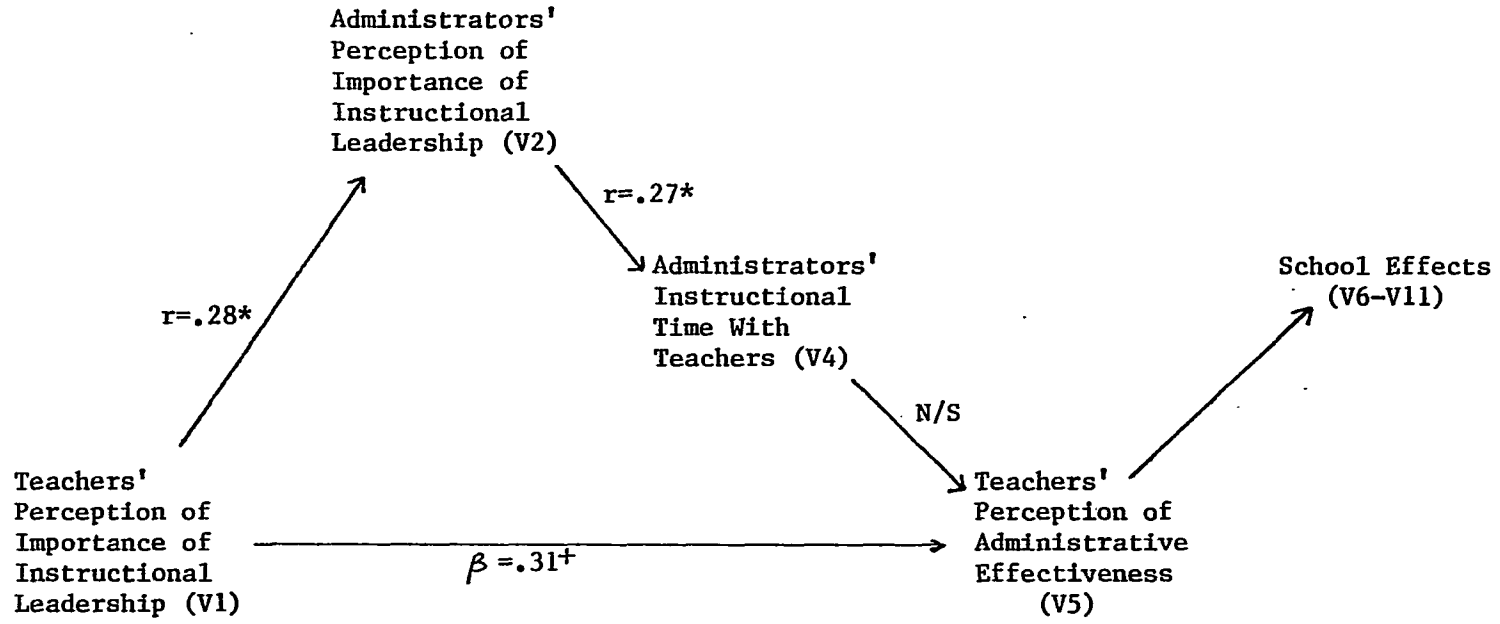


Figure 9. Hypothesized partial model of the impact of teacher perception of importance of instructional leadership (V1) on school effects moderated by V2, V4, and V5



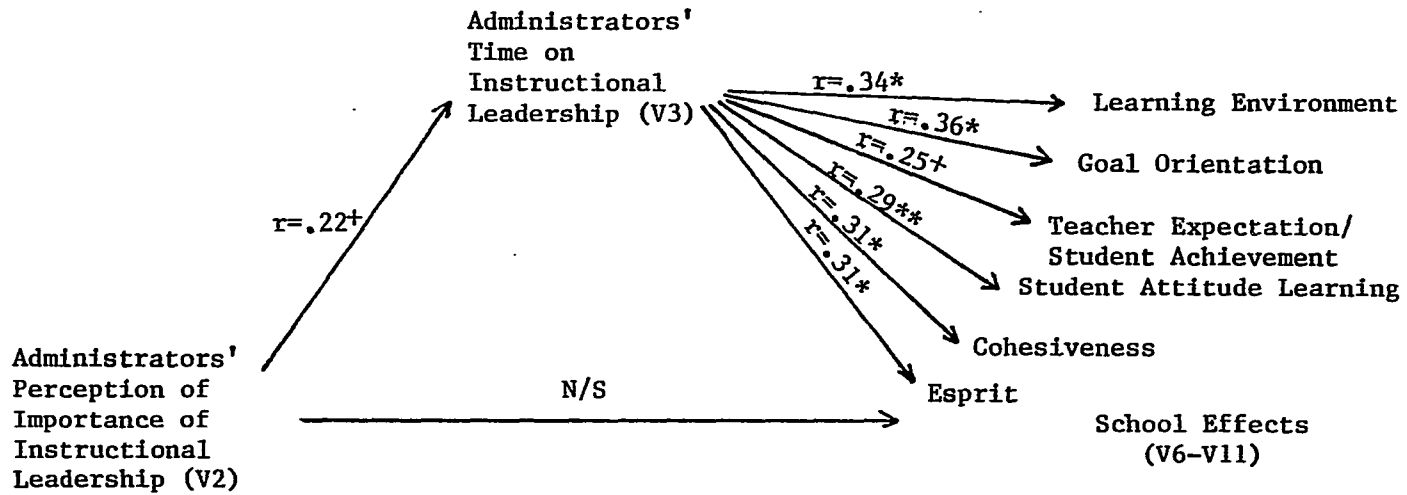


Figure 10. Hypothesized partial model of the impact of administrator perception of importance of instructional leadership (V2) on school effects moderated by V3

The model is presented in Figure 11 representing analysis of the data on path coefficients. There is no summary of regression analysis for V3 and V5 on V6-V11 because V3 (administrators' time on instructional leadership) had no significant contribution to the prediction of school effects with V5 (teachers' perception of administrators' effectiveness).

The path coefficients are displayed for V1 (teachers' perception of the importance of instructional leadership) and V3 (administrators' time on instructional leadership) with V5 (teachers' perception of administrator effectiveness). Since no significant contribution was made by V1 (teachers' perception of the importance of instructional leadership) to the prediction of V5 with V3, this path of the model is not supported empirically.

The solid and dotted lines of the model represent statistically significant path coefficients. The dashed lines are not statistically significant. This final model presents the pattern of causation between variables. The consistency of this model lends support to the theories reviewed in this study. "The path coefficient indicates the direct effect of a variable hypothesized as a cause of a variable taken as an effect" (Pedhazur, 1982, p. 583).

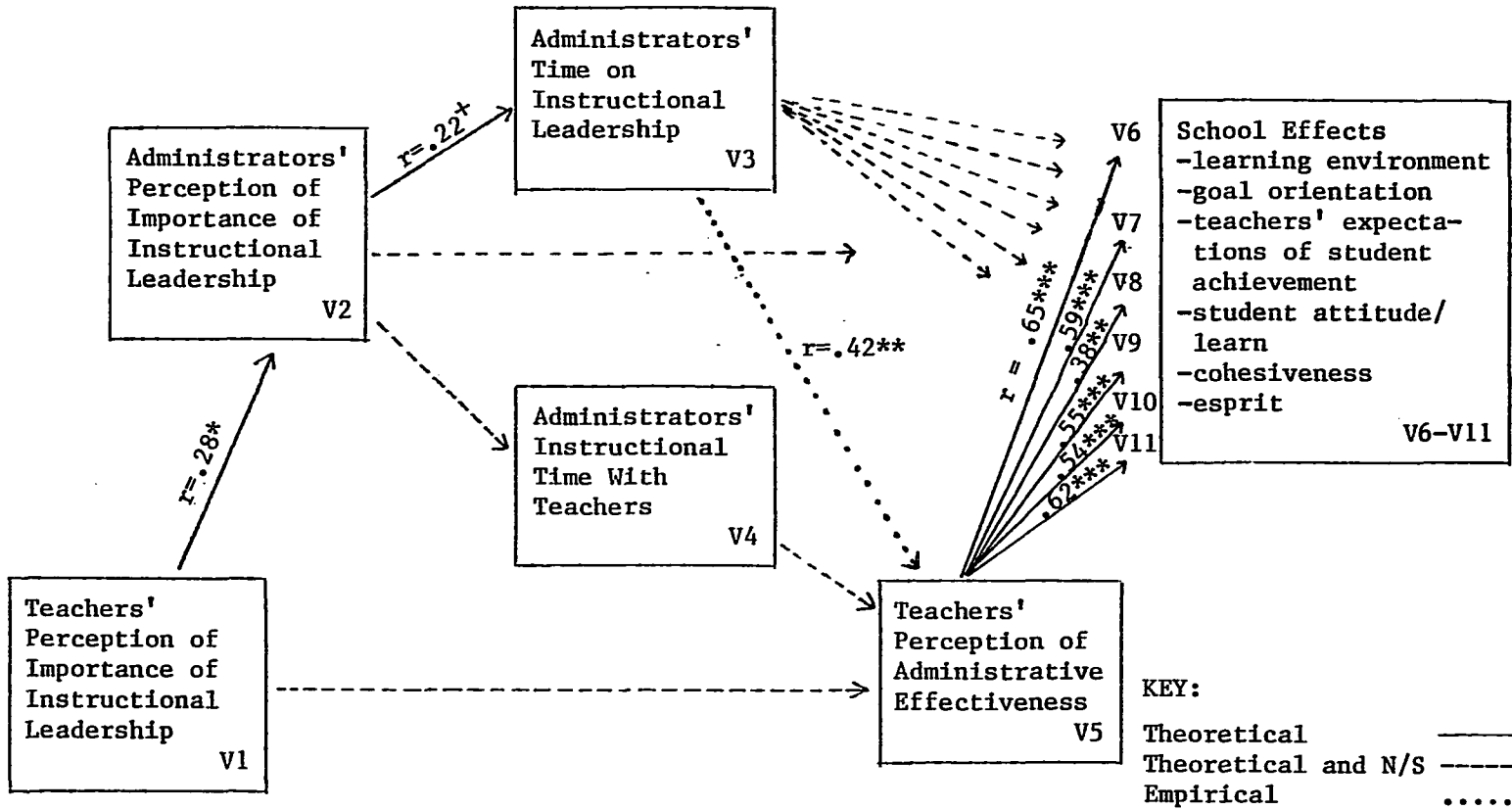


Figure 11. Hypothesized total causal model of the impact of the independent variables (V1-V5) on school effects (V6-V11)

## CHAPTER V. SUMMARY, DISCUSSION, AND RECOMMENDATIONS

The search for better schools has been operationalized, in one manner, by educators' observing that some schools served their pupils better than other schools did. In this way, the vision of better schools spawned the concept called "effective schools." Articles on effective schools frequently identify the need for strong building leadership, and although research of the effective schools movement has room for improvement, the concepts have proven useful to practical application and further research. As Achilles (1987) comments, "..., the findings of effective schools make sense."

## Summary

School climate is frequently listed as an essential element of the effective school. As a matter of fact, school expectations are usually linked to school climate by leadership. The building principal who supports the establishment of a positive learning climate and the maintenance of this climate is often described as a principal demonstrating effective school leadership. Measurements of school climate consider expectations of teachers for student achievement, esprit, and mutual respect between and among teachers and students, sense of community, safe learning environment, and a focus on instruction (Brookover et al., 1982).

Sergiovani (1987) observed that significant changes are taking place in how school leadership is viewed, understood, and practiced. Of the functions performed by principals, setting the tone of the school and

communicating the school's values to teachers, parents, and students is one of the most important activities. This view of leadership places emphasis on perceptions of administrators, teachers, and students as they shape the school's culture. How leadership activities, such as communication, influence climate; how principals perform specific leadership behaviors that affect climate; and how teachers' perceptions of the leadership of their principals directly relate to student achievement are concepts targeted for further study by several researchers (Pinckney, 1982; Sweeney, 1986; and Andrews & Soder, 1987).

The major theme of this study was to examine the relationships between perceptions of teachers and administrators, the administrators' time on instructional leadership activities, and school effects which make up the learning climate. The purpose of this study was to construct and test a model which illustrates the relationships of perception and behavior variables with school climate. This study also sheds light on the nature of leadership and its effect on teachers; on the meanings associated with principals' actions; and revealed that the primary effect of administrators' leadership is indirect.

#### The Dynamics of Instructional Leadership Model

The research on effective schools, instructional leadership, communication, and school climate provided a rationale for the specific factors included in the model of the dynamics of instructional leadership. The model included the independent variables of (1) teachers' perception of the importance of instructional leadership, (2) administrators' perceptions of the importance of instructional leadership, (3) the

administrators' time on instructional leadership activities, (4) the instructional time administrators spent with teachers, and (5) the teachers' perception of administrator effectiveness on instructional leadership. Indicators of the school learning climate (school effects) included measurements of (1) learning environment, (2) goal orientation, (3) teachers' expectations of student achievement, (4) student attitudes toward learning, (5) cohesiveness, and (6) esprit.

The instructional leadership model postulated that administrators' perceptions were positively related to teachers' perceptions regarding the importance of the instructional leadership function, and that teachers' perceptions of the importance of the instructional leadership function would positively relate to their perceptions of the administrators' effectiveness on instructional leadership.

Administrators' perception of the importance of the instructional leadership function, according to the model, influence the amount of time administrators spent on instructional leadership and also the amount of time spent with teachers on instructional activities which would, in turn, relate positively with the teachers' perception of administrator effectiveness on the instructional leadership function. School effects (measures of school learning climate) were theorized to be positively related to both tasks (administrator time on instructional leadership activities) and relations (teachers' perception of administrator effectiveness on the instructional leadership function).

The instructional leadership model developed for this study allows for correlational, predictive, and causal analysis. Three hypotheses,

translated from the theoretical to the empirical level for testing, are presented below:

1. There is a significant relationship between instructional leadership perceptions and activities with school effects.
2. Both teacher and administrator perceptions combine with instructional leadership activities to predict school effects (measures of school learning climate).
3. Both teacher and administrator perceptions combine with instructional leadership activities to demonstrate a causal pattern to school effects (measures of school learning climate).

The study utilized data collected from School Improvement Model (SIM) projects conducted by ISU personnel at the request of four K-12 school districts interested in school reform. These school improvement projects, initiated in 1986, used survey research to collect data from teachers and administrators regarding school improvement measures and perceptions of school administrator functions. They also used data, self-reported by individual administrators, regarding time spent on critical work activities. It should be noted that all data used for this study were pre-intervention, benchmark data.

Descriptive information about perceptions of teachers and administrators revealed that administrators ranked the importance of the instructional leadership function at 3.95 on a five-point scale, which is seven percent higher than teachers (3.59). Further analysis indicated that administrators spend approximately 50 percent more time on

instructional leadership activities with other administrators and alone than with teachers.

Teacher respondents perceived their administrators as performing the instructional leadership function at 3.36 on a five-point scale measuring effectiveness. Additional data collected by the School Improvement Inventory revealed teachers' perceptions of administrators' performance on specific instructional leadership activities (evaluating pupil progress, coordinating instruction and curriculum, and instructional and curricular emphasis). Administrators' effectiveness on specific instructional leadership activities was perceived to be 25 percent less effective than administrators' performance of enthusiasm, dedication, and support of teachers.

In testing the hypotheses related to the Dynamics of Instructional Leadership Model, the data were grouped by building units, i.e., the mean response of teachers from each building along with the mean response of the administrator/s were identified as one record. Each building record included survey data from the School Improvement Inventory (SII) and the mean times from Critical Work Activity (CWA) logs. The empirical measures for each of the variables within the model were described in Chapter III.

#### Hypotheses and Questions

The theoretical framework within the context of the Dynamics of Instructional Leadership Model posed specific questions for this study. Research hypotheses and the analysis of the data resulted in findings relating to the major goals of the study.



### Hypothesis 1

There is a positive relationship between teacher perceptions, administrator time on instructional leadership activities, and school effects.

Correlation coefficients between independent variables indicate low positive relationships significant at the  $p < .05$  level for: teachers' perceptions of importance of instructional leadership function with administrators' perception of importance of instructional leadership function (.28), with administrators' instructional time with teachers (.32), and with teachers' perceptions of effectiveness of administrators' instructional leadership (.31); also, administrators' perceptions of importance of instructional leadership function with administrators' instructional time with teachers (.27). The correlation coefficient for the relationship between administrators' instructional time with teachers and teachers' perception of effectiveness of administrators' instructional leadership (.42) was significant at the  $p < .01$  level.

Correlation coefficients of independent variables (perceptions and time on instructional leadership activities) with the dependent variables in the model (measures of school learning climate) indicate half of the relationships are moderate, positive, and significant at  $p < .05$ . These include: learning environment with administrators' time on instructional leadership (.34), and with teachers' perception of administrator effectiveness; goal orientation with administrators' time on instructional leadership (.36), administrators' instructional time with teachers (.32), and teachers' perceptions of administrators' effectiveness (.65); teacher

expectations for student achievement with administrators' instructional time with teachers (.32), and teachers' perceptions of administrators' effectiveness (.38); student attitudes about learning with administrators' time on instructional leadership (.29), administrators' instructional time with teachers (.33), and teachers' perceptions of administrators' effectiveness (.55); cohesiveness with administrators' time on instructional leadership (.31), administrators' instructional time with teachers (.31), and teachers' perceptions of administrator effectiveness (.54); and esprit with administrators' time on instructional leadership (.31), and teachers' perception of administrators' effectiveness (.62).

#### Hypothesis 2

The independent variables (teacher perceptions and time on instructional leadership activities) presented in the theorized model will both directly and indirectly predict school effects as explained by the partial models.

- a. Teachers' perception of importance of instructional leadership (V1) was predicted to lead to an increase in school effects (V6-V11) by indirectly increasing administrator perception of importance of instructional leadership (V2), administrator instructional time with teachers (V4), and teachers' perception of administrator effectiveness (V5) (see Fig. 9).

Teachers' perceptions of importance of instructional leadership was a moderate predictor, accounting for less than 30 percent of the variability at the  $p < .05$  level, of administrators' perception of importance of instructional leadership, and administrators' instructional time with

teachers. Teachers' perceptions of the importance of instructional leadership had no significant prediction ability along the indirect path to school effects.

- b. Administrators' perception of importance of instructional leadership (V2) was predicted to lead to an increase in school effects (V6-V11), both directly and indirectly by increasing administrator time on instructional leadership (V3) (see Fig. 10).

Administrators' perceptions of importance of instructional leadership was not a significant predictor of time on instructional leadership, nor was it a significant direct predictor of school effects. Administrators' time on instructional leadership was a moderate direct predictor significant at  $p < .05$  for five of the school effects accounting for a mean 32 percent of the variance in learning environment, goal orientation, student attitudes about learning, cohesiveness, and esprit. Teacher expectations for student achievement was not significantly predicted by administrator time on instructional leadership.

### Hypothesis 3

The total theoretical model will represent a causal pattern between the teacher perceptions along with administrators' time on instructional leadership leading to the school effects (see Fig. 11).

Path analysis revealed a significant ( $p < .10$ ) causal pattern between four independent variables and school effects. Theorized paths within the model substantiated by empirical results included teachers' perceptions of importance of instructional leadership, administrators' perception of

importance of instructional leadership, and administrators' time on instructional leadership; also, teachers' perceptions of administrator effectiveness and all school effects.

One path not theorized a priori, but suggested by empirical results, is between administrator time on instructional leadership and teachers' perceptions of administrators' effectiveness. This path was significant at the  $p < .01$  level and it completes the causal pattern from V1 (teachers' perceptions of importance of instructional leadership function) to V6-V11 (all school effects). These variables each proved to be linear and additive relationships with one another, therefore satisfying the assumption underlying path analysis that there is one-way causal flow in the system (Pedhazur, 1982).

Questions posed for this study were suggested by the theoretical framework of the Dynamics of Instructional Leadership Model. Results of this study relate to these questions.

Teachers' perceptions of the importance of instructional leadership

Question 1: Are teachers' perceptions of the importance of instructional leadership able to influence their own perception of administrator effectiveness and also the administrators' perceptions of the importance of instructional leadership?

Teachers' perceptions of the importance of instructional leadership function were significantly and positively related to the other perception variables within the model. Teachers' perceptions of the importance

influenced .28 ( $p < .05$ ) of the administrators' perceptions of importance and .31 ( $p < .10$ ) of the teachers' own perception of administrator effectiveness.

Administrators' perception of the importance of instructional leadership

Question 2: Does the administrators' perception of the importance of instructional leadership influence the amount of time they spend on instructional leadership and also the amount of time they spend with teachers on instructional leadership?

Administrators' perceptions of the importance of instructional leadership were significantly and positively correlated to both the amount of time they spent on instructional leadership and the amount of instructional time they spent with teachers. Administrators' perceptions of the importance correlated at .27 ( $p < .05$ ) of the time with teachers and .22 ( $p < .10$ ) of the time on instructional leadership without teachers. Five percent of the variance in time on instructional leadership activities without teachers is influenced by administrators' perceptions of importance. Those same administrators' perceptions influenced eight percent of the variance in instructional time they spent with teachers.

Administrators' time on instructional leadership activities

Question 3: Does the amount of administrators' time spent on instructional leadership influence school effects, viz., teacher expectations for student achievement,

cohesiveness, esprit, goal orientation, school learning environment, and student attitudes toward learning?

The school effects of learning environment, goal orientation, cohesiveness, and esprit were, similarly, moderate (mean  $r=.33$ ) positive correlates of administrators' time on instructional leadership at the  $p<.05$  level. Teacher expectations for student achievement was a low positive correlate ( $r=.25$ ) at the  $p<.10$  level. Student attitudes for learning was also a low positive correlate ( $r=.29$ ) at the  $p<.01$  level. Path analysis revealed no significant influence on school effects by the administrators' time on instructional leadership activities.

Administrators' instructional time with teachers

Question 4: Does the amount of time administrators spend with teachers on instructional leadership together with teachers' perception of the importance of instructional leadership influence teachers' perceptions of administrators' effectiveness?

Instructional time with teachers and teachers' perceptions of importance were low correlates of teachers' perceptions of administrator effectiveness. The correlation coefficient for time with teachers was .21 at the  $p<.10$  level and the teachers' perception of importance coefficient was .31 at the  $p<.05$  level. Regression analysis indicated no significant influence of time with teachers together with teachers' perceptions of importance upon teachers' perceptions of administrators' effectiveness.

### Teachers' perceptions of administrators' effectiveness

Question 5: Do teachers' perceptions of the administrators' effectiveness influence any school effects?

Teachers' perceptions of administrators' effectiveness was the strongest influence of all the factors upon all school effects. The most significant ( $p < .001$ ) correlation coefficients (mean  $r = .60$ ) were with five school effects (learning environment, goal orientation, student attitudes about learning, cohesiveness, and esprit). Teacher expectations of student achievement correlated at  $.38$  ( $p < .01$ ).

### School effects

Question 6: Do the school effects reinforce as feedback and influence teachers' perceptions of administrator effectiveness and/or importance of instructional leadership?

The reinforcement or feedback function of school effects was not tested in this study. The reciprocal relationship of individual perceptions and organizational climate restricted is theorized in numerous studies, but this study was by the research design (longitudinal studies are more effective methods for analyzing feedback influence) and the size of the sample (LISREL statistical analysis will test for reciprocal relationships if the sample size is over 1,000).

### Administrator and teacher perceptions

Question 7: Do administrators' perceptions, together with teachers' perceptions and amount of time spent on instructional

leadership activities, predict school effects relative to instructional outcomes?

The school effects measured in this study are based on effective schools research. Maximizing instructional outcomes is the common measure of effective schools. If perceptions and time on instructional leadership influence school effects, implications are that they may also influence instructional outcomes (student achievement). The final causal model represents a causal pattern between teachers' perceptions of importance to administrators' perceptions of importance to the amount of time spent on instructional leadership activities to teachers' perceptions of administrators' effectiveness. These four factors together significantly impact school effects (from  $p < .10$  to  $p < .001$ ).

The ability of these four factors together to predict school effects is significant from  $p < .0001$  to  $p < .05$  and accounts for 43 percent variance in learning environment, 36 percent variance in goal orientation, 16 percent variance in teacher expectations of student achievement, 31 percent variance in student attitudes about learning, 30 percent variance in cohesiveness, and 38 percent of the variance in esprit.

#### Conclusions

The analyses of the data point to several conclusions relating to the relationships of the variables to school learning climate, the amount of influence the variables have upon school climate and each other, and the overall strength of the variables together as they predict school climate and substantiate patterns of causality.



1. Teachers' perceptions evoke similar perceptions in the administrators. Teachers' and administrators' perceptions of the importance of the instructional leadership function have a modest, but significant, positive relationship (Sergiovani, 1987).

2. Administrators spend time on activities in proportion to their perception of the importance of those activities. Administrators' perceptions of the importance of instructional leadership activities have a slight positive relationship to the amounts of time administrators spend on instructional leadership activities without teachers. Administrator time with teachers was a stronger, more significant relationship to their perceptions (Pinckney, 1982).

3. The time administrators spent on instructional leadership activities was moderately related to teacher perceptions of cohesiveness, esprit, goal orientation, and learning environment. Teachers place a high value on administrator activities which enhance their satisfaction with teaching (Pinckney, 1982).

4. The time which administrators spend with teachers is influenced by both their own and the teachers' perceptions of relative importance (Steinfatt & Miller, 1974).

5. The instructional time that administrators spend with teachers does not influence teachers' perceptions of administrators' effectiveness as much as the time that administrators spend on instructional leadership activities without teachers. Grunig and Hunt (1984) theorize that perceptions of effectiveness are influenced by the time spent on important activities.

6. Teachers do not rate the importance of instructional leadership as high as administrators do, and therefore teachers' perceptions of administrators' effectiveness is not as influenced by the fact that administrators spend more time on instructional leadership without teachers than with them. Perceptions of the relative importance of information influences which information a person seeks and how frequently they will seek the information (Grunig & Hunt, 1984).

7. The administrators' time spent on instructional leadership activities moderately influences goal orientation and learning environment. Administrators typically spend 70 percent more time on activities other than instructional leadership (see Table 8). Time plays a necessary role in communication for processing and normalizing information.

8. School administrators influence school effects through teacher perceptions. Leaders rely on normative power when seeking coordination, order, and compliance (Etzioni, 1961).

9. Educational organizations are loosely coupled systems which require administrative linkages between school district goals and student outcomes (Weick, 1976; Deal & Celotti, 1980; Andrews & Soder, 1987; and Wilson & Firestone, 1987).

The causal model resulting from analysis of data in this study presents a pattern of causation between the perceptions of teachers and administrators' activities affecting school learning climate. Time on instructional leadership activities works together with teacher and administrator perceptions to explain 36 percent of the variance in school

learning climate measures. Other factors not included in this study may determine remaining portions of causality left unexplained by these variables.

### Discussion

The major purpose of this study was to study relationships of teacher perceptions, administrator time on instructional leadership activities, and school learning climate. The literature pertaining to the dynamics of leadership, organizational climate, and communication research was applied to 41 school settings by using a model of dynamics of instructional leadership. School learning climate was defined as the teaching/learning atmosphere measured by the School Improvement Inventory. Instructional leadership activities were defined as administrator performances which enhance learning.

The school effect variable, teacher expectations for student achievement, did not test as strong or significant in the model as other measures of school learning climate. Teacher expectations may be influenced more strongly by exogenous variables (variables outside the Dynamics of Instructional Leadership Model). Interactions between teacher and student are commonly investigated to explain teacher expectations. These interactions between individuals within each classroom are often influenced by teacher self-efficacy and student socioeconomic status, gender, race, and/or ethnic culture. Results of this study lend empirical support for the viewpoint that teacher expectations is more a function of teacher-student interaction than teacher-principal interaction.

This study would indicate that principal behaviors have no direct effect on school learning climate. The behaviors of principals influence climate only through teacher reactions to those behaviors. The behaviors alone are not as important as the meaning associated with the behaviors (Sergiovani, 1987). Also, the principal does not function in isolation. Principals' behaviors are influenced by their own perceptions and teachers' perceptions of what they should be doing. Perceptions of role expectancy influence the administrators' behavior. Administrators' behavior responds to teacher perceptions along with administrators' own perceptions.

This study also evidences that effectiveness is a perception of others. The performance of necessary behaviors on the part of the leader functions as a symbol of what is expected. Teachers and administrators do not act in isolation, but as part of a building unit. Teachers react to the administrator behavior and perceptions as they interpret administrator effectiveness.

Through data analysis, several factors that influence school learning climate were correlated with measures of school effects. These factors included the actions and reactions (perceptions and time on activities) of teachers and administrators. They reiterate the dynamics of leadership and give credence to the followership (teacher) dimension. Teacher reactions function as symbols of attitudes and behaviors in response to administrator behavior and attitude and the cycle continues...a flow of action, reaction, action, etc. Results from this study parallel

leadership theories that are founded on the symbolic, interactive process approach (Griffen et al., 1987; and Sergiovani, 1987).

This study indicates that a consequence or outcome of leader/follower interaction is the development of an organizational climate. The degree of agreement (perceptions of both teachers and administrators) about the importance of teaching/learning drives a significant share of school learning climate measures. The interactions become a means of communication and a framework for interpreting the culture and climate of the school organization.

The school learning climate is a consequence of the actions and interactions of teacher and principals. The interactions include dyadic (principal with one teacher), full-group (principal with all teachers), and other variations in between. This research parallels previous leadership theories (Pfeffer, 1981) that propose meaningful patterns of leader behavior, follower response, and subsequent leader behavior. If administrators are spending almost 50 percent more time on instructional activities without teachers, the teachers may not be aware that the principals are performing those tasks. Instructional leadership is a dynamic process resulting from two-way interaction between teachers and principals. Simply put, a principal doesn't lead when he's in a meeting with his superior or when she's working alone.

The variable within the model which did not display the strength necessary to function as a theorized path coefficient was the amount of instructional time spent by administrators with the teachers. A significant correlate with teachers' perception of the importance of the

instructional leadership function, it appears to represent only a manifestation of the presence of those perceptions. Time spent in interactions with teachers did not function as a communication about effectiveness of the instructional leadership as hypothesized.

The stronger, more significant path coefficient, not hypothesized a priori, was the time spent on instructional leadership activities without teachers. The influence of the time on instructional leadership was too weak to have a significant direct effect on school learning climate variables; however, time on instructional leadership was a significant contributor to teachers' perceptions...an indirect effect.

The Dynamics of Instructional Leadership Model may provide a useful vehicle for operationalizing the many variables of school climate and instructional leadership. This study attempts to clarify the interactions of teachers and administrators in relation to the complex phenomenon of instructional leadership and school learning climate. Examination of these concepts may reveal evidence pertaining to the larger constructs.

#### Limitations

1. All data analyzed in this study came from school districts participating in School Improvement Model (SIM) projects and generalizations cannot be made outside that population.
2. The attention to school improvement within the school district may have created a greater disposition for all administrators to be logging more than the usual amount of time on critical work activities.
3. All data were gathered during 1987, and generalizations about the reliability of these measures must be made within that time frame.

4. Variables not considered in this study may have an undetected direct or interaction effect on time logging, teacher or administrator perceptions, and school effects.

5. The data were collected during an on-going School Improvement Model project which prohibited the use of an experimental design with a control group, thus limiting the ability of the investigator to establish cause and effect relationships between two or more variables.

6. The School Improvement Inventory has limitations due to lack of thorough review for reliability, validity, and consistency.

#### Recommendations for Practitioners

The results of this study suggest that certain instructional leadership activities are critical to providing a school learning climate, but that teachers are the medium through which school principals must work.

1. School effects which comprise the learning climate need to be understood by all faculty and not just administrators.

2. Emphasize the individual school as a unit of decision making and instructional outcomes.

3. The research-based activities critical to instructional leadership need to be understood by all faculty and not just administrators.

4. Measures of time spent on critical instructional leadership activities such as time logging are useful to increase awareness of administrators and provide an instructional focus to the daily work activities.

5. Administrators must work with teachers to plan, implement, monitor, and evaluate school learning climate.
6. Administrators must realize that their leadership cannot exist separate from what the teachers find meaningful and significant.
7. Educational leadership training should incorporate up-to-date explicit knowledge of effective school learning climate and instructional leadership activities, along with skills in working with groups and committees, team development, interpersonal communication, and participative approaches such as mentoring and coaching.
8. The selection criteria for school administrators should include these principal behaviors which are linked to effective school learning climate.
9. Administrator appraisal procedures and criteria should include measures of effective principal behaviors and school learning climate as perceived by teachers.

#### Recommendations for Further Research

The present study has shown that the school learning climate is influenced by teacher perceptions regarding administrator time on instructional leadership. Further research listed below could strengthen the methodology and provide further insight into the factors that influence school learning climate and explain the instructional leadership process.

1. Longitudinal studies to determine the influence of school climate as a feedback loop to teacher perceptions and the time administrators spend on instructional leadership activities.



2. Redesign this study into an experimental cause and effect research design. The amount of administrator time or the types of activities could be applied as treatment to a randomly selected sample of school building units.

3. Consider other measures of interaction or communication between administrators and teachers and reinstate the path of the model for this variable (V4).

4. Revise the Dynamics of Instructional Leadership Model to include additional measurements of teacher perceptions of administrator effectiveness as explored in this study. A jury could validate and weight those measures which included administrator enthusiasm and dedication, supports teachers, evaluates pupil progress, coordinates instruction and curricula, instructional and curricular emphasis, along with the effectiveness of the instructional leadership function.

5. Improve the School Improvement Inventory or use a different assessment tool.

6. Expand the Dynamics of Instructional Leadership Model to include measures of student achievement.

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peer group provided esprit necessary and often vital to maintenance of  
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APPENDIX A.  
DATA COLLECTION INSTRUMENTS

# SCHOOL IMPROVEMENT INVENTORY

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Dr. Jim Sweeney

Iowa State University

ORGANIZATION	BUILDING	GROUP	EXAMPLES	IMPORTANT DIRECTIONS FOR MARKING ANSWERS
<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	<input type="radio"/> Teacher  <input type="radio"/> Administrator  <input type="radio"/> Central Office  <input type="radio"/> Other	<p><b>WRONG</b></p> <p>1 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5</p> <p><b>WRONG</b></p> <p>2 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5</p> <p><b>WRONG</b></p> <p>3 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5</p> <p><b>RIGHT</b></p> <p>4 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5</p>	<ul style="list-style-type: none"> <li>• Use black lead pencil only (No. 2½ or softer)</li> <li>• Do NOT use ink or ballpoint pens</li> <li>• Make heavy black marks that fill the circle completely</li> <li>• Erase cleanly any answer you wish to change</li> <li>• Make no stray marks on the answer sheet</li> </ul>

This inventory is designed to gather information which can be used for school improvement. In completing this inventory, it is important that you respond as thoughtfully and candidly as possible. Please read the directions carefully and respond to each item as it currently applies to conditions in your school. Described below are six major functions which are the responsibility of your building administrator. You are being asked to rate the relative importance of each for promoting effectiveness in your school.

**HUMAN RESOURCE MANAGEMENT** – Assists teachers to motivate, challenge, and excite students to learn at the optimal level, and assists staff in obtaining maximum use of their human potential for reaching personal and organizational goals.

**INSTRUCTIONAL LEADERSHIP** – Enhances student learning through updating of curriculum and instructional materials, evaluating staff for the purposes of improvement, and evaluating educational program and student progress.

**LEARNING ENVIRONMENT MANAGEMENT** – Develops and maintains discipline standards which provide students with a clear understanding of expectations for behavior inside and outside the classroom and provides an educational atmosphere conducive to learning.

**NON-INSTRUCTIONAL MANAGEMENT** – Schedules all routine and special activities; supervises logistical matters and the school plant.

**PUPIL PERSONNEL** – Meets with students individually and in groups to address their problems and concerns, and promotes student involvement in co-curricular and extra-curricular activities.

**SCHOOL-COMMUNITY RELATIONS** – Communicates with parents and promotes the school through advisory committees, parent-teacher organization, needs assessment, and the media.

You have 20 points to distribute among the six functions (using the 1 to 5 scale provided). While you may think that all of the functions are very important, since you have only 20 points to work with, it will be necessary for you to make some decisions as to the relative importance of each function. You may assign the same rating to more than one function and must rate each of the six. Below is an example of how one respondent approached the task.

**EXAMPLE: Relative Importance**

In this example, the respondent decided that Human Resource Management and Learning Environment Management were both of "very high importance" thereby using 10 of the 20 points. The remaining 10 points were distributed among the other four functions. You could have given Instructional Leadership, Pupil Personnel, and School-Community Relations 5 points each and then distribute the remaining 5 points among the other 3 functions.

	IMPORTANCE				
	Very low	Low	Moderate	High	Very High
Human Resource Management	1	2	3	4	5
Instructional Leadership	1	5	3	4	5
Learning Environment Management	1	2	3	4	5
Non-instructional Management	1	2	3	4	5
Pupil Personnel	5	2	3	4	5
School-Community Relations	1	2	5	4	5

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**Relative Importance**

Please indicate the relative importance of each of the six functions for promoting effectiveness in your school by rating each function from 1 to 5. (Keep in mind that the total must equal 20.)

	IMPORTANCE				
	Very low	Low	Moderate	High	Very High
Human Resource Management	1	2	3	4	5
Instructional Leadership	1	2	3	4	5
Learning Environment Management	1	2	3	4	5
Non-instructional Management	1	2	3	4	5
Pupil Personnel	1	2	3	4	5
School-Community Relations	1	2	3	4	5

20

**LEVEL OF EFFECTIVENESS**

In this section you are asked to indicate the level of effectiveness at which the six major functions described previously have been carried out by your building administrator. Please review each of the descriptions on the first page and indicate the level at which each function has been performed. If you are completing this inventory on or before February 1, consider performance during the previous school year. If the survey is completed after February 1, consider performance during only the current school year.

	Level of Effectiveness				
	Very low	Low	Moderate	High	Very High
Human Resource Management	①	②	③	④	⑤
Instructional Leadership	①	②	③	④	⑤
Learning Environment Management	①	②	③	④	⑤
Non-instructional Management	①	②	③	④	⑤
Pupil Personnel	①	②	③	④	⑤
School-Community Relations	①	②	③	④	⑤

**PERCEPTIONS OF SCHOOL AND JOB**

This section is designed to gather information about how you view your school and job. Please examine each item carefully and darken the circle which best represents your perception for each of the questions posed.

**EXAMPLE:**

To what extent are teachers in your school involved in major decisions related to their work?

Very little	Some	Considerable	Very great
①      ②	③      ④	⑤      ⑥	⑦      ⑧

If you think teachers have "considerable" involvement in decisions, fill in 5 or 6. Fill in a 5 if you feel the situation is closer to "some"; fill in a 6 if you feel the situation is closer to "very great". If you think there is "very little" you will have to decide whether it is closer to "some" (3) or "none" and mark either a 1 or a 2.

1. To what extent does your school strive for excellence?

Very little	Some	Considerable	Very great
①      ②	③      ④	⑤      ⑥	⑦      ⑧

2. In your school, to what extent do different grade levels, departments, and curriculum areas plan and coordinate their efforts together?

Very little	Some	Considerable	Very much
①      ②	③      ④	⑤      ⑥	⑦      ⑧

3. How many teachers in your school feel that all their students should be taught to read well and master other academic subjects even though some students may not appear to be interested?

Very few	Some	Many	Most
①      ②	③      ④	⑤      ⑥	⑦      ⑧





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4. How likely are you to expend extra effort to raise student achievement?
 

Not very likely ①      ②	Somewhat likely ③      ④	Quite likely ⑤      ⑥	Very likely ⑦      ⑧
--------------------------------	--------------------------------	-----------------------------	----------------------------
  
  6. To what extent do teachers in your school convey to students that learning is important?
 

Very little ①      ②	Some ③      ④	Considerable ⑤      ⑥	Very great ⑦      ⑧
----------------------------	------------------	--------------------------	---------------------------
  
  6. To what extent is the building administrator in your school viewed by teachers as being non-supportive?
 

Very little ①      ②	Some ③      ④	Considerable ⑤      ⑥	Very great ⑦      ⑧
----------------------------	------------------	--------------------------	---------------------------
  
  7. In your school, do most teachers feel it is worthwhile or a waste of time to do their best?
 

Waste of time ①      ②	Somewhat worthwhile ③      ④	Worthwhile ⑤      ⑥	Very worthwhile ⑦      ⑧
------------------------------	------------------------------------	------------------------	--------------------------------
  
  8. To what extent do teachers in your school set challenging goals for students?
 

Very little ①      ②	Some ③      ④	Considerable ⑤      ⑥	Very great ⑦      ⑧
----------------------------	------------------	--------------------------	---------------------------
  
  9. In your school is it every person for himself or do teachers work together as a team?
 

No teamwork ①      ②	Some but not enough teamwork ③      ④	Adequate but more is needed ⑤      ⑥	Great amount of teamwork ⑦      ⑧
----------------------------	--	---	--
  
  10. How satisfying is teaching in your school?
 

Not satisfying ①      ②	Somewhat satisfying ③      ④	Quite satisfying ⑤      ⑥	Very satisfying ⑦      ⑧
-------------------------------	------------------------------------	---------------------------------	--------------------------------
  
  11. To what extent do teachers in your school challenge low-ability students?
 

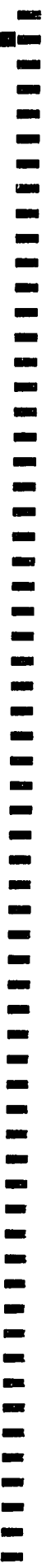
Very little ①      ②	Some ③      ④	Considerable ⑤      ⑥	Very much ⑦      ⑧
----------------------------	------------------	--------------------------	--------------------------
  
  12. To what extent do teachers in your school give help to one another on important school matters?
 

Very little ①      ②	Some ③      ④	Considerable ⑤      ⑥	Very great ⑦      ⑧
----------------------------	------------------	--------------------------	---------------------------
  
  13. To what extent do teachers look forward to teaching each day?
 

Very little ①      ②	Some ③      ④	Quite a bit ⑤      ⑥	Very much ⑦      ⑧
----------------------------	------------------	----------------------------	--------------------------
  
  14. How would you describe the commitment of teachers to high performance goals in your school?
 

Very weak ①      ②	Somewhat strong ③      ④	Quite strong ⑤      ⑥	Very strong ⑦      ⑧
--------------------------	--------------------------------	-----------------------------	----------------------------
  
  15. To what extent do teachers in your school work together as a smoothly functioning team?
 

Very little ①      ②	Some ③      ④	Quite a bit ⑤      ⑥	Very much ⑦      ⑧
----------------------------	------------------	----------------------------	--------------------------



16. In your school to what extent do most teachers agree on the major instructional objectives of your school?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very much (7) (8)
17. To what extent do teachers in your school expect students to do their best?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
18. How would you describe the sense of belonging in this school?
- No sense of belonging (1) (2) Some sense of belonging (3) (4) Considerable sense of belonging (5) (6) Great sense of belonging (7) (8)
19. To what extent do teachers in your school have a feeling that they can make a significant contribution to improving the classroom performance of students?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
20. To what extent do you feel that what you do is not important?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
21. To what extent does the principal evaluate pupil progress in your school?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
22. To what extent do the teachers in your school work at improving the quality of the educational program?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
23. How would you describe your building administrator's dedication and enthusiasm?
- Very low (1) (2) Somewhat low (3) (4) Somewhat high (5) (6) Very high (7) (8)
24. How would you describe the general attitude of students toward your school?
- Poor (1) (2) Fair (3) (4) Good (5) (6) Very good (7) (8)
25. In your school how often is there meaningful discussion of curriculum or instruction in faculty meetings?
- Seldom (1) (2) Occasionally (3) (4) Often (5) (6) Very often (7) (8)
26. To what extent does the principal coordinate curriculum and instruction in your school?
- Very little (1) (2) Some (3) (4) Considerable (5) (6) Very great (7) (8)
27. How would you describe the learning environment in your school?
- Not at all positive (1) (2) Somewhat positive (3) (4) Quite positive (5) (6) Very positive (7) (8)







APPENDIX B.  
EXPLORATORY ANALYSIS AUGMENTING THE STUDY

Descriptions of Other Effectiveness  
Measures in the SII

The other five items asked teachers to indicate the response "which best represents your perception for each of the questions posed." Response categories and the scores assigned to each of the following items were "very little" (1) (2), "some" (3) (4), "considerable" (5) (6), or "very great" (7) (8). These questionnaire items were "To what extent is the building administrator in your school viewed by teachers as being non-supportive?" "To what extent does the principal evaluate pupil progress in your school?" "To what extent does the principal coordinate curriculum and instruction in your school?" The item which asked "How would you describe your building administrator's dedication and enthusiasm?" used the responses "very low" (1) (2), "somewhat low" (3) (4), "somewhat high" (5) (6), and "very high" (7) (8). The last item measuring administrator effectiveness, "In your school how often is there meaningful discussion of curriculum or instruction in faculty meetings?" used responses of "seldom" (1) (2), "occasionally" (3) (4), "often" (5) (6), and "very often" (7) (8).

Table 13. Means and standard deviations of teacher perceptions of administrator effectiveness measures

District	N	Effective- ness of function (V5A) <sup>a</sup>		Enthusiasm and dedication (V5B)		Supports teachers (V5C)		Evaluates pupil progress (V5D)		Coordinates instruction and curriculum (V5E)		Instruc- tional and curricular (V5F)		Combined effective- ness (V5)	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
A	518	3.31	.95	5.86	1.63	5.60	1.73	3.84	1.65	4.39	1.68	3.73	1.77	4.46	1.20
B	149	3.16	1.02	5.45	1.55	5.60	1.71	3.38	1.54	3.79	1.55	3.71	1.70	4.20	1.07
C	254	3.79	.93	6.49	1.51	6.51	1.68	4.94	1.71	5.38	1.65	5.15	1.82	5.26	1.20
D	169	3.33	.93	6.37	1.32	6.20	1.40	5.29	1.64	4.75	1.67	4.72	1.89	5.14	1.10
Total	1077	3.36	.97	5.97	1.60	5.83	1.71	4.16	1.77	4.49	1.71	4.11	1.88	4.67	1.23

<sup>a</sup>V5A: Range of responses, 1 (low) to 5 (high). All others: Range of responses, 1 (low) to 8 (high).



Table 14. Correlations of the combined measures of administrator effectiveness as perceived by teachers with the school effects (N=41)

School effects	Combined measure of perceptions of teachers of administrators' effectiveness on instructional leadership	Effectiveness of instructional leadership function
Learning environment	.66***	.65***
Goal orientation	.64***	.59***
Teacher expectations for student achievement	.48***	.38**
Student attitudes for learning	.61***	.55***
Cohesiveness	.61***	.54***
Esprit	.65***	.62***

\*p<.05.

\*\*p<.01.

\*\*\*p<.001.

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Breakdown				
Administrators' enthusiasm and dedication	Supports teachers	Evaluates pupil progress	Coordinates curriculum and instruction	Emphasizes curriculum and instruction
.50***	.60***	.51***	.58***	.77***
.43***	.45**	.58***	.55***	.79***
.33*	.32*	.48***	.37**	.66***
.49***	.51***	.48***	.50***	.72***
.43**	.46***	.53***	.49***	.80***
.45**	.55***	.51***	.52***	.75***

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APPENDIX C.

ADDITIONAL PRESENTATION OF THE DYNAMICS OF  
INSTRUCTIONAL LEADERSHIP MODEL

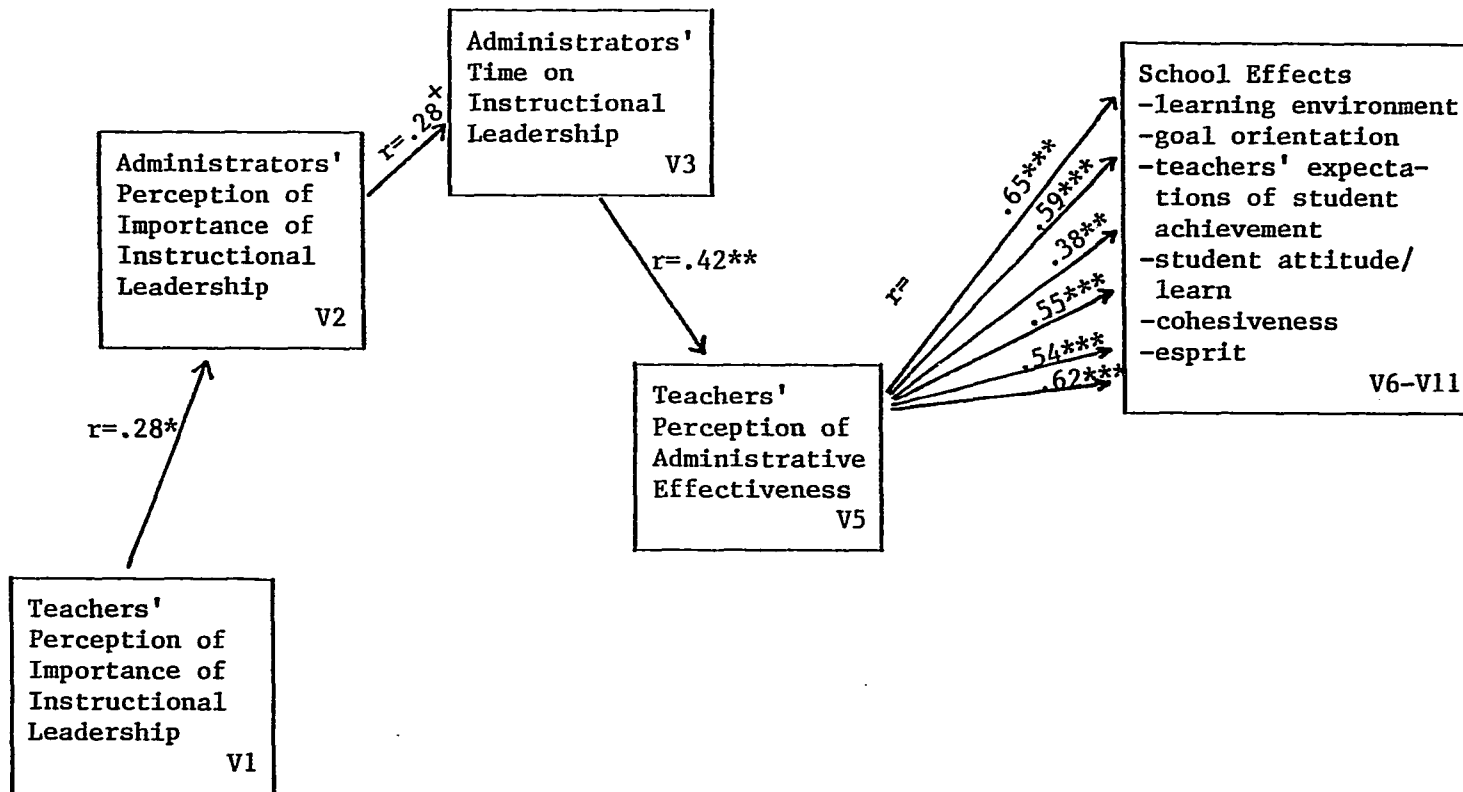


Figure 12. Adjusted total causal model of the impact of the independent variables (V1-V5) on school effects (V6-V11)

Table 15. Regression data of independent variables on school effects  
(V6-V11)

School effects	Multiple R	R Square	Significance
Learning environment (V6)	.65	.43	.0001
Goal orientation (V7)	.59	.36	.0001
Teacher expectations of student achievement (V8)	.38	.16	.05
Student attitudes for learning (V9)	.55	.31	.001
Cohesiveness (V10)	.54	.30	.002
Esprit (V11)	.62	.38	.0001

Table 16. Principals' critical work activities, SIM norms, 1987 to present

Level	Supports teachers	Assists with instructional strategies	Supervises curriculum	Evaluates student progress
<b>Elementary</b>				
Average Rank	7.03	4.83	6.47	6.80
Average Hours	11.26	17.76	10.10	8.91
Percent	7.23	11.32	6.46	5.67
No. Administrators	30	30	30	30
<b>Secondary</b>				
Average Rank	6.59	5.24	6.59	6.24
Average Hours	8.82	11.55	8.34	6.95
Percent	5.69	7.51	5.63	4.49
No. Administrators	17	17	17	17
<b>Assistants</b>				
Average Rank	6.30	6.52	7.70	6.35
Average Hours	5.64	6.11	4.14	6.13
Percent	3.70	4.00	2.65	3.94
No. Administrators	23	23	23	23
<b>Total</b>				
Average Rank	6.69	5.49	6.90	6.51
Average Hours	8.82	12.43	7.71	7.52
Percent	5.70	7.99	5.01	4.82
No. Administrators	70	70	70	70

<sup>a</sup>Total percentage may equal more than 100% because activities have been logged under more than one category.

Supports improvement of instruction	Provides orderly environment	SIM subtotal research based	SIM all other activities	SIM total <sup>a</sup>
4.77	7.37			
15.64	9.57	73.2467	74.05	147.2933
9.90	6.17	46.74	47.08	93.82
30	30	30	30	30
5.41	6.88			
9.81	7.20	52.6706	74.45	127.1235
6.32	4.65	34.29	48.53	82.82
17	17	17	17	17
5.30	5.83			
7.40	11.10	40.5217	67.33	107.8565
4.80	7.74	26.84	43.95	70.80
23	23	23	23	23
5.10	6.74			
11.52	9.50	57.4971	71.94	129.4371
7.36	6.32	37.18	46.40	83.58
70	70	70	70	70