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INFLUENCE-GAINING BEHAVIORS OF PRINCIPALS IN SCHOOLS OF VARYING LEVELS OF INSTRUCTIONAL EFFECTIVENESS

A Dissertation

Presented for the

Doctor of Education

Degree

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Reginald Morris High

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DEDICATIONS

This manuscript is dedicated to Katherine Huggins High, my wife and best friend, whose moral and physical contributions to the completion of this endeavor are considerable.

The writer also dedicates this work to his parents, Eula Abernathy High and Marshall Reid High, whose love, support, and sacrifice gave the writer the desire and determination to pursue and attain a higher education.

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ABSTRACT

Although there has been a purported decline in the formal authority of principals to provide leadership in schools, certain sources of influence are available, which if used, would enable principals to increase their leadership. This descriptive field study attempted to classify and describe sources of principal influence in behaviorial form using French and Raven's (1959) bases of social power plus the research of Leithwood and Montgomery (1982) and Ross (1980).

This study examined behaviors of three principals (one middle and two elementary) in high-achieving schools and six principals (two middle and four elementary) in other (lower achieving) schools. Questionnaires, interviews/observations and surveys provided data to study differences in the behaviors of the two groups of principals.

Findings showed that principals in high-achieving schools employed referent, expert, enabler, coercer, legitimate authority, and norm setter behaviors to a significantly ($p \leq .05$) greater extent than did principals in the other schools. These same principals rated referent, expert, enabler, coercer, legitimate authority, and norm setter significantly ($p \leq .05$) more positive in influence with teachers than did principals in other schools. Teachers in high-achieving schools rated referent, expert, enabler, coercer, legitimate authority, and norm setter significantly ($p \leq .05$) more positive in fluence than did teachers in other schools. All teachers ranked expert, legitimate authority, norm setter, and referent behaviors potentially most influential; coercer the least. All principals ranked expert, involver,

legitimate authority and enabler behaviors potentially most influential with their teachers.

Principals have at their disposal potential sources of influence which would allow them to increase their leadership. Principals must develop expertise in some aspect of schooling which teachers value, utilize the authority of their position in the organization, set professional norms through modeling, and demonstrate the ability to work with people. Preparation programs should focus on the conceptualization, simulation, and use of the potential sources of influence described in this study.

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CHAPTER I

INTRODUCTION TO THE STUDY

I. INTRODUCTION

Shane (1981) echoed the warning. He noted that a national desperation existed due to the alleged serious deterioration in public education, and that the public's suggested solution was to adopt educational standards and require that they be met. Other researchers have reached similar conclusions. Coleman (1966), Jencks, Smith, Acland, Bane, Cohen, Gentis and Michelson (1972), and Mosteller and Moynihan (1972) concluded that public schools did not and cannot make a significant difference for students. They posited that public schools cannot overcome the obstacles formed by students' socio-economic background or race.

Another body of research, however, beginning with work by Levine (1966), Weber (1971), and continuing with Brookover, Beady, Flood, Schweitzer and Wisenbaker (1979), Austin (1979), and Edmonds (1979), identified exemplary schools in which student achievement, despite socio-economic background and/or race of students, was noteworthy. In this research, the existence of effective schooling for urban, poor, and minority students was confirmed. Effectiveness was determined based on the size of the discrepancy between predicted standardized achievement test scores and the observed scores (Austin, 1979). The greater the discrepancy, the more effective the school.

Despite considerable criticism of the narrowly framed definition of an effective school, Erickson (1979) noted that nothing could be

more profoundly pertinent to the consequences of an educational organization than these school effects studies. School effects studies continued (e.g., Brookover, Schweitzer, Schneider, Flood, and Wisenbaker, 1979; Venezky and Winfield, 1979; and Rutter, Maushan, Mortimore, Ouston, and Smith, 1979) and attempted to determine how and why the effective schools were different from other schools. Through correlational methodology (for the most part) these researchers and others have collapsed a multitude of "effectiveness" characteristics into a generally agreed upon listing of five most frequently found variables. These variables have had positive correlations with improved student achievement in reading and math as measured by standardized achievement tests. Curran (1982), in a partial synthesis of school effects research endeavors, enumerated indispensable characteristics of effective schools as: (a) strong principal instructional leadership, (b) high expectations for student achievement, (c) orderly and safe school climate, (d) basic skills instruction, and (e) frequent monitoring of pupil progress. Others have come to the same or to similar conclusions regarding the characteristics of effective schools.

Of the five generally accepted characteristics of the instructionally effective schools, strong leadership of the building principal was considered to be the most influencial in determining school effectiveness. Felsenthal (1982) posited that although research has identified many variables related to school effectiveness, strong leadership appeared to be the most crucial factor. Edmonds (1979) insisted that one of the most tangible and indispensable characteristics of effective schools was strong administrative leadership, without

which the disparate elements of good schooling can neither be brought together nor kept together. Sergiovanni (1981) declared that the principal was the key person in school effectiveness. Klopf (1972) asserted that since the principal was the (formal) leader of the school, the school's effectiveness depended on the leadership of the principal.

In short, research has shown that effective schools do exist. It has further been determined that the principals of these schools are crucial to their effectiveness. Several studies have illuminated what principals do. The question remains: How do effective principals do what they do?

II. THE PROBLEM

Some writers believe that although public education is indeed in a state of crisis over its loss of credibility, prestige, and public confidence, some schools "do make a difference" (Ravitch, 1981, p. 719). Several researchers, including, Levine (1966), Weber (1971), Brookover et al. (1979), and Edmonds (1979), have empirically identified numerous exemplary schools whose students scored significantly higher on norm-referenced tests than did students from other, similar schools. Thus, one potential avenue for improvement in the quality of American public schools has clearly been opened. This line of research on instructionally effective or exemplary schools noted that a key variable was the instructional leadership role of a strong principal (Shoun, Lintz, and Achilles, 1981; Sergiovanni, 1981; and Klopf, 1972). Adler (1982, p. 61) declared: "The effectiveness of even the best trained

teachers will depend on the role played by the principal of the school in which they teach."

Effective schools research has shown that some principals were instructional leaders and some were not. Further investigation revealed that principals who were actively involved and participated in the teachers' work were most likely to become influential in instructional matters (Bredo, 1977). Ross (1980, p. 228) stated that ". . . there are a variety of mechanisms that can and could be used by principals to increase their curricular influence." Further study, description, and classification of these "mechanisms" of influence are needed.

What is influence? The literature has suggested that it is a combination of several concepts--applied power and authority, social control of subordinates, subordinate consent--mediated by the persuasion of subordinates through negotiation with them (Bossert, Dwyer, Rowan and Lee, 1982; Meyer, 1972; Parsons, 1966; Blau, 1964; French and Raven, 1959; and Bierstedt, 1959).

Katz and Kahn (1978) suggested that every act of influence on a matter of organizational relevance was in some degree an act of leadership. Therefore, a principal must gain influence to provide leadership. Bossert, et al. (1982) emphasized that the most important part of the investigation of instructional leadership concerned how principals gained influence in the eyes of their subordinates.

The problem of this study was to investigate <u>how</u> principals gain influence with teachers to achieve improvement in the quality and effectiveness of instruction for students in their schools.

III. THE PURPOSE

The purpose of this study was to examine behaviors of principals in schools of varying levels of effectiveness to determine if significant differences existed in the degree to which the principals of these schools exhibited or possessed influence-gaining behaviors/characteristics. Influence-gaining behaviors/characteristics were classified and described in accordance with the hypotheses of French and Raven (1959), Leithwood and Montgomery (1982), and Ross (1980); i.e., social bases of power. The description, classification, and examination of influence-gaining behaviors were conducted to shed additional light on the broader question of why some principals (and some schools) are effective and some are not.

IV. RESEARCH QUESTIONS

The basic research question for this study has two parts: (1) How do principals of high-achieving schools and principals of other schools gain influence with their teachers? (2) How are the influence-gaining behaviors of principals in high-achieving schools different from the influence-gaining behaviors of principals in other schools?

There are three related questions. They are:

1. What differences exist in the direction (positive or negative) of principals' influence-gaining behaviors/characteristics between the two groups of principals (high-achieving schools and other selected schools)?

2. What differences exist between the two groups of teachers (high-achieving schools and other selected schools) in their ranking of

the potential influence of selected principal behaviors/characteristics?

3. What differences exist between the two groups of principals (high-achieving and other selected schools) in their ranking of the potential influence of selected principal behaviors/characteristics on their teachers?

V. ASSUMPTIONS

This study is based on three assumptions.

1. Principals attempt to gain influence over their teachers.

2. Teachers can recognize influence-gaining behaviors exhibited by their principals and can describe these behaviors.

3. Principals recognize their own influence-gaining behaviors and can describe them.

VI. LIMITATIONS AND DELIMITATIONS OF THE STUDY

The study has one delimitation and several limitations. The limiting factors are listed below.

1. The study was delimited to nine schools in one urban school system that was implementing an effective schools effort.

2. The small sample size makes possible only limited generalizability as to the findings contained in the study.

3. The study is bounded by the limitations of ex post facto research design (lack of randomness, limited generalizability, inability to infer any cause-effect relationships).

4. The one-shot case approach contains numerous limitations:

generalizability, possibility of results being unduly influenced by an "unusual" day, etc.

5. The study is limited to a large degree by the formulations of French and Raven (1959) whose work provided a substantial portion of the framework for the current study.

VII. DESIGN OF THE STUDY

This study is exploratory, descriptive, and quasi-experimental.

Quasi-Experimental

This study does not attempt to manipulate independent variables; therefore, it does not meet the definition of an experimental design (Campbell and Stanley, 1963). It employs an *ex post facto* approach.

Ex Post Facto

Asher (1976, p. 277) defined *ex post facto* as a research design which ". . . attempts to evaluate or research after the fact of the grouping of subjects and application of conditions or treatments." The research describes conditions that exist in particular situations.

Descriptive

Various methods--questionnaires, observations/interviews, and surveys were used to describe the influence-gaining behaviors of principals. There is no attempt to infer from a sample to a population.

Case Study

A snapshot of the influence-gaining behaviors of nine different principals was taken to describe their behaviors. This "one-shot" approach was supported by observation and questionnaire data, with student outcome measures (results of standardized tests) used as criterion variables.

VIII. DATA COLLECTION AND ANALYSIS

This study employed three descriptive data collection techniques: questionnaires, implementation surveys, and observations/interviews. Teachers and principals in selected schools completed questionnaires designed to investigate the degree to which principals exhibited selected influence-gaining behaviors/characteristics, the direction (positive or negative) of the influence of these behaviors/characteristics, and the potential influence of the selected behaviors/characteristics. One form of a questionnaire developed and designed by the investigator was distributed to teachers in the selected schools; a similar form was given to the principals of those schools. These questionnaires are included as Appendix A.

Data from the questionnaires were analyzed in the following ways:

1. Teachers rated the degree to which principals exhibited the selected behaviors/characteristics. The ratings were analyzed by using the Mann Whitney U test to determine if significant differences existed among teacher responses in the two groups of schools (high-achieving schools, and other schools). Additionally, teachers indicated whether

they perceived each selected behavior/characteristic to be a positive or negative influence. The teacher responses in the two groups were again analyzed by the Mann Whitney U Test to determine if significant differences existed. Finally, teachers ranked the selected behaviors/characteristics in terms of potential influence. The Mann Whitney U test was used to compare the responses of the teachers in the two groups to see if significant differences existed.

2. The questionnaire data were examined in a second manner. The responses of the principals were compared with teacher responses within each of the two groups of schools (high-achieving and others). This analysis was conducted to determine whether significant differences existed between principal and teacher responses within each of the two groups of schools. The Mann-Whitney U test was used to analyze these data.

Data from the implementaion survey and interviews/observations were compared with the questionnaire data from principals and teachers within each of the two groups of schools (high-achieving schools and other schools). The implementation survey appears as Appendix B. The interview/observation (implementation) guide appears as Appendix C.

Kendall's Coefficient of Concordance (W) was used to determine the extent of agreement of ranked data within two groups of schools. The Spearman Rho (rs) was used to determine the extent of agreement of ranked data between two groups of schools. Data consisted of the seven influence-gaining behaviors.

IX. DEFINITIONS USED IN THE STUDY

Some definitions are important to a clear understanding of this research. Most of these definitions relate to influence-gaining behaviors used by principals. Definitions of many influence-gaining behaviors have been adapted from French and Raven (1959), Ross (1980), and Leithwood and Montgomery (1978).

Influence is the ability to modify the behavior of teachers. Every act of influence on matters of organizational relevance is in some degree an act of leadership (Katz and Kahn, 1978).

Instructional Effectiveness is the attainment of instructional objectives resulting in a large proportion of students achieving mastery of basic skills in math and reading as measured by standardized achievement tests.

Outlier Schools are those schools whose students achieve beyond expectations held of them based on their socio-economic factors (Austin, 1979).

Principal As Enabler is the concept that the principal selectively disperses resources or rewards to teachers in exchange for their cooperative behavior.

Principal As Establisher of Professional Norms is the concept that the principal sets school norms by such means as articulating what is best for children, modeling a professional image, and defining professional conduct and standards (principal as norm-setter).

Principal As Expert is the concept that the principal provides professional knowledge, information, and skills as a basis of influence and leadership.

Principal As Formal Authority is the concept that positional authority flows from the office of the principal and the principal uses this as a basis of influence.

Principal As Involver is the concept that the principal meaningfully involves teachers in school-wide decisionmaking and gains influence with teachers in classroom decisionmaking.

Principal as Coercer is the concept that the principal negatively sanctions teachers when they engage in non-conformist behavior.

Principal As Referent is the concept that teachers comply with the wishes of the principal because of their liking of or identification with the principal; it is the concept that the principal gains influence with teachers because of his or her personality.

X. ORGANIZATION OF THE STUDY

This study is organized into five chapters.

Chapter I includes the Introduction to the Study, the Statement of the Problem, the Purpose of the Study, Research Questions, Assumptions, Limitations, Design of the Study, Data Collection and Analysis, Definitions Used in the Study, and the Organization of the Study.

Chapter II contains a Review of the Related Literature and Research.

Chapter III includes the Design and Methodology of the Study.

Chapter IV contains the Reporting and Presentation of the Data.

Chapter V includes the Findings of the Study, Conclusions, Implications, Discussion, and Recommendations.

CHAPTER II

RELATED LITERATURE AND RESEARCH

I. INTRODUCTION

This study analyzed influence-gaining behaviors of selected public school principals who worked in schools of varying levels of instructional effectiveness. Influence has been defined as a combination of applied social power and authority, mediated by the persuasion of subordinates through negotiations with them (Bossert, Dwyer, Rowan, and Lee, 1982; Meyer, 1972; Parsons, 1966; Blau, 1964; French and Raven, 1959; and Bierstedt, 1959). The concept of influence is often used synonymously with leadership, which has been defined as the activity of influencing teachers to strive willingly for school goals. Numerous studies and theorists have defined principals as the single most important person in individual school stability and improvement. This study was undertaken to determine and describe--using a modified case study approach--how principals do in fact attempt to lead (influence) teachers through the use of influence-gaining behaviors and to identify and classify those behaviors which appeared to have the greatest influence potential. Principals in schools of varying levels of instructional effectiveness as determined by student test scores were the subjects of this study.

The search of related literature and research had two interrelated purposes. The first section briefly examines varying roles of the principal in schools and relates these roles to the concept of the expected leadership of principals, especially their leadership role in

instructionally effective schools. The purpose of the first section is to indicate the importance of two major aspects of principals' roles in schools: organizational maintenance and organizational change. The literature search revealed that the principals' roles in organizational maintenance and change were both contained within the expected leadership dimension of principals' behavior. The literature search then turned to the leadership dimension of principals' instructional leadership, and specifically principals' roles in instructionally effective schools. One main emphasis of the review is an examination of principals' social bases of power (influence) (French and Raven, 1959). These bases of social power are synthesized with proposed influence-gaining behaviors (Ross, 1980; Leithwood and Montgomery 1982) to conceptualize deductively the seven influence-gaining behaviors that principals use in their interactions with teachers.

II. ROLES OF PRINCIPALS: ORGANIZATIONAL MAINTENANCE AND ORGANIZATIONAL CHANGE

Organizational Maintenance

Barth (1980, p. 5) described the maintenance role of the principal as follows:

> The principal is ultimately responsible for almost everything that happens in school and out. We are responsible for personnel. . . . We are in charge of program. . . . We are accountable to parents. . . . We are expected to protect children.

Pierce (1934, p. 211) noted that by 1900 " . . . the principal had become the directing manager rather than the presiding teacher of the school." The managerial duties and responsibilities of the principal grew concurrently with an ever-expanding school-age population. The

power of principals increased as well, adding prestige to the position. The middle of the nineteenth century saw the development of the supervisory role of principals and the mid-twentieth century brought refinement of the supervisory role. The early twentieth century saw an altered role for school administrators--school administration as management. School administrators attempted to emphasize fiscal efficiency through the use of refined techniques of budgeting, accounting, plant construction, and maintenance. Other trends affecting school administrators followed, leaving principals groping with an identity crisis. Knezevich (1975, pp. 394-395) suggested that presently " . . . the principal is recognized as an executive or administrator and the principalship as a constellation of positions."

Morris, Crowson, and Porter-Gehrie (1981), Sproull (1981), and Wolcott (1973) reported that the majority of principals' time was spent on managerial activities. These activities were not related to instructional issues; they were fragmented, variable in topic, and short in duration. These activities related to organizational maintenance, contributing to a smooth-running organization. Chesler, Schmuck, and Lippitt (1975) and Sarason (1971) suggested that these activities were designed to keep the school manageable in the midst of pressures for change. Leithwood and Montgomery (1982, p. 322) remarked that " . . . with respect to teachers, running a smooth ship places the principal's main emphasis on harmonious interpersonal relationships . . . " rather than on the attainment of increased student achievement. Many maintenance activities were designed to respond to district demands which appeared to be the "primary determiner of these activites." (Leithwood

and Montgomery, 1982, p. 330). Blumberg and Greenfield (1980, p. 19) concluded that:

> . . . school principals find the bulk of their time and energy consumed by the daily press of administrative detail and the problems of maintaining the school organization, its teachers and students, on an even keel.

The role of the principal in organizational maintenance--running a smooth ship, as it were--seems well established in the literature and folklore of educational administration. The principal's role in organizational change is a newer aspect, and less well defined.

Organizational Change

Studies and literature on the principal as change agent or as manager of change are relatively recent. They seem to have received their impetus from the federal government's emphasis on change and innovation in education. This emphasis was a major portion of Title III of the Elementary and Secondary Education Act of 1966. Arends (1982, p. 80) reported that " . . . during the past decade a small but somewhat consistent literature has evolved that speaks to the importance of administrative support in relation to change efforts in educational administration."

Emrick and Peterson (1978) synthesized five major studies of educational change and concluded that change was unlikely in the absence of administrative support. Hall, Hord, and Griffin (1980) acknowledged that the degree of implementation of any innovation was different in different schools because of the actions and concerns of the principal. Other researchers, e.g., Sarason (1971), Fullan and Pomfret (1977), Miles (1978), and Daresh (1978), have underscored the critical

importance of principals in various change attempts. Goodlad (1955) and Little (1982) posited that, because of their designated leadership positions in schools, principals were key figures in any process of educational change.

Kozberg and Winegar (1981, p. 568) specified:

> . . . if change is to occur, it is the principal who must encourage and support it by providing the necessary resources, serving as a buffer for teachers engaged in the change process, reducing fear, and nurturing confidence and growth.

Lipham and Rankin (1982, p. 4) stated emphatically that " . . . no change of major significance can occur within a school without the understanding and support of the principal." Berman and McLaughlin (1978) and McGeown (1978-80) remarked that principals encouraged change or innovation by promoting new materials, ideas, and methods learned from professional readings and discussions with other professionals. Fege (1980, pp. 18-19) commented that " . . . the principal is the key person in any school district to provide effective and long-lasting change." Berman and Pauley (1975, pp. 58-59) summarized 293 educational change efforts through the United States. They found that " . . . principals' opposition to projects sharply increased the prospects for failure, whereas their active or even passive support was necessary for perceived success." They went on to say that . . . "the principal seemed to serve as either a facilitator or an inhibitor of change." The principal's support for implementation of change was significant at .10, and lack of support was significant for non-implementation at .10.

Clearly, because of their positions in educational organizations, principals are of considerable importance to any change or innovation project. Tanner (1976, p. 92) reported that the Administration and

Supervision National Task Force on the Improvement and Reform of American Education concluded:

> Since the unit where the most productive change efforts can be carried out is the individual school, the local administrators, the principal, and other administrators with whom he interacts, constitute the highest priority as an entry point in educational reform.

III. THE ROLE OF THE PRINCIPAL IN INSTRUCTIONAL LEADERSHIP AND INSTRUCTIONALLY EFFECTIVE SCHOOLS

The 1972 Senate Select Committee on Equal Educational Opportunity (1972, p. 306) may have said it best:

> In many ways the school principal is the most important and influential individual in any school. He is the person responsible for all of the activities that occur in and around the school building. It is his leadership that sets the tone of the school, the climate for learning, the level of professionalism and morale of teachers and the degree of concern for what students may or may not become. He is the main link between the school and the community and how he performs in that capacity largely determines the attitudes of students and parents about the school. If a school is a vibrant, innovative, child-centered place; if it has a reputation for excellence in teaching; if students are performing to the best of their ability one can almost always point to the principal's leadership as the key to success.

Numerous scholars in the field of educational administration would agree with the Senate Select Committee cited above. Cubberly (1923) was apparently among the first to classify principals as educational leaders. Goodlad (1955), Erickson (1967), Wayson (1971), Trump (1972), Wolcott (1973), Brown (1976), Brookover, et al. (1979), and Shoun, Lintz, and Achilles (1981) corroborrated Cubberly's pronouncements and continued or extended the research on principals and leadership. Researchers and scholars such as those cited above have

maintained that because of their organizational position principals exercised varying degrees of control and influence over school matters. Principals' formal authority has eroded over the past decades, primarily due to the rise in membership of teachers' unions, and the intrusion of the courts into the domain of public education. Nevertheless, despite many serious obstacles, " . . . the opportunities for exerting leadership in schools are almost innumerable and are, in a sense, the measure of principals' responsibilities to lead." (Roe and Drake, 1980, p. 108). Curran (1982) in a synthesis of "effective schools" research enumerated the five indispensable elements of effective schools as: (a) high expectations for student and staff performance, (b) an orderly and safe climate, (c) emphasis on basic skills instruction, (d) frequent monitoring of pupil progress, and (e) the instructional leadership of the principal.

School climate has proven to be an elusive element of effective schools. Weber (1971) described it as an atmosphere which is pleasant, orderly, quiet, and safe. Halpin and Croft (1963) suggested that the climate of an organization and the personality of an individual are similar in meaning. Taguiri (1968) identified four dimensions of climate as (a) ecology or the material and physical aspects; (b) milieu, the social dimension concerned with people and groups; (c) social system, or the patterned relationships of persons and groups; and (d) culture--the beliefs, values, and meanings. Rutter, et al. (1979) called climate the ethos of the school, and Edmonds (1979) suggested that an effective school climate must be conducive to learning. A climate conducive to learning is a major component of instructionally effective

schools. The principal is a key element in establishing the school climate.

Effective instruction in the basic skills has received considerable attention from various researchers who have attempted to specify some characteristics and strategies. Ramey, Hillman, and Matthews (1982), Medley (1979), Stallings (1982), and Bloom (1974) concluded that the use of direct instruction was positively correlated with increased student achievement. The direct instruction model included academic focus, teacher-directed instruction to the whole class, factual questioning, and controlled practice. Time on task has been included as an important factor in effective instruction. Studies by Bloom (1974, 1984), Berliner (1979), Madaus (1980), Ramey, et al. (1982) and others have agreed that the amount of time spent on academic learning tasks is positively correlated with increased student achievement.

Berliner (1979), Edmonds (1979), Brophy (1979), and Murane (1980) found that teachers in effective schools tended to have higher expectations for student achievement than teachers in other schools. Rutter, et al. (1979) concluded that effective schools produced teacher attitudes which conveyed the expectation that <u>all</u> students would pass exams. Brookover, et al. (1979) noted that principals in effective schools shared the belief that all students would pass exams. Students in effective schools reported that their schools allowed them the opportunity to succeed.

Armor and Associates (1976) found high levels of teacher-student contact related to pupil performance in effective schools. Bloom (1974), Berliner (1979), and Cohen (1981) reported that the frequency

and quality of feedback given to students were associated with increased student learning and achievement. Wellisch (1978) concluded that this feedback focused on performance standards for students, usually in the form of behavioral objectives.

Of the five generally cited elements of effective schools, the instructional leadership of the building principal was determined to have the most influence in determining school effectiveness (e.g., Clark, Lotto and McCarthy, 1980). Research indicated that the instructional leader in the effective school had strong views and was very active in the observation and coordination of academic work within the school (Venezky and Winfield, 1979). The leader tended to feel strongly about instruction and had a definite point of view which was promoted (Welisch et al., 1978). Edmonds (1979) found that the principal was a strong administrator who demonstrated strong leadership in a mix of managerial and instructional skills. Austin (1979) reported that the instructional leader in the effective school more frequently reported a feeling of control over the functioning of the school, the curriculum, and the program staff. Brookover et al. (1979) found that leaders in this setting were more accepting of teacher accountability. Kean (1979) posited that the instructional leader tended to observe in classrooms more frequently than others. The leader of the effective school tended to assume more responsibility for the achievement of basic skills by students (Brookover et al., 1979). The leader participated more in the classroom teaching (Kean, 1979). Sweeney (1982) and Shoemaker and Fraser (1981) found that the leader tended to have developed schoolwide procedures for instructional strategies in specific areas. The leader

participated more actively in the selection of resources and in the planning and organization of curricula. The leader's awareness of specific teaching strategies such as homework assignments was also evident. Squires (1980) and Wynne (1981) reported that the effective principal did not promote students who failed to meet required performance levels.

Felsenthal (1982) posited that although research has identified many variables related to school effectiveness, strong leadership appeared to be the most crucial factor. Edmonds (1979) insisted that one of the most tangible and indispensable characteristics of effective schools was strong administrative leadership, without which the various and important elements of good schooling could neither be brought together nor kept together. Roe and Drake (1980, p. 92) reported:

> The principal of a school is viewed from almost every quarter as being the leader of that school. The board of education hired him/her to lead. Research indicates that the teachers want him/her to lead. The community holds him/her responsible if he/she does not lead. . . . It is apparent that the question facing the principal is not whether he/she must behave as a leader; rather, it is a question of how shall he/she behave to be an effective leader.

Erickson (1967, p. 11) linked effective principal leadership with student outcomes when he suggested " . . . knowledge of the educational enterprise will remain deficient until administrative behavior and student learning are empirically linked." Klopf, Sheldon, and Brennan (1982) asserted that since the principal was the leader of the school, the school's effectiveness depended on the effectiveness of the principal. Sergiovanni (1981, p. xvii) declared that " . . . it is clear no single person is more key to school effectiveness than the principal." Trump (1972), Brown (1976), Brookover et al. (1979), Shoun et al.

(1981), Shoemaker and Fraser (1981), and Sweeney (1982) have supported the notion that effective principals' leadership is critical to the academic effectiveness of public schools. Clark, et al. (1980) posited that principals affect teachers who in turn affect pupils. Shoun et al. (1981, p. 14) concluded: "As is the principal so is the school."

The preceding portion of this literature search has verified the crucial importance of principals' leadership (influence) behaviors for organizational maintenance and change and for instructional leadership. Schools must be led, not allowed to vacillate without vision or purpose. Organizationally, principals are in unique positions to provide direction and purpose. Clearly, the disparate elements of schooling can be brought into a coherent relationship through the efforts of dedicated, influential principals. The following literature review section identifies bases of social power as potential influence sources.

IV. PRINCIPALS' SOCIAL BASES OF INFLUENCE

Introduction

Katz and Kahn (1978, p. 527) generalized:

> Leadership appears in social science literature with three main meanings: as the attribute of a position, as the characteristic of a person, and as a category of behavior. . . . Moreover, leadership is a relational concept implying two terms: The influencing agent and the person influenced. . . . One common approach to the definition of leadership is to equate it with the differential exertion of influence. (Emphasis added.)

Parsons (1966) defined power as positional while Blau (1964) cited power as the result of ongoing negotiations and exchanges between leaders and their subordinates. French and Raven (1959) concluded that

power and authority represented potential influence. Bierstedt (1954) saw power as coersion, while influence was persuasion. Gilman (1962, pp. 106-107) concluded that power " . . . is possible only because one can influence, when and if necessary, the behavior of the subordinates in such a way that he acts on the basis of his superior's judgment rather than his own."

Principal as Legitimate Authority

Sergiovanni (1980, p. 85) noted that " . . . the school organization is essentially bureaucratic, with a chief characteristic being a hierarchy of authority which flows from the top of the school to the bottom." The principal, then, as the top organizational offcial in the school, has legitimate power bestowed by law, school board policy, and/or delegation from the superintendent. French and Raven (1959) wrote:

> Legitimate power in formal organization is largely a relationship between offices rather than between persons and the acceptance of an office as right is a basis for legitimate power . . . a foreman should assign work, and it is management's prerogative to make certain decisions.

Thus, " . . . the basis for principals' influence with teachers . . . is as middle manager with responsibilities delegated by a board through its administrative hierarchy" (Ross, 1980, p. 221). "Subordinates comply because 'the principal says' or 'he or she is the boss'" (Sergiovanni, 1980, p. 186).

Guba suggested that an administrator has authority (influence) derived from two sources, the role and person dimensions. He concluded that "the role dimension is realized through the placing of the administrator in a school role which carries ascribed or delegated authority for role-related activities" (Guba, 1960, p. 123).

Principal as Referent

Referent power has been cited in the literature as an example of an informal power base. French and Raven (1959) maintained that the attractiveness of the agent increased the agent's potential influence. Katz and Kahn (1978, p. 528) identified referent power as influence based on liking, identification with, and respect for the agent. Halpin (1959, p. 4) explained referent power as follows: " . . . behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff."

Principal as Enabler or as Rewarder

French and Raven (1959) categorized reward power as an example of leadership behavior. "Reward power is defined as power whose basis is the ability to reward," (French and Raven, 1959, p. 613). Keedy (1982, p. 40) defined rewards (resources) as "all organizational inputs that principals have at their disposal that meet the personal and professional needs of teachers." Spuck (1974, p. 18) linked the potential of reward (resource) allocation to principals' ability to gain influence:

> . . . cooperation is not given freely by those participating in an organization, but is exchanged for desired rewards made through participation in the organization. Teachers, as members of a formal organization, exchange their cooperative behaviors for desired rewards offered by and within the school.

Basically, the principal has control of two types of rewards: extrinsic and intrinsic. Extrinsic rewards take several forms. Ross (1980, p. 222) noted that:

> extrinsic rewards in schools . . . are scarce . . . the distribution of extrinsic rewards is largely outside the principal's control. However, principals can extrinsically reward teachers through the allocation of school facilities, especially location, and distribution of school resources. . . .

Other examples of how principals, as designated leaders of schools, can reward teachers extrinsically include selectively providing instructional resources, providing positive recommendations for promotion, providing protection from outside interference, and by controlling student assignment to classes.

Principals also can reward teachers by meeting teachers' psychic or intrinsic needs. Teachers' psychic needs include working conditions which allow teachers to feel successful in the classroom. Ross (1980, p. 224) noted that teachers often defined success in the classroom in terms of their students' progress

> . . . to more general goals in addition to official curriculum goals, inculcating attitudes, and values appropriate to good citizenship as a remedy for perceived deficiencies in a home, promoting a commitment to lifelong learning, and ensuring that all children benefit from educational experiences.

Sieber (1979) posited that one way in which principals met teachers' psychic needs was by freeing them from time-consuming clerical responsibilities and thus enabling them more classroom teaching time. Keedy (1982, p. 44) reported that principals could meet teachers' psychic needs by relieving " . . . the staff of role ambiguity and operational diffusiveness by establishing specific curriculum goals and objectives." Increased teaching time and specific goal definition allowed teachers greater attainment in classrooms (Lortie, 1975). Clark et al. (1980, pp. 468-469), in their study of characteristics of effective inner-city schools, concluded that principals gained staff

support because " . . . they motivate and exhort teachers to concentrate on teaching: they obtain political, parental, and financial support. Effective leaders are 'enablers'." Keedy (1982, p. 41) summarized that " . . . the more effective a principal is in obtaining and distributing resources to meet teachers' needs, the more a principal can expect in return."

Principal as Coercer

The fourth base of social power identified by French and Raven (1959) was coercive power or negative sanction power. Although springing from legitimate power, the capacity to sanction negatively was defined as a separate behavior. Gorton (1972, p. 311) defined coercive power as the "capacity to provide punishment or negative consequences, such as teacher dismissal." Principals applied sanctions (punishments) through unsatisfactory teacher evaluations, negative promotion recommendations, and removal from coveted positions of prominence. Principals also withheld financial and human resources as a sanction for nonconformity among teachers.

Principals employed perceived willingness to sanction as a means to gain teacher compliance. Levin (1980, p. 18), quoting a principal's implied threat, reported: "Everybody here does his job or he doesn't stay. If you don't perform after all the help we offer, you're out."

Principals have lost control of most punitive measures previously employed to gain teachers' conformity. Yet selective use of teacher evaluations, recommendations, committee assignments, and allocations of classroom spaces and students yields some influence potential.

Principal as Professional Norm Setter

Principals engage in profeesional norm setting behavior which provides an additional base of social power (influence). Hanson (1976-77, p. 37) posited:

> The principal participates in the norm structure of the school in several ways. First, the principal is a teacher or former teacher who has shared the ethos of the classroom; consequently, he has an intuitive grasp of the content of teacher norms. Second, the principal provides, consciously or unconsciously, an image of professional competence, demonstrating through his own behavior the norms that govern relationships between teacher and student, parent and teacher, and teacher and fellow teacher. Third, the principal plays a pivotal role in the maintenance of the normative structure by continually providing operational definitions of professional conduct. Similarly, the principal is central to teacher norms to the extent that he functions as a definer of what is best for children.

Anderson (1982, p. 338) maintained that principals are in " . . . a unique position to establish and maintain the important norms of collegiality and experimentation . . . " by virtue of their office as well as their performance. Hanson (1976-77, p. 38) reached the same conclusion in an earlier study and stated that " . . . the control of the normative structure of the school, particularly with respect to providing operational definitions of professionalism, is the basis for administrative influence on teachers."

Underlying principals' exertion of influence on teachers in the norm setting role is the notion of reciprocity (Keedy, 1982). Reciprocity implies a cause and effect relationship. Because principals have the power to meet various needs, teachers are inclined to acquiesce to the principals' wishes or dictates.

Malinowski (1932, p. 35) suggested reciprocity when he concluded that, "The essence of the social relationship . . . is the give and take

character of the social setting in which people are mutually dependent on one another." Teachers depend on principals for rewards since principals normally control the reward structures in schools. Reciprocity is exchange. "Social behavior is an exchange of goods, material goods but also non-material ones, such as symbols of approval or prestige," (Homans, 1958, p. 606). Principals provide expert knowledge, skills, and/or information and can expect teachers' conformity. Gouldner (1960, p. 170) further clarified reciprocity/exchange when he concluded that there was a " . . . mutually contingent exchange of benefits or contributions."

Principal as Involver

Another behavior in which principals engage that provides an additional source of influence is teacher involvement in school-wide decisionmaking. Ross (1980, p. 226) declared that involving subordinates in the decisionmaking process actually increased the control of the superordinates. He stated:

> There is a substantial tradition within organizational theory which argues that providing subordinates with an opportunity to participate in organizations' decisionmaking will increase the control exercised by superordinates in the organization.

Berman and McLaughlin (1979) noted that the most effective principals often dispersed decisionmaking power, by delegating authority, but did so within a central framework agreed upon by the principal. Effective principals encourage early staff decisionmaking involvement (Emrick and Peterson, 1978) and "actively seek staff advice on important school-wide issues" (McGeown, 1979, p. 80).

Ross (1980, p. 227) concluded that involving teachers in the decisionmaking process encouraged behavioral changes among teachers that the principal wanted to have occur. He stated:

> By providing for greater teacher influence in the settlement of school-wide curriculum decisions the principal can gain access to in-class decisions and thereby encourage the behavioral changes he/she deems appropriate.

Principal as Expert

French and Raven (1959) identified expert power as a base of social influence. Expert power or influence was defined as actual special knowledge or skill that principals possessed, plus the principal's perceived expertise. Principals worked closely with teachers in classrooms on issues identified during classroom observations, in a form of individualized inservice (Leithwood et al., 1978). Berman and McLaughlin (1979) reported that principals established formal occasions designed to encourage teachers' interaction regarding professional issues. Principals provided structured inservice activities for teachers and provided current information on innovative practices. Venezky and Winfield (1979) reported that principals closely monitored student progress and investigated any problems with teachers. Blumberg and Greenfield (1980) found that principals collected and disseminated information about work-world demands likely to be placed on students. As a rule, information was collected and disseminated openly, which produced an atmosphere of trust among teachers and students. All these behaviors illustrate principals' expertise. Gorton (1972, p. 318) summarized:

> . . . there is one source of administrative influence which potentially would seem to offer the administrator a truly viable basis upon which to gain the cooperation of others. That source is expertise, i.e., specialized knowledge or skill.

Conclusion

The literature cited in this section of the review has identified seven principal behaviors which potentially serve to influence teachers. Five of these--reward power, coercive power, referent power, expert power, and legitimate power--had been hypothesized by French and Raven (1959). Two additional behaviors, described by the phrases "principal as professional norm setter" and "principal as involver," were deductively conceptualized and identified from separate bodies of research. French and Raven's terminology was altered slightly and two categories were added resulting in the following conceptualized categories: Principal as Enabler, Principal as Coercer, Principal as Referent, Principal As Expert, Principal as Legitimate Authority, Principal as Professional Norm Setter, and Principal as Involver.

As Enablers, principals selectively provided resources and extrinsic and intrinsic rewards to teachers to insure their conformity to the principals' suggestions and mandates. Principals as Coercers negatively sanctioned teachers when non-conformist behavior was evident. As Referents, principals achieved conformity on the part of teachers through the personal attractiveness and teacher identification with the principals. Principals' expertise, specialized knowledge, or skill (Principal as Expert) also allowed them to achieve teacher conformity, as did the fact that principals occupied the top organizational positions in the schools (Legitimate Authority). Setting professional

norms by controlling the norm structure of the school provided additional potential for influence for principals. Finally, involving teachers in school-wide decisionmaking increased principals' influence on teachers in regards to individual classroom practices.

V. FINDINGS FROM THE LITERATURE REVIEW

Undeniably, principals can have the influence and do have the responsibility to provide leadership in the public schools. Although some authors contend that principals' formal authority has eroded over the past few decades, opportunities to gain influence among teachers and thereby provide leadership for or with them are numerous. Instead of wringing their hands in despair and helplessness over the partial loss of formal authority, principals must realize and capitalize on the existing potential for influence to be found in social bases of power. This emerging influence will take shape for principals mediated through negotiations with and persuasion of their teachers.

Principals have two primary responsibilities. Organizational maintenance has been and will continue to be an important expectation placed on the principalship by parents, superintendents, and boards of education. Additionally, principals must initiate and/or support change efforts in the schools if these effects are to ever be meaningful and permanent.

Superficially, these two responsibilities appear to be dichotomous. On the one hand, principals are expected to insure organizational change. On the other hand, they are expected to maintain the status quo. These apparent opposites are resolved when proactive leadership

and the role of principals in instructionally effective schools is understood. Principals must provide leadership to articulate a vision for schools. This vision would incorporate the answers to several questions: What tasks will schools take responsibility for? What should students be taught? When? Where? By whom? How? What accountability standards and measures will be employed? With these questions as a guide to behavior, principals can take the lead in evaluating current practices, retaining successful practices, and changing unsuccessful ones.

The research literature suggests that by using knowledge of French and Raven's (1959) social bases of power (influence), principals can begin to understand and increase their potential influence with teachers. Principals occupy the top organizational position in their schools, and thereby benefit from the organizational hierarchy. They can gain influence with teachers through selective use of negative sanctions. They can provide for teachers' extrinsic and intrinsic (psychic) needs, rewarding them for conformity. Principals can develop and provide expertise and set professional norms based on their understanding of the teaching ethos. They can involve teachers meaningfully in resolving school-wide decisions and can expect to be included in classroom decisionmaking. Finally, by establishing trust, respect, and affiliation with teachers, principals can expect teachers to accept principal's requests and mandates with greater frequency.

CHAPTER III

DESIGN AND METHODOLOGY

I. INTRODUCTION

This study focused on the influence-gaining behaviors of principals in schools of varying levels of instructional effectiveness. The study analyzed influence-gaining behaviors of principals to determine, in part, why some principals (and some schools) are effective and some are less effective. Chapter III describes the design and methodology used in the study.

The study was designed to allow its replication. Data from three sources--questionnaire, implementation survey, and interview/observation--were collected during a field test of implementation of five effective schooling elements in a district-wide school improvement project. Two groupings of schools were defined based on past performance of students on the California Achievement Test (CAT), general rankings of schools by central administrative staff (N=4), and levels of implementation of the five effective schooling elements. There were three middle and six elementary schools. The groups of schools were labeled in terms of "effective schools" elements as high-achieving schools and other schools. Three schools (two elementary and one middle) were designated high-achieving, and six schools (four elementary and two middle schools) were designated other schools.

The field research took place in a large urban school district that was implementing effective schooling elements as a means to improve educational opportunities for youngsters. Improvement or

effectiveness was defined narrowly in the tradition of effective school studies (Edmonds, 1979; Austin, 1979) as improvement on standardized tests in pupil performance (i.e., attaining at least the national norm) so that the performance exceeds the expected or predicted levels of learning of students in these schools.

II. SELECTION OF SCHOOLS

Background

In 1980, the urban school district which was the site of the study became involved in a school improvement project guided by elements or "correlates" of effective schools as identified by Ronald Edmonds (1979). As a result of the leadership of the district's area superintendent, an instructional improvement plan was developed to be implemented initially in four schools. These schools, three elementary and one middle, were selected since they formed a cluster--students matriculated from the three elementary schools into the middle school. Additional schools were added to the improvement project over the succeeding three-year period, so that by the end of the 1983-84 school year, 19 schools within the district were involved in the improvement process. All 19 schools qualified for Chapter I assistance, and most students met the criteria needed to qualify for free or reduced-cost meals. These 19 schools were the population for the instructional improvement study and also for this study of principals' influence-gaining behavior.

Several methods were used to divide the nine schools into categories designated as high-achieving and others relative to issues of

instructional effectiveness. Initial division of the schools was based upon the judgments of four instructional supervisors who worked with the schools closely and by the past performance of pupils on standardized tests. The supervisors worked independently, and there was agreement among them on the placement of schools into the "high" category. The supervisors placed schools into the high category based on (1) pupil performance on CAT, and (2) perceived level of implementation of five effective schools elements of the project.

The second criterion for placement of schools was the school's ranking (of 19) on the 1984 CAT test results of its pupils. Schools were ranked by categories reflecting the percent of results at or above the national average based on National Curve Equivalents (NCEs). There were some tied ranks.

The third criterion for placement of the schools into the high-achieving and other category was the level of implementation of the effective schooling elements as determined by the 16-member field-test team. Each of the 19 schools was visited by a field-test team and rated on five elements of effective schooling (administration, basic skills, climate, expectations, assessment of pupil progress) included in the replication model (Appendix D). Field-test team members used the observation/interview (implementation) guide (Appendix C) to rate the schools on these elements. The 19 schools were then ranked from 1 (high) to 19 (low) by the field-test teams based on ratings obtained on the factors on the observation/interview guide.

Table 1 summarizes the data categories used to label schools as either high-achieving schools or other. The 19 schools were ranked

TABLE 1

SELECTION OF SCHOOLS FOR INCORPORATION
INTO THE STUDY

Schools By Number	CAT Rank (of 19)	Implementation Rank (of 19)	Supervisor Rank*	Average Rank	Designation
Elementary					
113	4.5	7.5	1.0	4.3	High
153	2.0	2.0	1.0	1.7	High
132	13.5	10.0	2.0	8.3	Other
162	4.5	18.0	2.0	8.1	Other
122	6.5	16.0	2.0	8.2	Other
142	17.0	19.0	2.0	12.7	Other
Middle					
233	2.0	3.0	1.0	2.0	High
212	17.0	13.0	2.0	10.7	Other
222	17.0	14.0	2.0	11.0	Other

*1=High-Achieving; 2=Other

from 1 (high) to 19 (low) on the latest California Achievement Test data by district staff. The 19 schools were ranked from 1 (high) to 19 (low) by teachers on implementation of "effective schools" elements. Four instructional supervisors ranked all 19 schools (1=high-achieving or 2=others). The ranking of the three categories for each school were totaled and an average ranking computed. Schools were designated as high-achieving schools or other schools on the basis of the average ranking for each school, and assigned a three-digit number for anonymity.

Of the original 19 schools, nine were chosen for inclusion in this study. These nine schools met the following criteria: (1) the principal of each school must have worked in the school for a minimum of three years; (2) elementary schools must have included grades K-5 or K-4; (3) middle schools must have included grades 6-8; (4) student population must have been composed of at least 95 percent minorities. These criteria were established in order to match schools closely so that valid comparisons could be made among them.

Thus, all nine schools selected for use in the study were similar demographically. The student populations were all nearly totally black, poor, and generally the same size. Table 2 contains a comparison of selected demographic variables of the nine schools in the district studied.

The final composition of the nine schools chosen for this study included two elementary schools and one middle school, designated as high-achieving schools, and four elementary schools and two middle schools, designated as other schools, all of which had been involved in

TABLE 2

DEMOGRAPHIC VARIABLES OF THE NINE SCHOOLS

School	Size	Grade Levels	Years In Project	Title I and/or Free Lunch	95 Percent Minority	Years Principal In School
113	380	K-5	3	Yes	Yes	5
122	200	K-4	2	Yes	Yes	5
132	440	K-5	2	Yes	Yes	5
142	400	K-5	1	Yes	Yes	3
153	480	K-5	3	Yes	Yes	5
162	400	K-5	2	Yes	Yes	5
212	500	6-8	2	Yes	Yes	5
222	600	6-8	2	Yes	Yes	4
233	440	6-8	3	Yes	Yes	5

the school improvement study for at least one year. The activities of the principals of these schools in influencing teachers to accept, adopt, and use the school improvement project were the target for the study of principal use of influence-gaining behaviors in schools of different levels of instructional effectiveness.

III. ACCESS TO THE SCHOOLS AND MAKE-UP OF THE RESEARCH TEAMS

The researcher collected data for this study as part of the analysis of implementation of effective schools elements in the school district. Four teams carried out the implementation study. Each four-member team was assigned four or five schools in which to observe the degree or level of implementation of the effective schools elements. Within each team, three members were educators with varying levels of experience (former principals, college professors, graduate students, former teachers, central office administrators, etc.), and one person was a psychologist (applied or clinical). Each team had male and female members, and black and white members. At least three members of each team were from a geographic area outside the school district studied. All team members had prior experience in evaluation methods and techniques. A team leader was designated for each team. A full day of training was conducted to introduce the teams to the project and the instrument. The teams worked as a group to develop consistency in the use of the observation guide. There was no formal check of inter-rate agreement for individuals on a team or between/among teams.

IV. INSTRUMENT DEVELOPMENT

Three instruments were used in this study. One instrument was a questionnaire developed by the researcher. The other two instruments were developed by the field-test team for use in determining the levels of implementation of the five effective schools factors in the 19 schools. One instrument was an observation/interview guide; another instrument was an implementation survey to be completed by faculty of the 19 schools.

The researcher developed a four-part teacher questionnaire (Appendix A) based on (1) instruments from Balderson (1975) and Rayder and Body (1975), (2) the hypotheses of French and Raven (1959), and (3) an extensive review of previous research. Section I sought demographic information about the respondents. Section II sought teachers' perceptions concerning the degree to which principals exhibited selected behaviors/characteristics. Seven behaviors were rated by the teachers. Each of the seven behaviors was represented in the instrument by two statements. Section III of the questionnaire was developed in a similar manner. Fourteen statements, representing seven behaviors/characteristics, were rated by teachers. Section III sought teachers' perceptions concerning the positive or negative influence of the behaviors/characteristics. Section IV again presented the fourteen statements representing the seven behaviors/characteristics, and teachers ranked these behaviors/characteristics relative to the potential influence these behaviors had with the teachers.

The investigator modified the four-part teacher questionnaire for use with the principals in the study (Appendix A). Statements were

changed in Sections II, III, and IV to make the instrument relevant for principals. Section I sought demographic information. In Section II, principals rated the degree to which they believed that they exhibited the seven behaviors/characteristics represented by fourteen statements. Principals were asked in Section III to rate the positive or negative influence of the fourteen statements. In Section IV, principals were asked to rank the fourteen behaviors/characteristics as to their potential influence with teachers.

Observation/Interview Guide and Implementation Survey Form

The development of the observation/interview guide entailed a three-year process. A team of consultants from the East and Midwest, at the request of a Midwestern school administrator, began working with district administrators and staff to develop a plan to implement the five elements of "effective schools." After considerable review of the literature and research, the plan evolved into a implementation/ replication model designed to track the implementation of the "effective schools" elements in the selected school district. The five elements of "effective schools" were found in the research of Weber (1971), Edmonds (1979), Austin (1979), and others. The model suggested a developmental process over a four-year period with the ideal to be achieved (called "institutionalization" in the model) including that set of descriptors which was found in schools previously labeled through research to be highly effective. The basic model appears in Appendix D. Four schools were chosen to implement the model and thereby implement the elements of "effective schools." After extensive training in effective schooling elements, the principals of these four schools reviewed the model and

assisted the consultants and other district staff in several informal field tests over the next two-year period.

The implementation/replication model served as the basis for the development of two data collection forms, the observation/interview guide, and the implementation survey form. These instruments appear in Appendices B and C. These instruments were field tested within the selected district in the early Spring of 1984. The implementation survey contains many of the same items as the interview guide.

The observation/interview guide and the implementation survey form each contained the same seven statements pertaining to the seven bases of social power used in the present study as the classification model for influence-gaining behaviors of principals. The observation/interview guide was utilized by the four teams of four persons who served on the implementation evaluation committee. These observation/interview team members were trained in a 12-hour training session prior to the visitations in the school district. The training sessions were conducted by central office staff members and the chair person of the implementation evaluation project. These teams visited the 19 schools in the district and recorded their findings on the observation/interview form (Appendix C). Two weeks later, the implementation survey form was distributed to the faculty of the 19 schools visited by the implementation evaluation team and faculty responses were collected. There was no attempt at follow-up since there was no process to identify respondents (who were assured anonymity).

V. VALIDITY

Introduction

In 1974, a joint committee of the American Psychological Association, the American Education Research Association, and the National Council on Measurements in Education identified three types of validity: content validity, criterion-related validity, and construct validity. Below is an explanation of the application of these types of validity to the questionnaires, observations/interviews, and surveys used in this study.

Construct Validity

Theorectical and rational support from the literature was available for the use of the three descriptive data collection methods utilized in this study. Wrightstone, Justman, and Robbins (1956) illustrate the uses of questionnaire, survey and interview data collection techniques. Weber (1971) and Mintzberg (1979) support the use of direct observation as a valid data collection technique.

Criterion-Related Validity

The data collection techniques employed in this study were chosen to validate each other concurrently. Questionnaire data were obtained from principals and teachers. Subsequently, additional data were collected through interviews/observations and implementation surveys to validate data obtained from the questionnaire results.

Content Validity

French and Raven (1959), after considerable study, hypothesized

that middle managers have five bases of social power which energize attempts to lead. They identified these bases as legitimate authority, reward power, coercive power, referent or personal power, and expert power. Leithwood and Montgomery (1978) and Ross (1981), among others, suggested two additional bases of social power specifically available to principals. These two additional social power bases were called norm setting power and involvement power. Balderson (1975) and Rayder and Body (1975) employed French and Raven's constructs in studies of principals' bases of social power. The literature and prior research identify that social bases of power have been utilized to measure principals' potential influence with teachers; therefore this study has been determined to meet the requirements of content validity.

VI. RELIABILITY

Introduction

The teacher questionnaire and the principal questionnaire were subjected to a test for reliability. A population of graduate students, currently employed as teachers in the East Tennessee area, completed the teacher questionnaire. They completed each section of the questionnaire (except the demographic section) and made recommendations concerning the wording of the 42 statements and the design of the instrument. A second population of graduate students, presently employed in administrative positions in the East Tennessee area, completed each section (except the demographic section) of the principal questionnaire and suggested ways to improve the format of the instrument and wording of the 42 statements. A total of 49 practicing teachers responded to the teacher

questionnaire. A total of 15 practicing administrators responded to the principal questionnaire.

Teacher Questionnaire

Forty-nine currently practicing teachers completed the teacher questionnaire. They were asked to respond to the 42 statements in the questionnaire, following directions for the different sections carefully. They were also asked to write on the instrument suggestions for improvement of the format of the instrument and wording of the 42 statements.

The design of the instrument lent itself to the application of the Spearman-Brown split-half reliability coefficient formula. This formula, ". . . the coefficient of internal consistency" (Gay, 1976, p. 94), was applied to the data generated from the 49 respondents. Sections II, III, and IV contained fourteen statements, two statements for each of the seven bases of principal social power. The 42 statements in the instrument were numbered consecutively; the responses to even-numbered statements were totaled as were the responses to odd-numbered statements. A Pearson r correlation coefficient was computed between responses to even-numbered statements and odd-numbered statements. The Spearman Brown Prophecy formula was applied to the Pearson r correlation coefficient which yielded a coefficient of internal consistency of .92 for the teacher questionnaire.

Principal Questionnaire

Fifteen currently practicing principals and assistant principals completed the principal questionnaire. They rated each statement in

each of the three sections and supplied suggestions for improvement in questionnaire design and statement format. The same procedures utilized with the teacher questionnaire were followed with the principal questionnaire. All 42 statements were numbered consecutively; responses to odd-numbered statements were summed as were responses to even-numbered statements. A Pearson r correlation coefficient was computed between the odd- and even-numbered statements. The Spearman Brown Prophecy formula was applied yielding a coefficient of internal consistency of .89 for the principal questionnaire.

Observation/Interview Guide and Implementation Survey Form

A formal field test of the observation/interview guide and implementation survey form was conducted in early Spring 1984 after several informal field tests had been conducted to remove reliability deficiences. The formal field test was conducted on teachers and staff in the selected school district. Mean ranks of principals' influence-gaining behaviors from the observation/interview guide, the implementation survey, Section II of the teacher questionnaire, and Section II of the principal questionnaire were correlated. The Kendall's Coefficient of Concordance, W, was used to correlate the four data sources. According to Champion (1970, p. 224) the "W measures the extent to which there is agreement between the rankings on any number of variables." A "W" of .74 was obtained for the four data sources.

VII. DESIGN OF THE STUDY

Quasi-Experimental

This study was quasi-experimental in design since no attempt was made to manipulate variables. The study's theoretical foundation was French and Raven's (1959) five bases of social power, plus two additional bases of power inferred from the literature (Ross, 1980; Leithwood and Montgomery 1982), resulting in seven identifiable bases of social power. Based on a current body of research known as "effective schools" research, inferences were made that principals' social power bases yield influences which affect teachers which in turn affect student achievement.

Ex Post Facto

This study was an ex post facto study according to Kerlinger's (1973, p. 379) description:

> Ex post facto research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulative. Inferences about relations among variables are made, without direct intervention, from concommitant variation of independent and dependent variables.

Descriptive

Descriptive research techniques--questionnaires, observations/interviews, and implementation surveys--were utilized in this study to provide a framework from which both teachers' and principals' perceptions of principals' influence-gaining behaviors could be discussed.

Case Study

This study provided a snapshot of nine principals' influence-gaining behaviors at the time the data were collected. This approach qualified as a case study, defined by Campbell and Stanley (1963, p. 6): "a single group studied only once, subsequent to some agent or treatment presumed to cause change."

Field Study

This study, incorporating French and Raven's (1959) five bases of social power with two other power bases from the literature, attempted to conceptualize a research model to be tested in the field. French and Raven's (1959) bases of social power have been used previously: Balderson (1975) and Rayder and Body (1975) incorporated French and Ravens' hypotheses in brief studies of principals.

VIII. DATA COLLECTION

Introduction

Three descriptive approaches were used to collect the data for this study--questionnaires, observations/interviews, and surveys. Teachers responded to a three-part questionnaire designed specifically to explore their perceptions of principals' influence-gaining behaviors. Principals completed a similar instrument designed to explore how the principal perceived him/herself and the teachers. Observations of principal behaviors were conducted to confirm the information obtained from the questionnaires and to assess the degrees of implementation of the effective schools elements. The observations were guided by structured observation instruments. Using interview guides

developed from the seven bases of principals' power, principals and selected teachers were interviewed, to confirm the validity of the questionnaire responses and to obtain additional data. Last, portions of an implementation survey developed from the observation guide and the theoretical model guiding the implementation provided information on the perceptions of the school staffs relative to implementation and to specific aspects of the principals' behaviors in using influence-gaining behaviors.

Teacher Questionnaires

The teacher questionnaires enabled the investigator to compile teachers' perceptions of their principals' influence-gaining behaviors. The questionnaire contained four sections. Section I requested demographic information. Section II sought to determine the degree to which principals exhibited selected influence-gaining behaviors. Section III inquired as to the direction (positive or negative) of the influence of selected principals' behaviors. The fourth section asked teachers to rank selected principals' behaviors as to their potential influence with teachers (Appendix A).

Principal Questionnaire

The principal questionnaire was designed very similarly to the teacher questionnaire. Section I sought demographic information. Section II asked the principal to indicate the degree to which he/she exhibited selected behaviors. In Section III the principal related the direction (positive or negative) of the influence of selected principal behaviors on their teachers. Section IV requested the principal to rank

selected principal behaviors as to their potential influence with teachers (Appendix A).

Direct Observations and Interviews

Principals selected for this study were observed and interviewed during one school day by a minimum of three observers. Items A-1, A-4, A-5, A-8, A-10, A-12 and A-13 of the observation/interview guide were related to principals' influence-gaining behaviors/characteristics found in the principal and teacher questionnaires (Appendix C). Principals were rated on these items by the observers who recorded their ratings on the guides. These ratings were compared with questionnaire data to validate the findings from the questionnaires.

Implementation Surveys

Teachers and principals in all 19 schools completed an implementation survey which contained selected items related to influence-gaining behaviors/characteristics found in both questionnaires. Items 1, 3, 4, 5, 7, 9, and 10 of the leadership section of the implementation survey were included to serve as an additional validity check for questionnaire data (Appendix B).

Summary

Three descriptive data collection methods were incorporated into this study. Teachers and principals completed similar questionnaires in an attempt to help the investigator better understand influence-gaining behaviors in which principals engaged.

Data from an implementation survey, completed by the professional staff, were used in two ways. These data provided additional validation

of the data obtained through the two questionnaires and more detailed data on the influence-gaining behaviors of principals in both groups of schools.

Observations of all selected principals were conducted focusing on the seven influence-gaining behaviors cited in the questionnaires. Additionally, all principals and selected teachers were interviewed to clarify the attempts of principals to gain influence with teachers. The observation and interview methods were included both to validate the data obtained through the questionnaires and to obtain more detailed data.

IX. ANALYSIS

Introduction

Raw data were organized for analysis in four ways: Teacher and principal ratings between the two groups of schools (high-achieving schools and other schools), within groups of schools (high-achieving schools' principal ratings with high-achieving schools' teacher ratings, and other group principal ratings with other group teacher ratings), between groups of principals (principals in high-achieving group and principals in other schools), and between groups of teachers (teachers in high-achieving schools and teachers in other schools). The Mann Whitney U test (See formula illustrated in Appendix E) was selected to analyze the data. Champion (1970, p. 176) described the Mann Whitney U as "a test for the significance of difference between two samples where the elements have been ranked according to some ordinal level variable."

The Kendall's Coefficient of Concordance, W (See Appendix E) was employed to determine the agreement in ranked data among and within respondent groups on the degree to which principals in the two groups of schools exhibited the seven behaviors. The Spearman's Rho (See Appendix E)) was used to determine the agreement in ranked data between two respondent groups on the degree to which principals in the two groups exhibited the seven behaviors.

The Research Question

The basic research question for this study has two parts:

Part 1. How do principals of high-achieving schools and principals of other schools gain influence with their teachers?

Part 2. How are the influence-gaining behaviors of principals of high-achieving schools different from the influence-gaining behaviors of principals of other schools?

The data analysis relative to Part 1 and Part 2 of the research question is organized in three parts: Teacher ratings between the two groups of schools; principal ratings compared to teacher ratings within the two groups of schools; and ratings of respondents to the implementation survey, observer/interviewer ratings, principal ratings, and teacher ratings between the two groups of schools.

Teacher Ratings Between Two Groups of Schools

Teacher ratings from Section II of the teacher questionnaire yielded data which were analyzed to determine if differences existed between the two groups of teachers.

Principal Ratings Compared to Teacher Ratings Within the Two Groups of Schools

Ratings of principals and teachers in the high-achieving schools were compared. The same comparison was made between principal ratings and teacher ratings in the other schools. Data from Section II of the principal and teacher questionnaires were included in these comparisons.

Observer/Interview Ratings, Survey Respondents' Ratings, Teacher Ratings, and Principal Ratings

Ratings of related statements found in the observation/interview guide, implementation survey, Section II of the teacher questionnaire, and Section II of the principal questionnaire were compared between the two groups of schools.

Related Research Question 1

What differences exist in the direction (positive or negative) of principal influence-gaining behaviors/characteristics between the two groups of principals (high-achieving schools and other selected schools)?

Data from Section III of the teacher and principal questionnaires were analyzed in three ways: Teacher ratings between the two groups of schools (high-achieving and other), principal ratings compared to teacher ratings within the high-achieving schools, and principal ratings compared to teacher ratings within the other schools.

Teacher Ratings Between Two Groups of Schools

Teacher ratings from Section III of the teacher questionnaire were analyzed to determine if differences existed between the two groups of teachers (high-achieving and other).

Principal Ratings Compared to Teacher Ratings Within Two Groups of Schools

Data from Section III of the principal questionnaire and the teacher questionnaire were analyzed. Two comparisons were made: between principal ratings and teacher ratings from high-achieving schools, and between principal ratings and teacher ratings in the other schools.

Related Research Question 2

What differences exist between the two groups of teachers (high-achieving schools and other schools) in their ranking of the potential influence of selected principal behaviors/characteristics?

Teacher Rankings Between Two Groups of Schools

Data from Section IV of the teacher questionnaire were compared between the teachers in high-achieving schools and teachers in the other schools.

Related Research Question 3

What differences exist between the two groups of principals (high-achieving schools and other schools) in their ranking of the

potential influence of selected principal behaviors/characteristics on their teachers?

Principal Ranking Between Two Groups of Schools

Data from Section IV of the principal questionnaire were compared between the principals in high-achieving schools and principals in other schools.

X. SUMMARY

This chapter described the design and methodology used in the study of influence-gaining behaviors of principals in schools of varying instructional effectiveness. It included a discussion of school selection, demographic variables of schools, composition of research teams, and instrument development. Analysis of data from principal and teacher questionnaires was described as were the validity and reliability of the instruments used in the study.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

I. INTRODUCTION

The Purpose of the Study

The purpose of this study was to classify and describe differences in influence-gaining behaviors of principals in schools of varying levels of instructional effectiveness. The research of French and Raven (1959), Ross (1980), and Leithwood and Montgomery (1982) served as the classification model by which principals' bases of social power were viewed as serving as potential sources of influence for principals.

Selection of Schools

Nineteen schools from a large Mid-Western school district were the population from which nine schools were selected for inclusion in the study. Length of principal tenure in school, racial composition of the student body, rankings of schools on past performance on the CAT, rankings of schools on a school improvement implementation program, socio-economic status of the school, and instructional supervisors' rankings of the schools served as selection criteria for inclusion into the the study. Pages 34 to 39 contain details of school selection.

Design of the Study

The design of the study was quasi-experimental, ex post facto, and descriptive. Nine "one-shot" case studies were conducted. Three descriptive data collection techniques--questionnaires, observations/

interviews, and implementation surveys resulted in raw data which were analyzed statistically to determine if differences existed in influence-gaining behaviors of principals. Three related questions were investigated and the data obtained from those questions were analyzed as well.

Data Collection and Analysis

Data collection techniques used and analyses conducted were organized around the research questions asked. Figure 1 provides a diagram of the various comparisons made. The research question has two parts:

(1) How do principals from the nine schools gain influence? Data from Section II of the principal questionnaire and teacher questionnaire, responses to seven items in the implementation survey, and results of observations/interviews by the implementation team were compared to describe how the two groups of principals behaved to gain influence with their teachers.

(2) How are the behaviors of principals in high-achieving schools different from the behaviors of principals in the other schools?

Data from observations/interviews and implementation surveys were analyzed employing the Mann Whitney U test to determine if significant differences existed in the degree to which principals from the two groups of schools exhibit the seven influence-gaining behaviors. The Spearman's Rho (r_S) was used to determine agreements of ranked data between respondent groups, and the Kendall's coefficient of concordance, W, was employed to determine agreement of ranked data among and within respondent groups. Data from Section II of both questionnaires

<table>
<tr><td></td><td colspan="4">RESPONDENT GROUPS</td></tr>
<tr><td>DATA SOURCE</td><td colspan="2">HIGH ACHIEVING SCHOOLS
TEACHERS PRINCIPALS</td><td colspan="2">OTHER SCHOOLS
TEACHERS PRINCIPALS</td></tr>
<tr><td>Teacher Questionnaire
and
Principal Questionnaire</td><td>Group A</td><td>Group B</td><td>Group C</td><td>Group D</td></tr>
<tr><td>Implementation Survey
(Seven Selected Items)</td><td colspan="4">Principals and Teachers
Group E (Staff) Group F</td></tr>
<tr><td>Observation/Interview
Guide
(Seven Selected Items)</td><td colspan="4">Combined responses of implementation evaluation team members on the seven selected items.
Group G Group H</td></tr>
</table>

Summary of Comparisons

Research Question, Part 1
1. Group A with Group C; Group B with Group D
2. Group A with Group B; Group C with Group D
3. Group E with Group F; Group G with Group H

Research Question, Part 2
1. Group A with Group C; Group B with Group D
2. Group A with Group B; Group C with Group D

Related Question 1
1. Group A with Group C
2. Group B with Group D

Related Question 2
Group A with Group C

Related Question 3
Group B with Group D

FIGURE 1. DIAGRAM OF VARIOUS COMPARISONS MADE IN THE DATA ANALYSIS OF 1984 STUDY OF PRINCIPAL INFLUENCE-GAINING BEHAVIORS

(principal and teacher) were compared utilizing the Mann Whitney U test to compare the following:

A. Teacher perceptions from high-achieving schools with principal perceptions from high achieving schools;

B. Teacher perceptions from high-achieving schools with teacher perceptions from the other schools;

C. Principal perceptions from high-achieving schools with principal perceptions from other schools; and

D. Teacher perceptions from the other schools with principal perceptions from the other schools.

Related Question 1: What differences exist in the direction (positive-negative) of principal behaviors between the two groups of principals? Data from Section III of the teacher questionnaire and principal questionnaire were analyzed (Mann Whitney U Test) in the following ways.

A. Teacher perceptions from high-achieving schools with teacher perceptions from the other schools.

B. Principal perceptions from high-achieving schools with principal perceptions from the other schools.

Related Question 2: What differences exist between the two groups of teachers (high-achieving schools and other schools) in their ranking of the potential influence of the seven selected principal behaviors/characteristics? Data from Section IV of the teacher questionnaire were compared employing the Mann Whitney U Test. The comparison was done between teachers in high-achieving schools and teachers in the other schools.

Related Question 3: What differences exist between the two groups of principals in their ranking of the potential influence of the seven selected principal behaviors/characteristics on their teachers? Data from Section IV of the principal questionnaire were compared, using the Mann Whitney U Test, between the rankings of the principals in high-achieving schools and the principals of other schools. Data consisted primarily of ratings and rankings which were analyzed employing the Mann Whitney U.

The Mann Whitney U Test was employed to provide answers to the second part of the research question and to related questions one, two and three. Mean ratings (scores) on the seven behaviors from the principal questionnaire and teacher questionnaire were computed. Mean ratings for each behavior from Section II of both questionnaires were ranked and compared between and within the two groups of schools. U values were computed and their significances were found in tables provided in a statistics textbook (Champion, 1970). The same procedure was followed for reporting and analyzing the data from Sections III and IV of the teacher questionnaire and principal questionnaire.

Data from the observations/interviews and implementation survey also were compared to provide answers to part two of the research questions. Mean ratings (scores) on the seven behaviors from observations/interviews were ranked and compared between the principals of the two groups of schools. The same procedures and comparisons were made on data from the implementation survey.

The Spearman's Rho (r_s) was used to determine agreement of rank data between respondent groups, and the Kendall's coefficient of

concordance, W, was employed to determine agreement of ranked data among and within respondent groups.

II. THE RESEARCH QUESTION, PART ONE: HOW DO PRINCIPALS OF HIGH-ACHIEVING SCHOOLS AND PRINCIPALS OF OTHER SCHOOLS GAIN INFLUENCE?

Introduction

There were four data sources that described how principals in the two groups of schools gained influence. Responses of various groups were compared using the four data sources. Capital letters here (e.g., A) refer to groups shown in Figure 1, p.58 for comparisons. Groups and data sources were: (1) Section II of the teacher questionnaire, (A and C); (2) Section II of the principal questionnaire, (B and D); (3) related statements found in the observation/interview guide, (G and H); and (4) related statements found in the implementation survey (E and F). Comparisons were as shown in Figure 1, page 58. Table 3 shows the degree of agreement of ranked data from the various respondent groups. The Spearman's Rho, r_s, was employed to determine the degree of agreement of ranked data between two respondent groups; Kendall's Coefficient of Concordance, W, was used to determine the degree of agreement of ranked data among and within three or more respondent groups (Table 3). Agreement between groups was from r_s .96 to r_s .-36; agreement among and within groups was from W .88 to W .14. These results are discussed throughout the text.

TABLE 3

DEGREE OF ASSOCIATION OF RANKED DATA BETWEEN, WITHIN, AND AMONG RESPONDENT GROUPS ON SECTION II OF PRINCIPAL AND TEACHER QUESTIONNAIRES, OBSERVATIONS/INTERVIEWS, AND IMPLEMENTATION SURVEYS

BETWEEN RESPONDENT GROUPS

Respondent Groups	r_s
A and C	.86
A and B	.25
B and D	.43
C and D	.96
E and F	.81
G and H	-.36

AMONG RESPONDENT GROUPS

Respondent Groups	W
A/B/G/E	.61
C/D/F/H	.29

WITHIN RESPONDENT GROUPS

Respondent Group	W
A (N=3)	.88
B (N=3)	.53
C (N=6)	.56
D (N=6)	.52
E (N=3)	.61
F (N=6)	.39
G (N=3)	.29
H (N=6)	.14

Principals From High-Achieving Schools

Teachers in the high-achieving schools (Group A from Figure 1, p. 58) rated their principals highest in the exertion of expert influence followed closely by legitimate authority and norm setting influence. They rated their principals lowest in coercive influence and enabling influence (Table 4). The principals (B) rated themselves highest in referent influence and legitimate authority. Principal as expert, ranked first by the teachers, was ranked fifth by the principals. The principals rated themselves lowest in the exhibition of involvement and coercion (Table 5). The observers/interviewers (G) rated the principal highest in referent behavior, followed closely by coercion, enabler, and expert (Table 6). According to the observations/ interviews, principals utilized norm setting and involvement behaviors least. Principals were rated highest in expert, referent, and enabler from the implementation survey results (E). They were seen as employing coercive, involving, and norm setting least of the seven behaviors (Table 7).

Summary

There was general agreement (W=.61, Table 3, p. 61) among the four data sources (A, B, G, E). Principals in the high-achieving schools exhibited four behaviors consistently more than the others. The principals exhibited expert behavior, legitimate authority, referent, and norm setter to a greater extent, and tended to exercise involvement behavior and coercive behavior least among the seven selected behaviors. The sum of ranks for the groups (A, B, G, E) shows that

TABLE 4

DEGREE PRINCIPALS EXHIBIT/POSSESS BEHAVIORS: TEACHER PERCEPTIONS FROM PART II OF TEACHER QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(A) Rank
Referent	5.36	3.0	5.05	4.0	5.18	4.0	11.0	4.0
Expert	5.40	2.0	5.35	1.0	5.44	2.5	5.5	1.0
Enabler	4.95	6.0	4.30	6.0	4.81	5.0	17.0	6.0
Coercer	3.31	7.0	3.60	7.0	4.38	7.0	21.0	7.0
Leg. Auth.	5.27	4.0	5.30	2.0	5.63	1.0	7.0	3.0
Norm Set.	5.63	1.0	5.25	3.0	5.44	2.5	6.5	2.0
Involver	5.00	5.0	4.80	5.0	4.63	6.0	16.0	5.0

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	4.96	4.0	4.65	3.0	4.71	4.0
Expert	5.06	2.5	5.10	1.0	5.00	3.0
Enabler	4.00	6.0	4.60	4.5	4.67	5.0
Coercer	2.80	7.0	1.65	7.0	3.53	7.0
Leg. Auth.	5.06	2.5	4.55	6.0	5.10	2.0
Norm Set.	5.18	1.0	4.75	2.0	5.25	1.0
Involver	4.93	5.0	4.60	4.5	4.32	6.0

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(C) Rank
Referent	4.10	4.0	3.86	6.0	4.14	6.0	27.0	5.0
Expert	4.40	3.0	4.27	5.0	4.28	4.0	17.5	3.0
Enabler	3.40	6.0	4.02	4.0	4.21	5.0	31.5	6.0
Coercer	1.00	7.0	2.54	7.0	3.28	7.0	42.0	7.0
Leg. Auth.	4.90	2.0	4.54	1.0	4.92	2.5	16.0	2.0
Norm Set.	4.00	5.0	4.31	3.0	5.71	1.0	13.0	1.0
Involver	5.40	1.0	4.36	2.0	4.92	2.5	21.0	4.0

Scale for Means: 1=non-existent to 6=very high

TABLE 5

DEGREE PRINCIPALS EXHIBIT/POSSESS BEHAVIORS: PRINCIPAL PERCEPTIONS FROM PART II OF PRINCIPAL QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(B) Rank
Referent	6.00	2.0	6.00	1.5	5.50	3.0	6.5	1.5
Expert	5.00	5.0	5.05	3.5	5.00	6.5	15.0	5.0
Enabler	5.00	5.0	5.00	5.5	5.50	3.0	13.5	4.0
Coercer	2.50	7.0	2.50	7.0	5.50	3.0	17.0	6.5
Leg. Auth.	6.00	2.0	6.00	1.5	5.50	3.0	6.5	1.5
Norm Set.	6.00	2.0	5.50	3.5	5.50	3.0	8.5	3.0
Involver	5.00	5.0	5.00	5.5	5.00	6.5	17.0	6.5

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	4.50	4.5	5.00	4.0	4.50	6.5
Expert	5.00	3.0	5.50	2.5	6.00	2.0
Enabler	2.50	6.0	5.50	2.5	4.50	6.5
Coercer	1.50	7.0	3.00	7.0	5.00	4.5
Leg. Auth.	4.50	4.5	4.50	5.5	6.00	2.0
Norm Set.	6.00	1.5	6.00	1.0	6.00	2.0
Involver	6.00	1.5	4.50	5.5	5.00	4.5

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(D) Rank
Referent	5.50	1.0	4.50	6.0	4.00	6.0	28.0	6.0
Expert	5.00	3.0	5.00	4.0	4.50	4.5	19.0	3.0
Enabler	4.00	6.0	5.00	4.0	5.00	2.5	27.5	5.0
Coercer	1.50	7.0	3.50	7.0	2.50	7.0	39.5	7.0
Leg. Auth.	5.00	3.0	6.00	1.5	5.50	1.0	17.5	2.0
Norm Set.	5.00	3.0	5.00	4.0	4.50	4.5	16.0	1.0
Involver	4.55	5.0	6.00	1.5	5.00	2.5	20.5	4.0

Scale for Means: 1=non-existent to 6=very high

TABLE 6

DEGREE PRINCIPALS EXHIBIT/POSSESS BEHAVIORS:
OBSERVER/INTERVIEW RATINGS

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(G) Rank
Referent	5.00	1.0	4.00	3.5	3.10	7.0	11.5	4.0
Expert	4.00	3.5	4.00	3.5	4.00	4.0	11.0	2.5
Enabler	4.00	3.5	3.50	7.0	4.00	4.0	14.5	5.5
Coercer	3.50	6.0	3.90	6.0	4.00	4.0	16.0	7.0
Leg. Auth.	4.00	3.5	4.00	3.5	4.00	4.0	11.0	2.5
Norm Set.	4.00	3.5	4.60	1.0	5.00	1.0	5.5	1.0
Involver	3.30	7.0	4.00	3.5	4.00	4.0	14.5	5.5

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	3.30	6.0	3.50	1.0	3.00	7.0
Expert	4.00	3.0	2.20	7.0	4.00	3.0
Enabler	4.00	3.0	2.90	4.5	4.00	3.0
Coercer	4.00	3.0	3.30	3.0	4.00	3.0
Leg. Auth.	4.00	3.0	3.40	2.0	4.00	3.0
Norm Set.	3.00	7.0	2.50	6.0	3.30	6.0
Involver	4.00	3.0	2.90	4.5	4.00	3.0

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(H) Rank
Referent	3.00	2.0	2.00	6.5	3.60	4.0	26.5	6.0
Expert	2.00	5.0	4.00	1.0	3.50	5.0	24.0	4.0
Enabler	2.90	3.0	2.20	4.5	3.00	7.0	25.0	5.0
Coercer	1.40	7.0	3.00	2.0	3.70	3.0	21.0	2.0
Leg. Auth.	2.60	4.0	2.70	3.0	3.90	2.0	17.0	1.0
Norm Set.	1.60	6.0	2.00	6.5	4.00	1.0	32.5	7.0
Involver	4.00	1.0	2.20	4.5	3.40	6.0	22.0	3.0

Scale for Means: 1=non-existent to 5=very high

TABLE 7

DEGREE PRINCIPALS EXHIBIT/POSSESS BEHAVIORS:
IMPLEMENTATION SURVEY RATINGS

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(E) Rank
Referent	4.82	1.0	4.82	1.0	4.67	6.0	8.0	2.0
Expert	4.75	2.0	4.76	2.0	4.89	1.0	5.0	1.0
Enabler	4.71	3.0	4.68	4.0	4.88	2.0	9.0	3.0
Coercer	4.40	6.0	4.59	6.0	4.81	4.0	16.0	5.5
Leg. Auth.	4.59	5.0	4.70	3.0	4.83	3.0	11.0	4.0
Norm Set.	4.63	4.0	4.62	5.0	4.50	7.0	16.0	5.5
Involver	4.18	7.0	4.40	7.0	4.75	5.0	19.0	7.0

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	4.95	1.0	4.85	1.0	4.88	1.0
Expert	4.71	4.0	4.31	5.0	4.78	2.5
Enabler	4.72	3.0	4.50	2.0	4.25	6.0
Coercer	4.63	6.0	4.22	6.0	4.78	2.5
Leg. Auth.	4.67	5.0	4.32	4.0	4.73	4.0
Norm Set.	4.84	2.0	4.33	3.0	4.69	5.0
Involver	4.29	7.0	3.42	7.0	4.06	7.0

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(F) Rank
Referent	4.88	1.0	3.09	5.0	3.70	4.0	13.0	1.0
Expert	4.63	4.0	3.64	2.0	4.27	1.0	18.5	3.0
Enabler	4.63	4.0	3.32	4.0	3.50	6.0	25.0	4.0
Coercer	4.57	6.0	3.40	3.0	3.80	3.0	26.5	5.0
Leg. Auth.	4.75	2.0	3.68	1.0	3.93	2.0	18.0	2.0
Norm Set.	4.00	7.0	2.78	6.0	3.59	5.0	28.0	6.0
Involver	4.63	4.0	2.77	7.0	3.26	7.0	39.0	7.0

Scale for Means: 1=non-existent to 5=very high

principals of high-achieving schools used (from most to least) expert, legitimate authority, norm setting, referent, enabler, involver and coercer. Some agreement was found within the three respondent groups (B, E, G) on the order of the ranks of the seven behaviors exhibited by principals in high-achieving schools (W=.53 for Group B, W=.61 for Group E, W=.29 for Group G). Less agreement (r_S=.25) was found between respondent groups A and B (Table 3, p. 62).

Principals From Other Schools

These six principals (Group D, Figure 1, p. 58) rated themselves highest in norm setting behavior, legitimate authority, and expert behavior. They rated themselves lowest in referent, enabling, and coercive behavior. Their teachers (C) were in considerable agreement with the principals, rating them highest in norm setting, expert, and legitimate authority. The teachers agreed that enabling behavior was used little, but rated norm setting as the least exhibited behavior for this group of principals (r_S C/D = .96, Table 3, p. 62). The observeration/interviewer ratings were a bit different. They (H) rated the principals highest in legitimate authority, involvement, and coercive behaviors. The principals' use of referent and norm setting behaviors was rated lowest by the observers. The data from the implementation survey (F) showed this group of principals exhibiting a high degree of referent behavior, legitimate authority, and expert behavior. The high rating for referent behavior was different from the high ratings found in the other three data sources. The principals were rated lowest on the use of norm setting and involving behaviors.

Summary

Moderate agreement (W=.29, Table 3, p. 62) was found among the four data sources (C, D, F, H) as to the behaviors exhibited to the greatest extent by principals in other schools (N=6). A sum of ranks for groups (C, D, F, H) shows that principals from other schools (from most to least) exhibited legitimate authority, expert and norm setting behaviors the most. They exhibited coercive and enabling behaviors the least, and were ranked in the mid-range on involving and referent behaviors.

These ratings for principals in other schools were similar for principals in high-achieving schools with two exceptions. Referent influence was utilized to a high degree by the principals in the high-achieving schools, but given a middle rating for the principals of other schools. Moreover, the principals in the other schools appeared to employ norm setting behavior to a great extent, while the principals in the high-achieving schools were found to employ norm setting to a moderate extent. The two groups of principals were rated similarly on two behaviors which neither group utilized much. These were principal as involver and principal as enabler. Coercive behavior was the least employed source of influence for the principals in both groups of schools.

III. THE RESEARCH QUESTION, PART TWO: HOW ARE THE INFLUENCE-GAINING BEHAVIORS OF PRINCIPALS OF HIGH-ACHIEVING SCHOOLS DIFFERENT FROM THE INFLUENCE-GAINING BEHAVIORS OF PRINCIPALS OF OTHER SCHOOLS?

Introduction

Data from Section II of the teacher and principal questionnaires were compared to determine if differences existed in influence-gaining behaviors of principals from the two groups of schools. These data were ranked by means for the seven influence-gaining behaviors incorporated into the present study. A Spearman's Rho was calculated for pairs of groups on the rankings of the seven behaviors. The Mann Whitney U was calculated for the rankings of each behavior among the nine schools.

Data from the observations/interviews were compared to determine if significant differences existed in influence-gaining behaviors of prinicpals from the two groups of schools. The same comparisons were made for the implementation survey data. The Mann Whitney U and Spearman's Rho were utilized the same as described in the preceding paragraph.

Teacher perceptions of the degree to which their principals exhibited/possessed the seven behaviors were compared between groups of schools. The perceptions of teachers in high-achieving schools (A) were compared with the perceptions of teachers in the other schools (C) to determine if significant differences existed. Each of the seven behaviors was compared individually between the teachers in the two groups of schools.

The same comparison as mentioned in the preceding paragraph was conducted based on data from Section II of the principal questionnaire. The perceptions of principals from high-achieving schools (B) and other schools (D) of the degree to which they exhibited/possessed the seven behaviors were compared to determine if significant differences existed between the principals of high-achieving schools (B) and the principals of the other schools (D) (See Table 5, p. 65).

Data were utilized from Section II of both the teacher and principal questionnaires to allow a comparison of the perceptions of teachers (A) and principals (B) from high-achieving schools and a comparison between the teachers (C) and principals (D) of the other schools in the study.

Teacher Perceptions Between the Two Groups of Schools

Table 4, p. 64 shows mean values of teacher perceptions on the degree to which principals exhibit/possess the seven behaviors. Mean values of teacher perceptions in Schools 113, 153 and 233 are shown at the top of the table. A sum of ranks and ranks are also shown. Mean values of teacher perceptions in Schools 132, 162, 212, 122, 142, and 222 are also shown along with a sum of ranks and ranks for teachers in the other schools.

The Spearman Rho found between teacher rankings of influence-gaining behaviors of principals in high-achieving schools (A) and other schools (C) was .86 (Table 3, p. 62). This indicates that teachers in both groups of schools rank their principals' use of the seven influence-gaining behaviors in very similar ways. Table 8 exhibits the

TABLE 8

DIFFERENCES BETWEEN TEACHER PERCEPTIONS: DEGREE TO WHICH PRINCIPALS EXHIBIT INFLUENCE-GAINING BEHAVIORS, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	18	0	$p \leq .001$
Expert	18	0	$p \leq .001$
Enabler	16	2	$p \leq .004$
Coercer	17	1	$p \leq .002$
Leg. Auth.	18	0	$p \leq .001$
Norm Setter	14.5	3.5	$p \leq .013$
Involver	10	8	$p \leq .066$

U values and significance levels of the differences between the ranked mean scores of teachers from the two groups of schools on each of the seven behaviors. According to the perceptions of teachers in high-achieving schools, the principals of high-achieving schools exhibited referent, expert, enabler, coercer, legitimate authority, and norm setter behaviors to a significantly greater extent than did the principals of other schools as seen by their teachers. The significance level of the difference on these six behaviors was $p < .05$. A difference was found on the seventh behavior, principal as involver, but the significance level of $p < .066$ did not meet the selected level of significance. Although the teachers in high-achieving schools rated their principals higher on this behavior than teachers in the other schools rated their principals, the difference was not significant.

Teacher/Principal Perceptions Within High-Achieving Schools

The perceptions of teachers (Table 4, p. 64) in high-achieving schools (A) on the degree to which their principals exhibited the seven behaviors were compared with the perceptions of their principals (B, Table 5, p.65).

The Spearman Rho between rankings of principal influence-gaining behaviors in high-achieving schools by teachers (A) and principals (B) of high achieving schools was .25. There is only a low positive relationship between the rankings of the two groups on principal influence-gaining behaviors. Teachers view their principals more as expert than do the principals; the principals see themselves relying more on referent behavior than do the teachers (Tables 4 and 5, pages 64 and 65).

Teacher and principal means were ranked on each behavior and comparisons made (Mann Whitney U) to determine if significance differences existed between principals and teachers. Table 9 provides the U values and significance levels for these comparisons. Similarity was found between teacher and principal perceptions on five of the seven behaviors. These behaviors were: principal as coercer, legitimate authority, norm setter, involver, and expert. Almost total agreement between principals and teachers was found on principal as expert. Another finding, although not significant, was that principals tended to rate themselves higher on legitimate authority, norm setter, and involver, while teachers rated principals higher on coercer. Significant differences ($p < .05$) were found on two behaviors. In both instances, referent and enabler, principals rated themselves significantly higher than their teachers rated them.

Principal Perceptions Between the Two Groups of Schools

Perceptions of principals in the three high-achieving schools (B) and of principals in the six other schools (D) on the degree to which they believed they exhibited the seven behaviors are shown in Table 5, p. 65. The seven behaviors were ranked for each group (B and D) of principals. The Spearman Rho between the two rankings was .43 (Table 3, p. 62), showing that there were some differences in the way that the two groups of principals ranked their use of the seven behaviors. Principals of high-achieving schools ranked referent high and expert low; principals of other schools ranked expert high and referent low (Table 5, p. 65). Means for each behavior were ranked and compared to

TABLE 9

DIFFERENCES BETWEEN TEACHER AND PRINCIPAL PERCEPTIONS: DEGREE TO WHICH PRINCIPALS EXHIBIT INFLUENCE-GAINING BEHAVIORS, IN HIGH ACHIEVING SCHOOLS

Behavior	U Values		Significance Levels
	Principal (N = 3)	Teacher (N = 3)	
Referent	9	0	$p \leq .05$
Expert	4	6	$p \leq .50$
Enabler	9	0	$p \leq .05$
Coercer	3	6	$p \leq .35$
Leg. Auth.	8	1	$p \leq .10$
Norm Setter	7	2	$p \leq .20$
Involver	7.5	1.5	$p \leq .15$

determine if differences existed between the principals in the two groups of schools (high-achieving and other). The observed U values and levels of significance are shown in Table 10.

Principals in high-achieving schools rated themselves significantly ($p \leq .05$) higher on five of the seven behaviors than the principals of other schools rated themselves. These behaviors were: referent, enabler, coercer, legitimate authority, and norm setter. The differences in the ratings for expert and involver were not significant, but the direction of the differences is clear. The principals of other schools rated themselves higher on expert and involver than the principals of the high-achieving schools rated themselves.

Teacher/Principal Perceptions Within the Other Schools

The perceptions of teachers from the other schools (Group C, Table 4, p. 64) and those of principals from the other schools (Group D, Table 5, p. 65) were compared. The Spearman Rho between rankings of principal influence-gaining behaviors in other schools as perceived by teachers in these schools (Group C) and their principals (Group D) was .96. This very strong positive relationship indicates that both groups agreed on the rankings of principal use of the seven behaviors.

Teacher and principal means were ranked on each of the seven behaviors and compared (Mann Whitney U) to determine if significant differences existed. Table 11 provides the observed U values and significance levels. No significant differences were found between the principals and teachers in the other schools on any of the seven behaviors. Although not significant, some differences were observed,

TABLE 10

DIFFERENCES BETWEEN PRINCIPAL PERCEPTIONS: DEGREE TO WHICH PRINCIPALS EXHIBIT INFLUENCE-GAINING BEHAVIORS, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	17.5	.5	$p \leq .002$
Expert	7.5	10.5	$p \leq .066$
Enabler	13.5	4.5	$p \leq .02$
Coercer	11	7	$p \leq .04$
Leg. Auth.	13.5	4.5	$p \leq .02$
Norm Setter	13.5	4.5	$p \leq .02$
Involver	9	29	$p \leq .09$

TABLE 11

DIFFERENCES BETWEEN TEACHER AND PRINCIPAL PERCEPTIONS:
DEGREE PRINCIPALS EXHIBIT BEHAVIORS,
OTHER SCHOOLS

Behavior	U Values		Significance Levels
	Principal (N = 6)	Teacher (N = 6)	
Referent	16	16	$p \leq .40$
Expert	25.5	10.5	$p \leq .15$
Enabler	13.5	12.5	$p \leq .19$
Coercer	19	17	$p \leq .46$
Leg. Auth.	18	14	$p \leq .29$
Norm Setter	26	10	$p \leq .12$
Involver	20	16	$p \leq .40$

and the direction of these differences is explained below. There was almost total agreement between the teachers and principals on the degree to which the principals exhibited three of the seven behaviors. These behaviors were referent, coercer and involver. The principals did rate themselves somewhat higher on enabler, expert, legitimate authority, and norm setter than their teachers rated them.

Observation/Interview Ratings Between the Two Groups of Schools

The observation/interview ratings on the degree to which the seven behaviors were exhibited by the principals of high-achieving schools (Group G) were compared with the observation/interview ratings of principals in the other schools (Group H). A Spearman Rho of .-36 (Table 3, p. 62) was found between the observation/interview rating of the principals from the two groups of schools which shows a negative relationship between the ratings. This negative relationship indicates disagreement on rankings of principal use of the seven behaviors. Observation/interview means were ranked (Table 6, p. 66) on each of the seven behaviors and compared (Table 12) utilizing the Mann Whitney U test to determine if significant differences existed in the observation/interview rankings between the principals of the two groups of schools.

Significant differences were found on all of the seven behaviors. According to observation/interview rankings, principals from high-achieving schools exhibited all seven behaviors to a significantly ($p \leq .05$) greater extent than did the principals of the other schools; a finding consistent with other similar comparisons.

TABLE 12

OBSERVATION/INTERVIEW RATINGS, DEGREE TO WHICH PRINCIPALS EXHIBIT INFLUENCE-GAINING BEHAVIORS, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	15	3	$p \leq .008$
Expert	13.5	4.5	$p \leq .02$
Enabler	14	4	$p \leq .01$
Coercer	12	6	$p \leq .03$
Leg. Auth.	15	3	$p \leq .008$
Norm Setter	17.5	.5	$p \leq .002$
Involver	11	7	$p \leq .04$

Implementation Survey Results Between the Two Groups of Schools

Ratings from the implementation survey on the degree to which principals from high-achieving schools (Group E) and principals of other schools (Groups F) exhibited the seven behaviors were compared. A Spearman Rho of .81 (Table 3, p. 62) was found in the implementation survey rankings between principals in the two groups of schools which indicates a strong positive relationship in these rankings. Both groups of principals were ranked very similarly in their use of the seven behaviors.

Implementation survey means were ranked (Table 7, p. 67) on each of the seven behaviors and compared (Table 13) employing the Mann Whitney U test to determine if significant difference existed in the implementation survey rankings between the principals of the two groups of schools. Significant differences were found: Principals of high-achieving schools exhibited six of the seven behaviors to a significantly ($p \leq .05$) greater extent than did the principals of other schools. The behaviors were: expert, enabler, coercer, legitimate authority, norm setter, and involver. Principals in other schools were found to exhibit referent behavior significantly more than did principals from high-achieving schools.

The sums of ranks from each data source (Groups A, B, G, E) for high-achieving schools on the seven behaviors were totaled and ranked. The sums of ranks from each data source (C, D, H, F) for other schools on the seven behaviors were totaled and ranked. A Spearman Rho was computed ($.96$ $p \leq .01$). The high correlation between the ways the seven behaviors were ranked for principals in high-achieving and for

TABLE 13

IMPLEMENTATION SURVEY RESULTS, DEGREE TO WHICH PRINCIPALS EXHIBIT INFLUENCE-GAINING BEHAVIORS, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	6	12	$p \leq .03$
Expert	16	2	$p \leq .004$
Enabler	16	2	$p \leq .004$
Coercer	13	5	$p \leq .02$
Leg. Auth.	13	5	$p \leq .02$
Norm Setter	12	6	$p \leq .03$
Involver	15	3	$p \leq .008$

principals in other schools indicates that each group used the seven behaviors, and they used them in the same general order.

Summary

Comparisons in this section were made between teachers and principals in high-achieving and in other schools. There were four respondent groups and four sets of comparisons. The Spearman Rho analyzed the relationship of the ranking of all seven behaviors for each pair in the analysis. The Mann Whitney U analyzed the degree or intensity of each of the seven behaviors for each pair in the analysis. The comparisons for analysis were as follows (Groups are explained in Figure 1, p. 58):

School Type	Teacher	Principal	Observer	Survey
High Achieving	A	B	G	E
Other	C	D	H	F

Groups A vs. B. The rankings were different (Rho=.25 ns). This difference was caused by (1) teacher perception of principal as more of an expert, and (2) principal perception of self as using more referent power. The Mann-Whitney U found significant differences on only two of seven behaviors. Groups A and B ranked the principals' use of the behaviors somewhat differently, but perceived the principals' degree or intensity of use each behavior about the same.

Groups C vs. D. These groups agreed both in kind (Rho=.96, $p \leq .01$) and in degree (no difference on any of seven Mann Whitney U tests).

Groups A vs. C. These groups agreed in kind (Rho=.86, $p \leq .05$). That is, both groups ranked the principals' use of the seven behaviors in about the same way. They disagreed in the degree or intensity of the

principals' use of six of the seven influence-gaining behaviors. In all comparisons, principals of high-achieving schools were seen as more intense in their use of the influence-gaining behaviors than were principals of other schools.

Groups B vs. D. These groups generally agreed in their rankings of principal use of the influence-gaining behaviors, providing a non-significant but moderate, positive r_s of .43. The principals of high-achieving schools rated themselves higher (in degree or intensity) on five of the seven influence-gaining behaviors than did the others.

Group G vs. H. The rankings were very different (Rho=.-36), possibly because: (1) principals of high-achieving schools were seen by observers/interviewers as exhibiting norm setter to the greatest extent and coercer to the least extent, and (2) principals in other schools were ranked highest in legitimate authority and lowest in norm setter. Differences in high-achieving and other schools may have been more obvious to external reviewers than they were to the staffs of the schools. Significant differences were shown in the intensity of the use of the seven behaviors by principals of the two groups of schools by observations/interviews. Principals from high-achieving schools exhibited the seven behaviors to a significantly ($p \leq .05$) greater extent than did principals of the other schools.

Group E vs. F. The rankings were very similar in kind (Rho=.81). That is, the implementation survey results showed that principals from both groups of schools exhibited the seven behaviors in a similar order. There were significant ($p \leq .05$) differences in the degree or intensity of the two groups of principals' use of the seven behaviors.

Principals of high-achieving schools used expert, enabler, coercer, legitimate authority, norm setter and involver to a significantly greater extent, while principals from the other schools exhibited referent behavior to a significantly greater degree than did principals in high-achieving schools.

IV. RELATED QUESTION 1: WHAT DIFFERENCES EXIST IN THE DIRECTION (POSITIVE-NEGATIVE) OF PRINCIPAL INFLUENCE-GAINING BEHAVIORS BETWEEN THE TWO GROUPS OF PRINCIPALS?

Introduction

Data from Section III of teacher questionnaire and from the principal questionnaire were compared to describe the differences in the ratings of the direction (positive-negative) of the seven behaviors. Comparisons were carried out between the high-achieving schools and the other schools. A Spearman Rho was computed between the rankings of the two groups. For all nine schools, these data were also ranked by means for the seven behaviors and tested by the Mann Whitney U.

Teacher perceptions (Table 14) of the direction of the influence of the seven behaviors were compared between the two groups of teachers (A and C). The perceptions of teachers in high-achieving schools (A) were compared with the perceptions of teachers in other schools (C) to determine if significant differences exist. Each of the seven behaviors was compared individually between the two groups of teachers using the Mann-Whitney U test. This comparison is in Table 15, p. 87.

The same comparison as mentioned in the preceeding paragraph was conducted based on data from Section III of the principal questionnaire

TABLE 14

DIRECTION OF INFLUENCE: PERCEPTIONS OF TEACHERS FROM HIGH ACHIEVNG SCHOOLS AND FROM OTHER SCHOOLS FROM SECTION III OF TEACHER QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	Rank
Referent	7.68	4.0	7.15	5.0	7.56	4.0	13.0	4.0
Expert	7.81	3.0	7.95	3.0	8.31	2.0	8.0	3.0
Enabler	7.13	6.0	6.20	6.0	6.93	5.0	17.0	6.0
Coercer	4.54	7.0	5.05	7.0	5.12	7.0	21.0	7.0
Leg. Auth.	8.40	1.0	8.50	1.0	8.68	1.0	3.0	1.0
Norm Set.	8.27	2.0	8.05	2.0	8.25	3.0	7.0	2.0
Involver	7.31	5.0	7.25	4.0	6.50	6.0	15.0	5.0

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	7.18	4.0	6.50	2.0	6.82	4.0
Expert	7.43	2.0	7.10	1.0	7.35	3.0
Enabler	5.62	6.0	5.90	6.0	6.53	5.0
Coercer	2.18	7.0	2.60	7.0	5.07	7.0
Leg. Auth.	7.25	3.0	6.30	4.0	7.39	2.0
Norm Set.	7.62	1.0	6.40	3.0	7.50	1.0
Involver	6.75	5.0	6.20	5.0	5.92	6.0

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	Rank
Referent	5.60	4.0	4.81	6.0	5.07	7.0	27.0	5.0
Expert	6.60	2.0	5.31	3.5	5.85	3.0	14.5	1.0
Enabler	4.20	6.0	4.86	5.0	5.57	4.0	32.0	6.0
Coercer	2.60	7.0	4.00	7.0	6.07	1.0	36.0	7.0
Leg. Auth.	6.50	3.0	5.31	3.5	5.14	6.0	21.5	4.0
Norm Set.	5.30	5.0	5.36	2.0	5.28	5.0	17.0	2.0
Involver	6.80	1.0	5.54	1.0	6.04	2.0	20.0	3.0

Scale for Means: 0=negative to 9=positive

TABLE 15

DIFFERENCES BETWEEN TEACHER PERCEPTIONS: DIRECTION OF INFLUENCE, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	17	1	$p \leq .002$
Expert	18	0	$p \leq .001$
Enabler	17	1	$p \leq .002$
Coercer	13	5	$p \leq .02$
Leg. Auth.	18	0	$p \leq .001$
Norm Setter	18	0	$p \leq .001$
Involver	16	2	$p \leq .004$

(Table 16, p. 89). Perceptions of principals from high-achieving schools (B) were compared with perceptions of principals from the other schools (D) to determine if significant differences exist (Table 17, p. 91).

Teacher Perceptions Between the Two Groups of Schools

Table 14 shows mean values of teacher perceptions for all schools on the direction (positive-negative) of the influence of the seven principal influence-gaining behaviors. The Spearman Rho between the rankings of Groups A and C was .86 (Table 3, p. 62).

Perceptions of teachers from high-achieving schools (A) were compared with perceptions of teachers from the other schools (C) to determine if significant differences exist. Table 12 exhibits the observed U values and significance levels for these comparisons.

Teachers in high-achieving schools rated all seven behaviors significantly ($p \leq .05$) more positive than did the teachers in the other schools. The differences were most apparent for expert, legitimate authority, and norm setter. The differences were least apparent for involver.

Principal Perceptions Between the Two Groups

Perceptions (Table 16) of the direction of the influence of the seven behaviors were compared between the principals of high-achieving (Group B) and other (Group D) schools. A Spearman Rho ($r_s=.43$) was computed between the rankings of the seven behaviors by Group B and D indicating that there was moderate agreement in the rankings of the groups. The rankings of each behavior by both groups (B and D) were

TABLE 16

DIRECTION OF INFLUENCE: PERCEPTIONS OF PRINCIPALS FROM HIGH ACHIEVING AND FROM OTHER SCHOOLS: SECTION III OF THE PRINCIPAL QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(B) Rank
Referent	8.50	5.0	8.00	3.5	8.00	4.5	13.0	5.0
Expert	9.00	2.0	7.50	5.5	8.00	4.5	12.0	4.0
Enabler	8.50	5.0	6.00	7.0	8.50	3.0	15.0	6.0
Coercer	7.50	7.0	7.50	5.5	1.00	7.0	19.5	7.0
Leg. Auth.	9.00	2.0	8.50	1.5	9.00	1.5	5.0	1.0
Norm Set.	8.50	5.0	8.50	1.5	9.00	1.5	8.0	2.0
Involver	9.00	2.0	8.00	3.5	7.00	6.0	11.5	3.0

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	4.00	5.0	6.50	6.0	4.00	7.0
Expert	8.00	3.0	7.50	3.5	7.50	4.0
Enabler	2.50	6.0	7.00	5.0	7.00	5.5
Coercer	0.00	7.0	5.50	7.0	7.00	5.5
Leg. Auth.	6.50	4.0	8.00	2.0	9.00	1.0
Norm Set.	8.50	2.0	9.00	1.0	8.00	2.5
Involver	9.00	1.0	7.50	3.5	8.00	2.5

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(D) Rank
Referent	7.00	4.5	5.50	6.0	4.00	6.0	34.5	6.0
Expert	7.50	2.5	8.00	3.5	5.50	4.0	20.5	4.0
Enabler	5.50	6.0	7.50	5.0	7.00	1.5	29.0	5.0
Coercer	1.00	7.0	4.00	7.0	3.00	7.0	40.5	7.0
Leg. Auth.	7.50	2.5	9.00	1.5	6.00	3.0	14.0	1.0
Norm Set.	8.00	1.0	8.00	3.5	5.00	5.0	15.0	3.0
Involver	7.00	4.5	9.00	1.5	7.00	1.5	14.5	2.0

Scale for Means: 0=negative to 9=positive

analyzed to determine if significant differences exist between the two groups. Each of the seven behaviors was compared individually. Table 17 contains the observed U values and significance levels for these comparisons.

Significant differences were found between the ratings of the principals in the two groups of schools on the direction of the influence of the seven behaviors. Principals from high-achieving schools consistently rated the behaviors more positively. Significant ($p \leq .05$) differences were found between the ratings of principals in the two groups of schools on six of the seven behaviors. The six behaviors were: referent, expert, enabler, coercer, legitimate authority, and norm setter.

V. RELATED QUESTION 2: WHAT DIFFERENCES EXIST BETWEEN THE TEACHERS IN THE TWO GROUPS OF SCHOOLS IN THEIR RANKING OF THE POTENTIAL INFLUENCE OF THE SEVEN SELECTED PRINCIPAL BEHAVIORS?

Teacher rankings (Table 18) of the potential influence of the seven behaviors were compared between the two groups of schools. Data from Section IV of the teacher questionnaire were used. A Spearman Rho was used to analyze the similarity of the rankings of the seven behaviors by the two groups of teachers. The perceptions of teachers in high-achieving schools (A) were compared with the perceptions of teachers in the other schools (C). Table 19 presents the observed U values and levels of significance for these data for the mean ratings of the two groups of teachers on each behavior.

TABLE 17

DIFFERENCES BETWEEN PRINCIPAL PERCEPTIONS: DIRECTION OF INFLUENCE, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	18	0	$p \leq .001$
Expert	13.5	4.5	$p \leq .032$
Enabler	14	4	$p \leq .008$
Coercer	13.5	4.5	$p \leq .02$
Leg. Auth.	14	4	$p \leq .01$
Norm Setter	14.5	3.5	$p \leq .01$
Involver	9.5	8.5	$p \leq .09$

TABLE 18

RANKS OF POTENTIAL INFLUENCE: PERCEPTIONS OF TEACHERS FROM HIGH ACHIEVING AND FROM OTHER SCHOOLS: SECTION IV OF TEACHER QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	School 113 Rank	School 153 $\bar{x}$	School 153 Rank	School 233 $\bar{x}$	School 233 Rank	$\sum$ of Ranks	(A) Rank
Referent	8.22	4.5	5.85	5.0	8.68	2.0	11.5	4.0
Expert	10.22	2.0	10.60	1.0	10.75	1.0	4.0	1.0
Enabler	8.22	4.5	5.50	6.0	6.06	5.0	15.5	5.0
Coercer	2.09	7.0	4.25	7.0	4.50	7.0	21.0	7.0
Leg. Auth.	11.18	1.0	10.00	2.0	8.56	3.0	6.0	2.0
Norm Set.	8.36	3.0	8.50	3.0	8.37	4.0	10.0	3.0
Involver	5.81	6.0	7.10	4.0	5.68	6.0	16.0	6.0

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	School 132 Rank	School 162 $\bar{x}$	School 162 Rank	School 212 $\bar{x}$	School 212 Rank
Referent	8.06	3.0	8.55	3.0	8.14	3.0
Expert	10.18	1.0	11.50	1.0	9.17	2.0
Enabler	6.06	5.0	7.65	4.0	7.32	5.0
Coercer	5.12	7.0	2.10	7.0	4.14	7.0
Leg. Auth.	9.43	2.0	9.45	2.0	9.64	1.0
Norm Set.	7.81	4.0	7.05	5.0	7.92	4.0
Involver	5.68	6.0	6.20	6.0	5.92	6.0

Behaviors	School 122 $\bar{x}$	School 122 Rank	School 142 $\bar{x}$	School 142 Rank	School 222 $\bar{x}$	School 222 Rank	$\sum$ of Ranks	(C) Rank
Referent	6.30	7.0	8.09	5.0	4.92	6.0	27.0	4.0
Expert	9.10	1.5	9.95	1.0	9.92	2.0	8.5	1.0
Enabler	7.60	3.0	6.04	6.0	6.78	5.0	28.0	5.5
Coercer	9.10	1.5	3.09	7.0	4.00	7.0	36.5	7.0
Leg. Auth.	6.90	4.0	8.72	2.0	9.14	3.0	14.0	2.0
Norm Set.	6.80	5.0	8.31	4.0	7.71	4.0	26.0	3.0
Involver	6.70	6.0	8.36	3.0	10.42	1.0	28.0	5.5

Scale for Means: 14=High to 1=Low

TABLE 19

DIFFERENCES BETWEEN TEACHER PERCEPTIONS: RANKS OF POTENTIAL INFLUENCE, HIGH ACHIEVING SCHOOLS VS. OTHER SCHOOLS

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	12	6	$p \leq .03$
Expert	15	3	$p \leq .008$
Enabler	7.5	10.5	$p \leq .066$
Coercer	8	10	$p \leq .066$
Leg. Auth.	13	5	$p \leq .02$
Norm Setter	18	0	$p \leq .001$
Involver	5.5	14.5	$p \leq .03$

Teachers in both groups (A and C) ranked the potential influence essentially the same (Rho=.99). Teachers, regardless of the achievement levels of the schools, see that the three highest sources of influence-gaining behaviors are: principal as expert; legitimate authority, and norm setter. The two least sources are coercer and involver.

Teachers from the high-achieving schools rated five of the seven behaviors significantly ($p \leq .05$) higher in potential influence than did the teachers from the other schools. The five behaviors were: referent, expert, legitimate authority, norm setter, and involver. Although not significant, the teachers from high-achieving schools ranked the remaining two behaviors, coercer and enabler, somewhat higher than did the teachers from the other schools.

VI. RELATED QUESTION 3: WHAT DIFFERENCES EXIST BETWEEN THE TWO GROUPS OF PRINCIPALS IN THEIR RANKINGS OF THE POTENTIAL INFLUENCE OF THE SEVEN PRINCIPAL BEHAVIORS?

Principal rankings (Table 20) of the potential influence of the seven behaviors on teachers were compared between the two groups of schools. The perceptions of the principals from high-achieving schools (B) were compared with the perceptions of principals from the other schools (D). A Spearman Rho was computed to analyze the similarities in rankings of the seven behaviors of the two groups (B and D). Table 21 shows the observed U values and levels of significance for comparisons between rankings of the mean ratings of the two groups on each of the seven behaviors taken individually.

TABLE 20

RANKS OF POTENTIAL INFLUENCE: PERCEPTIONS OF PRINCIPALS FROM HIGH ACHIEVING AND OTHER SCHOOLS: SECTION IV OF THE PRINCIPAL QUESTIONNAIRE

HIGH ACHIEVING SCHOOLS

Behaviors	School 113 $\bar{x}$	Rank	School 153 $\bar{x}$	Rank	School 233 $\bar{x}$	Rank	$\sum$ of Ranks	(B) Rank
Referent	3.50	6.0	8.50	3.5	7.50	5.0	14.5	5.0
Expert	9.50	2.5	9.00	2.0	13.00	1.0	5.5	1.5
Enabler	7.50	5.0	4.00	6.0	8.00	4.0	15.0	6.0
Coercer	1.50	7.0	3.50	7.0	1.50	7.0	21.0	7.0
Leg. Auth.	13.00	1.0	5.50	5.0	4.50	6.0	12.0	4.0
Norm Set.	8.00	4.0	8.50	3.5	8.50	3.0	10.5	3.0
Involver	9.50	2.5	13.50	1.0	9.50	2.0	5.5	1.5

OTHER SCHOOLS

Behaviors	School 132 $\bar{x}$	Rank	School 162 $\bar{x}$	Rank	School 212 $\bar{x}$	Rank
Referent	9.00	2.5	6.50	5.0	6.00	5.0
Expert	1.50	7.0	13.50	1.0	12.50	1.0
Enabler	9.00	2.5	8.50	3.5	4.50	6.0
Coercer	13.50	1.0	1.50	7.0	4.00	7.0
Leg. Auth.	8.00	4.0	10.50	2.0	7.50	3.5
Norm Set.	7.00	5.0	8.50	3.5	7.50	3.5
Involver	4.50	6.0	3.50	6.0	10.50	2.0

Behaviors	School 122 $\bar{x}$	Rank	School 142 $\bar{x}$	Rank	School 222 $\bar{x}$	Rank	$\sum$ of Ranks	(D) Rank
Referent	7.50	5.0	6.50	5.0	4.50	6.0	28.5	6.0
Expert	11.50	1.0	11.00	2.0	10.50	2.0	14.0	1.0
Enabler	8.00	4.0	8.00	4.0	6.50	5.0	25.0	4.0
Coercer	1.50	7.0	3.50	6.0	1.50	7.0	35.0	7.0
Leg. Auth.	4.50	6.0	8.50	3.0	10.00	3.0	21.5	3.0
Norm Set.	9.00	3.0	1.50	7.0	7.00	4.0	26.0	5.0
Involver	10.50	2.0	13.50	1.0	12.50	1.0	18.0	2.0

Scale for Means: 14=High to 1=Low

TABLE 21

DIFFERENCES BETWEEN GROUPS OF PRINCIPALS:
RANKS OF POTENTIAL INFLUENCE,
PRINCIPAL VS. PRINCIPAL

Behavior	U Values: High Achieving Schools (N = 3)	U Values: Other Schools (N = 6)	Significance Levels
Referent	9.5	9	$p \leq .09$
Expert	7	11	$p \leq .04$
Enabler	5	13	$p \leq .02$
Coercer	6.5	11.5	$p \leq .03$
Leg. Auth.	8	10	$p \leq .06$
Norm Setter	13	5	$p \leq .02$
Involver	9.5	8.5	$p \leq .09$

A Spearman Rho (.81) shows that the two groups of principals generally agreed on their rankings of potential influence of the seven behaviors on teachers. Their top three were: expert; involver, and norm setter. Their lowest two were coercer and referent. Principals from the other schools rated three behaviors--enabler, expert, and coercer--significantly ($p < .05$) higher in potential influence than did the principals in high-achieving schools. Principals from high-achieving schools rated norm setter significantly higher in potential influence than did the principals from the other schools. No significant differences were found on three behaviors (referent, legitimate authority, and involver). Principals of high-achieving schools ranked two behaviors--referent and involver--somewhat higher than did principals from the other schools, while principals from the other schools ranked legitimate authority somewhat higher than did the principals of high-achieving schools.

Since data for related question 2 showed general agreement among both groups of teachers (Rho=.99) and data for related question 3 showed general agreement between both groups of principals (Rho=.81), data from teachers (Groups A and C) and from principals (Groups B and D) were combined and analyzed. The sum of ranks from Table 18 and 20 were divided by their respective number of respondent groups (three and six), and then combined to provide a rank for teachers (data from Table 18) and for principals (data from Table 20). Table 22 shows these data. The Spearman Rho (.61) shows that principals and teachers have fairly high agreement on the potential of principal influence-gaining behaviors to gain influence. The major source of difference is that principals

TABLE 22

COMBINED RANKINGS OF TEACHERS AND OF PRINCIPALS (HIGH ACHIEVING AND OTHER SCHOOLS) ON POTENTIAL INFLUENCE OF PRINCIPALS' INFLUENCE-GAINING BEHAVIORS

Data From Table 18	High Achieving Σ Ranks	÷ 3	Others Σ Ranks	÷ 6	Σ	B & D Rank*
Referent	11.5	3.83	27	4.50	8.33	4
Expert	4	1.33	8.5	1.42	2.75	1
Enabler	15.5	5.17	28	4.67	9.84	5
Coercer	21	7.0	36.5	6.08	13.08	7
Leg. Auth.	6	2.0	14.0	2.33	4.33	2
Norm Set.	10	3.33	26.0	4.33	7.66	3
Involver	16	5.33	28.0	4.67	10.00	6

Data From Table 20	High Achieving Σ Ranks	÷ 3	Others Σ Ranks	÷ 6	Σ	A & C Rank*
Referent	14.5	4.83	28.5	4.75	9.58	6
Expert	5.5	1.83	14.0	2.33	4.16	1
Enabler	15.0	5.0	25.0	4.17	9.17	5
Coercer	21.0	7.0	35.0	5.83	12.83	7
Leg. Auth.	12.0	4.0	21.5	3.58	7.58	3
Norm Set.	10.5	3.5	26.0	4.33	7.83	4
Involver	5.5	1.83	18.0	3.00	4.83	2

* r_s (A+C/B+D=.61)

view involver as a major source of potential influence, while teachers do not (rank 2 to 6). Additionally, teachers view referent (personality) as potentially more influential than do principals (rank 4 to 6).

VII. SUMMARY

This chapter presented the data collected for the study. These data were collected to provide answers for the research question, which has two parts, and three related questions. The data were analyzed between groups of teachers, between groups of principals, and within groups of schools. Significant differences were found and discussed.

CHAPTER V

FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

I. INTRODUCTION

This study examined behaviors of principals in schools of varying levels of instructional effectiveness to determine if significant differences existed in the degree to which these principals exhibited or possessed influence-gaining behaviors/characteristics, the direction of the influence, and the potential influence of the behaviors/characteristics. Influence-gaining behaviors/characteristics were classified and described in accordance with the hypotheses of French and Raven (1959), Leithwood and Montgomery (1982), and Ross (1980); i.e., social bases of power.

There were two sets of findings: (1) those findings derived from the literature (Chapter II); and (2) those uncovered through statistical comparisons of data from four descriptive sources: (1) teacher questionnaire; (2) principal questionnaire; (3) observation/interview guide; and (4) implementation survey (Chapter IV). This chapter contains a summary of the findings from Chapters II and IV, conclusions, implications, and recommendations.

II. SUMMARY OF FINDINGS FROM THE LITERATURE REVIEW

1. Public schools can make a difference in the cognitive growth of all students regardless of sex, race, socio-economic status (Levine, 1966; Weber, 1971; Austin, 1979; Edmonds, 1979).

2. Some of these schools have been found, studied, and identified as "outlier" or "effective schools" (Brookover, Beady, Flood, Schweitzer and Wisenbaker, 1979; Austin, 1979; Edmonds, 1979; Venezky and Winfield, 1979; Rutter, Maushan, Mortimore, Ouston, and Smith, 1979).

3. Five generally accepted elements have been attributed to these "effective schools" (Curran, 1982). These elements are:

A. Considerable emphasis has been placed on instruction in the basic skills of reading and math (Bloom, 1979; Berliner, 1979; Madaus, 1980; Ramey, et al., 1982).

B. A positive learning environment permeates the schools (Weber, 1971; Rutter, 1979; Edmonds, 1979).

C. A program of continuous assessment is in place (Armor and Associates, 1976; Wellisch, 1979; Berliner, 1979; Cohen, 1981).

D. High expectations for teacher and student success are present (Brophy, 1979; Murnane, 1980).

E. Instructional leadership of the building principal is usually present (Edmonds, 1979; Clark, 1980; Sergiovanni, 1981; Klopf, et al., 1982; Adler, 1982).

4. The leadership of the principal is the most crucial element in the "effective schools" (Brown, 1976; Brookover et al., 1979; Shoun, Lintz, and Achilles, 1981).

5. Principals are expected to provide leadership (Erickson, 1967; Roe and Drake, 1980).

6. Principals have two major roles as leaders:

   A. Organizational maintenance (Sarason, 1971; Chesler, Schmuck and Lippitt, 1975; Knezevich, 1975; Barth, 1980).

   B. Organizational change (Fullan and Pomfret, 1977; Miles, 1979; Daresh, 1978; Hall, Hord and Griffin, 1980; Lipham and Rankin, 1982).

7. Leadership is a combination of applied power and authority--subordinate consent mediated by the persuasion of subordinates through negotiations with them (Bierstedt, 1959; French and Raven, 1959; Blau, 1964; Parsons, 1966; Meyer, 1972; and Bossert, Dwyer, Rowan and Lee, 1982).

8. Leadership is equated with influence (Katz and Kahn, 1978; Bossert et al., 1982).

9. Principals have seven sources of social power from which they may gain influence. The seven sources are:

   A. Principal as legitimate authority is the concept of positional authority (French and Raven, 1959; Guba, 1960; Sergiovanni, 1980; Ross, 1980; Leithwood and Montgomery, 1982).

   B. Principal as expert is the notion that the expert knowledge, skills, and experience of principals is influential with teachers (Gorton, 1972; Leithwood, 1978; Berman and Pauley, 1979; French and Raven, 1959).

   C. Principal as referent means influence based on teachers' liking of and identification with the principal (Halpin, 1959; French and Raven, 1959; Katz and Kahn, 1978).

D. Principal as coercer is the notion of the implied threat of or actual application of negative sanctions (Gorton, 1972; Levin, 1980; French and Raven, 1959).

E. Principal as enabler contains the concepts of rewarding and supporting teachers (Spuck, 1974; Lortie, 1975; Siber, 1979; Keedy, 1982).

F. Principal as norm setter means that the principal models professional conduct and standards through his/her treatment of students, teachers, parents, and others (Hanson, 1976; Anderson, 1982; Keedy, 1982).

G. Principal as involver is the concept that principals gain influence in classroom decisions by involving teachers in schoolwide decisions (Emrick and Peterson, 1978; Berman and McLaughlin, 1979; McGeown, 1979; Ross, 1980).

III. SUMMARY OF FINDINGS FROM THE PRESENT RESEARCH

The Research Question, Part One: How do Principals in High-Achieving Schools and Principals in Other Schools Gain Influence?

Data from four sources, teacher questionnaire, principal questionnaire, observation/interview, and implementary survey were compared between principals in the two groups of schools.

Principals in high-achieving schools. The findings among the four data sources were in general agreement and are:

1. Teacher Perceptions. Principals were perceived to exhibit three behaviors--expert, norm setter, and legitimate authority--to the

highest degree, and the behaviors of coercer, and enabler to the lowest degree.

2. Principal Perceptions. Principals rated themselves highest in referent influence and legitimate authority, while they rated themselves lowest in involver and coercer behaviors.

3. Observations/Interviews. Principals were rated highest on norm setter, expert, legitimate authority, and referent behaviors, and lowest in enabler and coercer behaviors.

4. Implementation Survey. Principals were rated highest on expert and referent behaviors, and rated lowest on involver, coercer, and norm setter behaviors.

Principals of other schools. General agreement was found among the four data sources as to the influences employed by principals from other schools.

1. Teacher Perceptions. Principals were perceived to exhibit the behaviors of norm setter and legitimate authority most, while coercer and enabler behaviors were employed least.

2. Principal Perceptions. Principals rated themselves highest as norm setter and legitimate authority; lowest as referent and coercer.

3. Observations/Interviews. Principals were perceived by observers to exhibit legitimate authority and coercer behaviors most, and norm setter and referent behaviors were observed least.

4. Implementation Survey. Principals were rated highest on expert and legitimate authority behavior, and lowest on norm setter and involver.

5. Principals of both groups (high-achieving and other schools) consistently were ranked highest in expert, legitimate authority and norm setter and lowest in coercer and involver.

The Research Question, Part Two: How are the Influence-Gaining Behaviors of Principals of High-Achieving Schools Different from the Influence-gaining Behaviors of Principals of Other Schools?

Data from two sources, principal questionnaire and teacher questionnaire, were compared in four ways: (1) Teacher perceptions between the two groups of schools; (2) teacher/principal perceptions within high-achieving schools; (3) principal perceptions between the two groups of schools; and (4) teacher/principal perceptions within the other schools.

Data from observations/interviews were compared between principals of the two groups of schools. The same comparisons were completed for the data from the implementation surveys.

Teacher/teacher differences. Teachers in the high-achieving schools rated their principals significantly higher on six of the seven behaviors: referent, expert, enabler, coercer, legitimate authority, and norm setter ($p \leq .05$) than teachers in other schools rated their principals.

Teacher/principal differences within high-achieving schools. Differences between principals and teachers on five of the seven behaviors were not significant. The exceptions were principal as referent and principal as enabler. On these two behaviors, principals rated themselves significantly ($p \leq .05$) higher than their teachers rated them.

Principal/principal differences. Significant differences were found on five of the seven behaviors. Principals in high-achieving schools rated themselves higher on referent, enabler, coercer, legitimate authority, and norm setter than did principals in other schools.

Teacher/principal differences within other schools. No significant differences were found.

Principal/principal differences from observations/interviews. Principals of high-achieving schools were ranked significantly ($p \leq .05$) higher on all seven of the behaviors than were the principals of other schools.

Principal/principal differences from implementation surveys. Significant ($p \leq .05$) differences were found on all seven behaviors. Principals in high-achieving schools utilized expert, enabler, coercer, legitimate authority, norm setter and involver to a significantly greater extent than did principals of other schools; principals from the other schools exhibited referent behavior to a significantly greater degree than did principals of high-achieving schools.

Related Question 1: What Differences Exist in the Direction (Positive-Negative) of Principal Influence-Gaining Behaviors Between the Two Groups of Principals

Data from two sources, principal questionnaire and teacher questionnaire, were compared in two ways: (1) Teacher perceptions between the two groups of schools, and (2) principal perceptions between the two groups of schools.

Teacher/teacher differences. All seven of the behaviors were rated more positive by the teachers from high-achieving schools than by teachers of other schools. The differences were significant at $p \leq .05$.

Principal/principal differences. Significant differences were found on six of the seven behaviors. Principals from high-achieving schools rated referent, expert, enabler, coercer, legitimate authority, and norm setter significantly more positively than did principals from the other schools.

Related Question 2: What Differences Exist Between the Teachers in the Two Groups of Schools in Their Rankings of Potential Influence of the Seven Selected Principal Behaviors?

Data from the teacher questionnaire were analyzed between groups of schools to determine if differences exist in teacher rankings of the potential influence of the seven behaviors. Significant differences were found in five of the seven behaviors. Teachers from high-achieving schools ranked referent, expert, legitimate authority and norm setter higher than teachers in other schools; teachers in other schools ranked involver higher than did teachers in high-achieving schools.

Related Question 3: What Differences Exist in Between the Two Groups of Principals in Their Rankings of the Potential Influence of the Seven Principal Behaviors?

Data from the principals questionnaire were analyzed between the two groups of principals to ascertain if differences exist in principal rankings of the seven behaviors.

1. Principals from high-achieving schools ranked norm setter significantly higher in terms of its potential influence than did principals from other schools.

2. Principals from other schools ranked enabler, expert, and coercer higher in terms of their potential influence than did principals from high-achieving schools.

The most positive between group agreements were between principals (Groups A and C) and between teachers and principals of other schools (Groups C and D). Least agreement was between the rankings of observers/interviewers on high-achieving and on other schools (r_s=.-36). There was consistent agreement on findings for high-achieving schools among four data sources (A, B, G, E; W=.61) and only moderate agreement on findings for other schools among four data sources (C, D, F, H; W=.29). The highest within group agreement was teachers on high-achieving schools (W=.88) and the lowest was observers/interviewers on other schools (W=.14).

IV. CONCLUSIONS

Several conclusions can be drawn from this study. These conclusions are discussed below.

1. The system used to classify principal influence-gaining behaviors is valid since teachers, principals, and observers/interviewers recognized the same behaviors in approximately the same ways.

2. The present study has reliability and concurrent validity since general agreement was found among the responses of the four sources of data.

3. Principals of high-achieving schools provided leadership as described in this study to a greater extent than did the principals of other schools.

4. Principals of high-achieving schools were able to provide more extensive leadership because they exhibited six of the seven behaviors to a significantly higher degree than did the principals of the other schools.

5. Principals of both groups of schools were quite aware of their leadership-gaining behaviors and were able to describe and classify these behaviors. This was evidenced by the general agreement between their perceptions and those of their teachers.

6. Despite the apparent recent loss of principals' legitimate authority as reported in the review of literature, teachers view the use of legitimate authority as a potential and positive source of principal influence.

7. The more intensively principals attempted to lead, the more positively their teachers perceived their principals' leadership behaviors to be.

8. Principals of the other schools did not recognize or use the potential/positive nature of principal as expert.

9. Teacher involvement in decisionmaking was overrated by principals in high-achieving schools as a potential influence with their teachers.

10. Principals make a difference in all schools included in the study.

11. Principal behaviors affect teachers when teachers can recognize these behaviors.

12. Teacher behaviors affect student learning; therefore principal behaviors affect student learning.

13. Principal as norm setter was an important source of principal influence and, therefore, should be added to the French and Raven (1959) classification hypotheses.

14. Principals should require that teachers do as the principal says (legitimate authority) and do as the principal does (norm setter) in an activity (expertise) important to teachers.

V. IMPLICATIONS

The following implications can be drawn from the study and are presented as follows:

1. Principal preparation programs should include exploration of the seven influence-gaining behaviors.

2. Principal preparation programs should be designed to allow principals to practice the seven behaviors (i.e., role playing, simulation).

3. If principals can exhibit more strongly referent, expert, legitimate authority, and norm setter behaviors, they can have a positive impact on student outcomes.

VI. RECOMMENDATIONS

The following recommendations have been made based on the findings from this study:

1. Principals should be made aware of the reservoir of potential that exists for them to provide leadership by becoming aware of and using the present classification system.

2. Principals should develop expertise in some facet of teachers' work which teachers view as beneficial (e.g., problem-solving, criterion referenced testing, reading instruction).

3. Principals should be required to demonstrate the ability to work with people; thereby, potential sources of influence could be utilized to their fullest.

4. Principals should understand the importance of a teacher reward system and how to use this system to enhance their ability to influence teachers.

5. Principals should be able to conceptualize principal as norm setter and demonstrate how to set norms to increase their influence.

6. Principals should attempt to ascertain which behaviors within the present classification system contain the most potential influence with their teachers (Section IV of the teacher questionnaire) and use those sources of influence to improve their leadership efforts.

7. Further study should be undertaken employing the present classification system in schools representative of high-achieving, mean-achieving, and low-achieving schools to determine if the differences found in this study are found in three levels of schools.

8. Further study should include longer periods of principal observation (five to ten days).

9. Inservice programs should be designed and presented to principals explaining the nature, use, potential, and application of the seven sources of principal influence.

10. Principals should be required to exhibit influence-gaining behaviors (e.g., from present study) in order to lead schools to excellence. Preparation progress should address this aspect of leadership.

11. An experimental study, three to five years in length, should be designed wherein four to six randomly selected principals are taught proficiency in the seven influence-gaining behaviors, and then matched with a control group of principals. Student outcomes should be the dependent variable. Such a study would build upon the present study, and serve as a further step in building a common body of knowledge concerning principal behaviors.

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APPENDIXES

APPENDIX A

QUESTIONNAIRE

This instrument contains four sections. Sections II, III, and IV contain fourteen phrases which represent some of the acknowledged characteristics/behaviors of principals. In Section II, indicate the degree to which your principal exhibits and/or possesses the behaviors/characteristics represented by the phrases. In Section III, indicate the degree of positive or negative influence your principal's behaviors have on you as a teacher to do what your principal wants done. In Section IV, rank each behavior/characteristic as to its potential influence with you as a teacher. Please provide the personal information in Section I. Please read and follow all directions carefully and accurately. Your participation is truly voluntary; your responses will be confidential.

SECTION I

1. Sex: 1. Female 2. Male
2. Race: 1. Black 2. White 3. Other
3. Years as classroom teacher:

   1. 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. more than 25

4. Years in present school:

   1. 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. more than 25

5. Years in present position:

   1 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. more than 25

6. Degrees Earned:

   1. B.A./B.S.
   2. M.S./M.A./M.Ed.
   3. Ed.D./Ph.D.
   4. Other:_____

SECTION II

Please circle a number on the scale adjacent to each phrase to indicate the degree to which that behavior/characteristic is exhibited and/or possessed by your principal.

		1	2	3	4	5	6
7.	exhibits personal qualities which warrant my admiration.	Non-existent	Very low	Low	Moderate	High	Very high
8.	possesses charisma and magnetism.	Non-existent	Very low	Low	Moderate	High	Very high
9.	demonstrates specialized knowledge and/or skill.	Non-existent	Very low	Low	Moderate	High	Very high
10.	possesses experiences which allow him/her to solve problems.	Non-existent	Very low	Low	Moderate	High	Very high
11.	distributes rewards to those who cooperate.	Non-existent	Very low	Low	Moderate	High	Very high

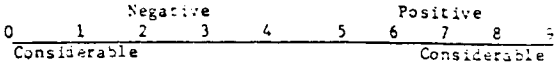
		1	2	3	4	5	6
12.	provides additional supplies, equipment, and human resources to get the job done.	Non existent	Very low	Low	Moderate	High	Very high
13.	applies pressure to those who do not cooperate.	Non existent	Very low	Low	Moderate	High	Very high
14.	has the reputation as one who might penalize uncooperative teachers.	Non existent	Very low	Low	Moderate	High	Very high
15.	possesses sufficient autonomy to act decisively.	Non existent	Very low	Low	Moderate	High	Very high
16.	is held responsible for school related matters by the superintendent.	Non existent	Very low	Low	Moderate	High	Very high
17.	projects a positive professional image to those outside the profession.	Non existent	Very low	Low	Moderate	High	Very high
18.	models the supportive relationship he/she wants teachers to establish with students.	Non existent	Very low	Low	Moderate	High	Very high
19.	includes me in school-wide decision-making.	Non existent	Very low	Low	Moderate	High	Very high
20.	actively seeks my advice and support.	Non existent	Very low	Low	Moderate	High	Very high

SECTION III

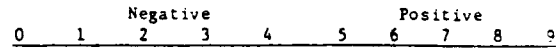
Please circle a number on the scale adjacent to each phase to indicate the degree of positive or negative influence your principal's behaviors/characteristics have on you to do what she/he wants done. A rating of 0,1,2,3, or 4 indicates some degree of negative influence while a rating of 5,6,7,8 or 9 indicates positive influence.

		Negative									Positive
21.	my personal admiration for my principal.	0	1	2	3	4	5	6	7	8	9
		Considerable									Considerable
22.	the charisma possessed by my principal.	0	1	2	3	4	5	6	7	8	9
		Considerable									Considerable
23.	my principal's specialized knowledge and/or skill.	0	1	2	3	4	5	6	7	8	9
		Considerable									Considerable
24.	his/her experiences which allow my principal to solve problems.	0	1	2	3	4	5	6	7	8	9
		Considerable									Considerable

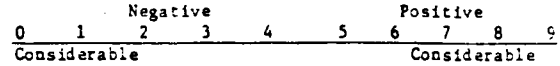
25. rewards given by my principal to those who cooperate.



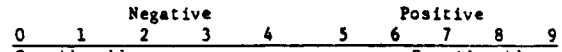
26. additional supplies, equipment and human resources provided by my principal to get the job done.



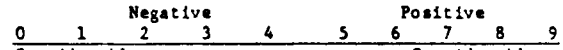
27. pressure applied by my principal to those who do not cooperate.



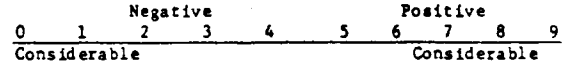
28. my principal's reputation as one who might penalize uncooperative teachers.



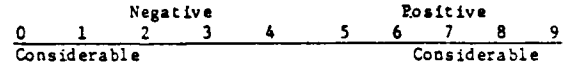
29. my principal's decisive actions as head of the school.



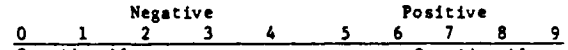
30. my principal's responsibility for school-related matters.



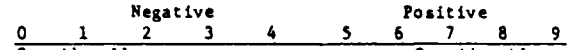
31. the positive professional image projected by my principal to those outside the school.



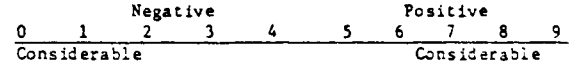
32. the supportive relationship modeled by my principal which he/she wants teachers to establish with students.



33. my principal's inclusion of me in school-wide decisionmaking.



34. my principal actively seeking my advice and support.



SECTION IV.

Below are the fourteen phrases representing principal behaviors/characteristics found in Section II. Please rank each behavior/characteristic as to its potential influence with you as a teacher to do what your principal wants done. After selecting the most influential behavior/characteristic, place the number 14 to the left of that phrase. Continue this process until you have ranked all of the behavior/characteristics. The behavior/characteristic you rank as least influential should have the number 1 beside it. Thank you very much for your valuable assistance.

Rank Behavior/Characteristic

35._____ MY PERSONAL ADMIRATION FOR MY PRINCIPAL.

36._____ CHARISMA AND MAGNETISM POSSESSED BY MY PRINCIPAL.

37._____ MY PRINCIPAL'S SPECIALIZED KNOWLEDGE AND/OR SKILLS.

38._____ EXPERIENCE WHICH ALLOWS MY PRINCIPAL TO SOLVE PROBLEMS.

39._____ REWARDS GIVEN TO THOSE WHO COOPERATE.

40._____ ADDITIONAL SUPPLIES, EQUIPMENT, AND HUMAN RESOURCES TO GET THE JOB DONE.

41._____ PRESSURE APPLIED TO THOSE WHO DO NOT COOPERATE.

42._____ REPUTATION AS ONE WHO MIGHT PENALIZE UNCOOPERATIVE TEACHERS.

43._____ TOP ADMINISTRATIVE OFFICIAL IN THE SCHOOL.

44._____ SUPERINTENDENT HOLDS HIM/HER RESPONSIBLE FOR SCHOOL RELATED MATTERS.

45._____ PROFESSIONAL IMAGE PROJECTED TO THOSE OUTSIDE THE PROFESSION.

46._____ EXAMPLE HE/SHE SETS WITH TEACHERS FOR THEIR RELATIONSHIP WITH STUDENTS.

47._____ MY INCLUSION IN SCHOOL-WIDE DECISIONMAKING.

48._____ ACTIVELY SEEKS MY ADVICE AND SUPPORT.

QUESTIONNAIRE

This instrument contains four sections. Sections II, III and IV contain fourteen phrases which represent some of the acknowledged characteristics/behaviors exhibited by principals. In Section II indicate the degree to which you believe you exhibit and/or possess the behaviors/characteristics represented by the phrases. In Section III, indicate the degree of positive or negative influence your behaviors/characteristics have on your teachers to do what you want done. In Section IV, rank each behavior/characteristic as to its potential influence with your teachers. Please provide the personal information in Section I. Please read and follow all directions carefully and accurately. Your participation is truly voluntary; your responses will be confidential.

SECTION I

1. Sex: 1. Female 2. Male

2. Race: 1.Black 2. White 3. Other

3. Number years as a principal:

   1. 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. More than 25

4. Years in present school:

   1. 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. More than 25

5. Years in present position:

   1. 0 - 5
   2. 6 - 10
   3. 11 - 15
   4. 16 - 20
   5. 21 - 25
   6. More than 25

6. Degrees earned:

   1. B.A/B.S.
   2. M.S/M.A./M.ED.
   3. Ed.D/Ph.D.
   4. Other:_____

SECTION II

Please circle a number on the scale adjacent to each phrase to indicate the degree to which you believe you exhibit and/or possess the behaviors/characteristics.

I believe I:

	1	2	3	4	5	6
7. exhibit personal qualities which warrant my teachers' admiration	Non-existent	Very low	Low	Moderate	High	Very high
8. possess charisma and magnetism	Non-existent	Very low	Low	Moderate	High	Very high
9. demonstrate specialized knowledge and/or skills.	Non-existent	Very low	Low	Moderate	High	Very high
10. possess experiences which allow me to solve problems.	Non-existent	Very low	Low	Moderate	High	Very high
11. distribute rewards to those who cooperate.	Non-existent	Very low	Low	Moderate	High	Very high

		1	2	3	4	5	6
12.	provide additional supplies, equipment, and human resources to get the job done.	Non-existent	Very low	Low	Moderate	High	Very high
13.	apply pressure to those who do not cooperate	Non-existent	Very low	Low	Moderate	High	Very high
14.	have the reputation as one who might penalize uncooperative teachers.	Non-existent	Very low	Low	Moderate	High	Very high
15.	possess sufficient autonomy to act decisively.	Non-existent	Very low	Low	Moderate	High	Very high
16.	am held responsible for school related matters by the superintendent.	Non-existent	Very low	Low	Moderate	High	Very high
17.	project a positive professional image to those outside the profession.	Non-existent	Very low	Low	Moderate	High	Very high
18.	model the supportive relationship I want teachers to establish with students.	Non-existent	Very low	Low	Moderate	High	Very high
19.	include my teachers in school-wide decision-making	Non-existent	Very low	Low	Moderate	High	Very high
20.	actively seek my teachers' advice and support.	Non-existent	Very low	Low	Moderate	High	Very high

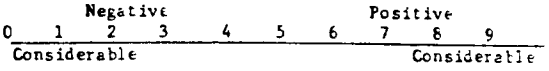
SECTION III.

Please circle a number on the scale adjacent to each phrase to indicate the degree of positive or negative influence your behaviors/characteristics have on your teachers to do what you want done. A rating of 0,1,2,3 or 4 indicates some degree of negative influence while a rating of 5,6,7, 8 or 9 indicates positive influence.

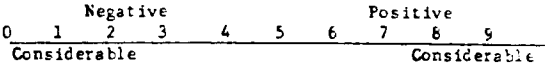
My teachers are influenced by:

		Negative								Positive
		0	1	2	3	4	5	6	7	8	9
21.	their personal admiration for me.	Considerable									Considerable
22.	my charisma and magnetism.	Considerable									Considerable
23.	my specialized knowledge and/or skills.	Considerable									Considerable

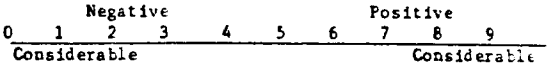
24. my experience which allows me to solve problems.



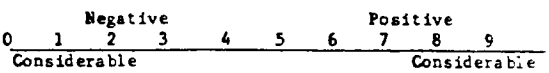
25. rewards I give to those who cooperate.



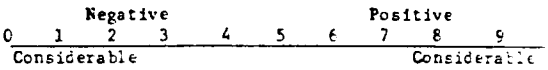
26. additional supplies, equipment and human resources I provide to get the job done.



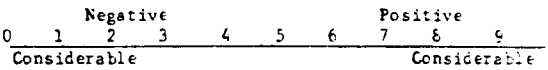
27. pressure I apply to those who do not cooperate.



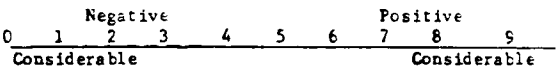
28. my reputation as one who might penalize uncooperative teachers.



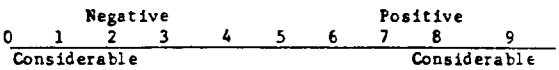
29. my decisive actions as head of the school.



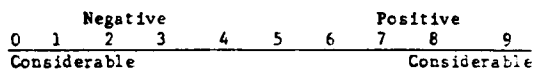
30. my responsibility for school related matters.



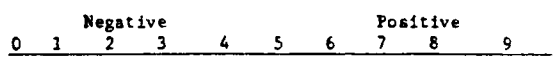
31. the positive professional image I project to those outside the profession.



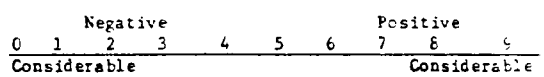
32. the supportive relationship I model with teachers which I want teachers to establish with students.



33. my inclusion of teachers in school-wide decision-making.



34. my actively seeking teachers' advice and support.



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Below are fourteen phrases representing principal behaviors/characteristics found in Section II. Please rank each behavior/characteristic as to its potential influence with your teachers to do what you want them to do. After selecting the most influential behavior/characteristic, place the number 14 to the left of that phrase. Continue this process until you have ranked all of the behaviors/characteristics. The behavior/characteristic you rate as least influential should have the number 1 beside it. Thank you very much for your valuable assistance.

	Rank	Behavior/Characteristic
35.	_____	MY TEACHERS' PERSONAL ADMIRATION FOR ME.
36.	_____	MY CHARISMA AND MAGNETISM.
37.	_____	MY SPECIALIZED KNOWLEDGE AND/OR SKILLS.
38.	_____	EXPERIENCE WHICH ALLOWS ME TO SOLVE PROBLEMS.
39.	_____	REWARDS I GIVE TO THOSE WHO COOPERATE.
40.	_____	ADDITIONAL SUPPLIES, EQUIPMENT, AND HUMAN RESOURCES I PROVIDE TO GET THE JOB DONE.
41.	_____	PRESSURE I APPLY TO THOSE WHO DO NOT COOPERATE.
42.	_____	MY REPUTATION AS ONE WHO MIGHT PENALIZE UNCOOPERATIVE TEACHERS.
43.	_____	I AM THE TOP ADMINISTRATIVE OFFICIAL IN THE SCHOOL.
44.	_____	SUPERINTENDENT HOLDS ME RESPONSIBLE FOR SCHOOL RELATED MATTERS.
45.	_____	PROFESSIONAL IMAGE I PROJECT TO THOSE OUTSIDE THE PROFESSION.
46.	_____	EXAMPLE I SET WITH TEACHERS FOR THEIR RELATIONSHIP WITH STUDENTS.
47.	_____	INCLUSION OF MY TEACHERS IN SCHOOL-WIDE DECISION-MAKING.
48.	_____	ACTIVELY SEEK MY TEACHERS' ADVICE AND SUPPORT.

APPENDIX B

IMPLEMENTATION SURVEY (4/84)

This survey will gather information from persons involved in . Information will help determine to what degree the Project model has been implemented in your school and help identify activities that might assist your school in fulfilling goals.

Your responses to this survey will be anonymous and voluntary. Your responses will be grouped with the responses of others and shared with the faculty and staff for planning purposes. You can help improve implementation by being fair and accurate in your responses.

There are two responses for each item--your idea of the quantity (amount or level) and your idea about the quality, ("goodness", or degree of effective operation) of the element represented by the item.

	Just Right, High/Much			Too much Low/Little	
QUANTITY (amount or level)	5	4	3	2	1
QUALITY ("goodness")	5	4	3	2	1

You can have a lot or just enough of something (high quantity) but it is not very good (low quality); both could be high, or both could be low, or you could have a little or too much of something (low quantity), but what you have is real good (high quality).

Please give your quantity and quality ratings for each item by circling the appropriate numbers.

	QUANTITY		QUALITY	
	Hi	Low	Hi	Low
Example				
Basic skills subjects have few interruptions	5 (4) 3 2 1		5 (4) 3 2 1	

Interpretation. There are few interruptions in basic skills subjects, and this is good.

IMPLEMENTATION SURVEY

School:_____

Position or job:_____(Teacher, admin., aide, counselor,

Years in this school_____? In a school_____? In teaching_____?

About how many related inservice sessions have you attended_____?

	Just Right, High/Much				Too Much Low/Little
QUANTITY (amount or level)	5	4	3	2	1
QUALITY ("goodness")	5	4	3	2	1

N/A = Not Applicable

Basic Skills	QUANTITY Hi Low	QUALITY Hi Low	
1. Teachers in this school agree on which minimum essentials in the basic skills are to be taught and at what grade levels they are to be taught.	5 4 3 2 1	5 4 3 2 1	NA
2. Basic skills subjects have a minimum of interruptions.	5 4 3 2 1	5 4 3 2 1	NA
3. Faculty and committee meetings most frequently focus on basic skill achievement.	5 4 3 2 1	5 4 3 2 1	NA
4. The principal spends much time on efforts relating to basic skill emphasis and achievement in school.	5 4 3 2 1	5 4 3 2 1	NA
5. Administrative efforts to reduce teacher time on "clerical" tasks through the use of aides, volunteers and creative scheduling have been made.	5 4 3 2 1	5 4 3 2 1	NA
6. There are structures, schedules and models for teaching of basic skills.	5 4 3 2 1	5 4 3 2 1	NA
7. Alternative classroom (remedial and accelerated) programs are in use (not just "pull-out" programs.	5 4 3 2 1	5 4 3 2 1	NA
8. Written instructional objectives and processes guide school programs.	5 4 3 2 1	5 4 3 2 1	NA
9. There is an emphasis on some structured approaches to the teaching of basic skills (Mastery Learning, Missouri Math Effectiveness, etc.)	5 4 3 2 1	5 4 3 2 1	NA

	QUANTITY		QUALITY		
	Hi	Low	Hi	Low	NA
School Climate					
1. Teachers and administrators work together to solve major school problems and attain school goals.	5 4 3 2 1		5 4 3 2 1		NA
2. Staff and student pride (sense of community) is evident in the school.	5 4 3 2 1		5 4 3 2 1		NA
3. A Code of Conduct (consistent, firm, fair) has been developed, updated and used.	5 4 3 2 1		5 4 3 2 1		NA
4. Buttons, murals, photos, student work on display, award days, and slogans are used as motivational devices for improved achievement and behavior.	5 4 3 2 1		5 4 3 2 1		NA
5. The school is neat and clean; vandalism is at a minimum; school appearance is everybody's business.	5 4 3 2 1		5 4 3 2 1		NA
6. Parents, volunteers and community groups are available to support school goals and objectives.	5 4 3 2 1		5 4 3 2 1		NA
7. Students know the rules.	5 4 3 2 1		5 4 3 2 1		NA
8. Teachers in this school feel responsible for good discipline and the behavior of students.	5 4 3 2 1		5 4 3 2 1		NA
9. Teacher/staff tardiness/absenteeism is low.	5 4 3 2 1		5 4 3 2 1		NA
10. Pupil tardiness/absenteeism is low.	5 4 3 2 1		5 4 3 2 1		NA
11. The school atmosphere is characterized as being orderly but not rigid; quiet but not oppressive.	5 4 3 2 1		5 4 3 2 1		NA
12. Students are "happy" and busily engaged in school.	5 4 3 2 1		5 4 3 2 1		NA
13. Students follow the rules in the school.	5 4 3 2 1		5 4 3 2 1		NA
Student Assessment					
1. Student achievement is monitored regularly.	5 4 3 2 1		5 4 3 2 1		NA
2. Teacher-made tests are used regularly to identify student progress at achieving instructional objectives.	5 4 3 2 1		5 4 3 2 1		NA
3. The principal regularly "spot-checks" student achievement.	5 4 3 2 1		5 4 3 2 1		NA
4. The principal evaluates teachers on their instructional performance rather than on obscure objectives or "traits."	5 4 3 2 1		5 4 3 2 1		NA

	QUANTITY	QUALITY	
	Hi Low	Hi Low	
5. Objectives are developed and monitored in daily, weekly, quarterly or unit lessons.	5 4 3 2 1	5 4 3 2 1	NA
6. A standardized testing program is used to monitor school achievement of goals/objectives.	5 4 3 2 1	5 4 3 2 1	NA
7. There are stated levels of performances/ achievement for homework.	5 4 3 2 1	5 4 3 2 1	NA
8. Lists of "minimum competencies" or instructional objectives are used as basis for monitoring student progress.	5 4 3 2 1	5 4 3 2 1	NA
9. Staff development (workshops, courses, faculty meetings) for testing, measurement and test usage is continuous and comprehensive.	5 4 3 2 1	5 4 3 2 1	NA
10. Teachers agree on standards for grading	5 4 3 2 1	5 4 3 2 1	NA
Expectations			
1. Building goals/objectives are established using national/regional norms, and the school is expected to attain them.	5 4 3 2 1	5 4 3 2 1	NA
2. During the past 1-3 years, the number (or percent) of pupils on honor rolls has increased.	5 4 3 2 1	5 4 3 2 1	NA
3. Inservice programs frequently focus on increasing student expectations, interactions and test results.	5 4 3 2 1	5 4 3 2 1	NA
4. Students in this school are challenged academically regardless of their ability levels.	5 4 3 2 1	5 4 3 2 1	NA
5. A system of rewards/honors/recognition programs exists to support improved student achievement.	5 4 3 2 1	5 4 3 2 1	NA
6. The principal expects teachers/pupils/parents to support the school.	5 4 3 2 1	5 4 3 2 1	NA
7. Teachers in this school expect each pupil to perform at least at that pupil's instructional level.	5 4 3 2 1	5 4 3 2 1	NA
8. The principal emphasizes student self discipline.	5 4 3 2 1	5 4 3 2 1	NA
9. The principal expects teachers both to perform well as teachers and to encourage pupils to perform well.	5 4 3 2 1	5 4 3 2 1	NA
10. Teachers in this school emphasize self discipline and orderly conduct and expect pupils to be responsible for their own behavior.	5 4 3 2 1	5 4 3 2 1	NA

	QUANTITY		QUALITY		
	Hi	Low	Hi	Low	
Leadership					
1. There is a definite structure for inter/intra-grade coordination (committees, etc.).	5 4 3 2 1		5 4 3 2 1		NA
2. Statements of instructional and non-instructional goals and objectives are used by all teachers.	5 4 3 2 1		5 4 3 2 1		NA
3. Teachers are directed to adhere to uniform school policies, goals, objectives, philosophy and teaching strategies.	5 4 3 2 1		5 4 3 2 1		NA
4. Adherence to uniform school goals and objectives is part of teacher evaluation process.	5 4 3 2 1		5 4 3 2 1		NA
5. The principal consistently models desired behaviors for teachers.	5 4 3 2 1		5 4 3 2 1		NA
6. The principal is frequently observed in/around the school (halls, classes, lunchroom, etc.).	5 4 3 2 1		5 4 3 2 1		NA
7. The principal chairs or attends important instructional meetings at the school and uses faculty meetings for instructional improvement.	5 4 3 2 1		5 4 3 2 1		NA
8. The principal shows that she/he is a "believer" in the school and its mission.	5 4 3 2 1		5 4 3 2 1		NA
9. The principal schedules time/space to make good use of physical/human/fiscal resources.	5 4 3 2 1		5 4 3 2 1		NA
10. The principal knows the staff, community, parents, and pupils (speaks to people by name; treats people with respect).	5 4 3 2 1		5 4 3 2 1		NA
11. The principal emphasizes achievement, focuses on instruction and is not driven by problem orientation.	5 4 3 2 1		5 4 3 2 1		NA
12. The principal sets high standards of performance for him/her self and others.	5 4 3 2 1		5 4 3 2 1		NA
13. The principal leads the staff in program planning, implementation, evaluation and refinement.	5 4 3 2 1		5 4 3 2 1		NA
14. The principal develops the schedule to support teacher planning and curriculum improvement.	5 4 3 2 1		5 4 3 2 1		NA
Organizational Processes/Climate					
1. People in this school work to solve problems; they don't just talk about them.	5 4 3 2 1		5 4 3 2 1		NA

	QUANTITY		QUALITY		
	Hi	Low	Hi	Low	
2. People with ideas or values different from the commonly accepted ones get a chance to be heard.	5 4 3 2 1		5 4 3 2 1		NA
3. Teachers find it easy to communicate with the principal.	5 4 3 2 1		5 4 3 2 1		NA
4. Parents participate in school and school related activities.	5 4 3 2 1		5 4 3 2 1		NA
5. Attention is given to student ideas.	5 4 3 2 1		5 4 3 2 1		NA
6. Teachers would rather teach here than in most other schools in this city.	5 4 3 2 1		5 4 3 2 1		NA
7. People seldom bring up extraneous or irrelevant matters at staff meetings.	5 4 3 2 1		5 4 3 2 1		NA
8. Our school does a good job of examining alternative solutions before deciding to try one.	5 4 3 2 1		5 4 3 2 1		NA
9. Community help is sought in developing the school's goals.	5 4 3 2 1		5 4 3 2 1		NA
10. There are ways for me to reach a higher authority when I have suffered from an unfair decision.	5 4 3 2 1		5 4 3 2 1		NA
11. The principal talks with us frankly and openly.	5 4 3 2 1		5 4 3 2 1		NA
12. When central or area administrators and staff make a decision about Project SHAL, they do so after discussion and recommendations from the school's principal and staff.	5 4 3 2 1		5 4 3 2 1		NA
13. When district-wide programs are introduced, careful effort is made to adapt them to the particular needs of this community and this school.	5 4 3 2 1		5 4 3 2 1		NA
14. Our faculty has a good feeling about working together.	5 4 3 2 1		5 4 3 2 1		NA
15. Many people are involved; the same few people do not do most of the talking during a meeting.	5 4 3 2 1		5 4 3 2 1		NA
16. Problems at this school are solved collectively.	5 4 3 2 1		5 4 3 2 1		NA
17. Goals are set and used here.	5 4 3 2 1		5 4 3 2 1		NA
18. I have influence on the decisions within the school which directly affect me.	5 4 3 2 1		5 4 3 2 1		NA

	QUANTITY		QUALITY		
	Hi	Low	Hi	Low	
19. Tension between faculty and principal is minimal.	5 4 3 2 1		5 4 3 2 1		NA
20. People can be openly critical or make good objections during a meeting.	5 4 3 2 1		5 4 3 2 1		NA
21. The problems we discuss in our meetings are current and relevant to most of us.	5 4 3 2 1		5 4 3 2 1		NA
22. Teachers in this school frequently share ideas about teaching.	5 4 3 2 1		5 4 3 2 1		NA
23. Work groups communicate with the principal about what is going on.	5 4 3 2 1		5 4 3 2 1		NA
24. The principal deals with conflicts directively and constructively.	5 4 3 2 1		5 4 3 2 1		NA

THANK YOU FOR YOUR HELP!

APPENDIX C

INSTRUCTIONS: Record the results of your observations and staff interviews on this form. Mark (4) if the item is clearly evident; (3) if the item is in process of being implemented; (2) if in the planning or start-up stage; (1) if not evident. Record additional appropriate items that reflect SHAL implementation in the blank spaces provided.

ADMINISTRATIVE LEADERSHIP	RESPONSES				SOURCES
A1. There is a definite structure for inter/intra-grade coordination (committees, etc.).	1	2	3	4	B
A2. School philosophy (motto, slogans) is visible.	1	2	3	4	D
A3. Statements of goals and objectives are available and used by all staff.	1	2	3	4	B
A4. Faculty are directed to adhere to school policies, goals, objectives, philosophy. Uniform adherence to teaching strategies and processes (Principal expects this and encourages it).	1	2	3	4	A,B
A5. Faculty adherence to goals, etc. (#4 above) is part of teacher evaluation process.	1	2	3	4	A,B
A6. Records of several current classroom observations, teacher/administrator conferences are available.	1	2	3	4	E
A7. School budget/expenditure decisions encourage adherence to and accomplishment of goals/objectives (plaques, slogans, awards, field trips, etc.).	1	2	3	4	A,E
A8. Administration models desired behaviors for teachers (teaching classes, setting norms, serving as resource).	1	2	3	4	B
A9. Administrator is highly visible in/around school (halls, classes, lunchroom, etc.) and is involved in school activity.	1	2	3	4	D
A10. Administrator chairs or attends important instructional meetings; uses faculty meetings for instructional improvement.	1	2	3	4	B
A11. Administrator shows that s/he is a "believer" in the school and its mission (philosophy, goals). Monitors instructional process.	1	2	3	4	A,B
A12. Administrator schedules (time/space) to make good use of physical/human/fiscal resources (e.g., plans instructional events into schedule).	1	2	3	4	A,E
A13. Administrator knows school, staff, community, parents, pupils, etc. (speaks to people by name; treats people with respect).	1	2	3	4	A,D

		RESPONSES				SOURCES
A14.	Administrator emphasizes achievement; focuses on school program and is not driven by problem orientation. (Focus on instruction.)	1	2	3	4	B
A15.	Curriculum guide/handbook, etc. available, but constantly being refined and improved.	1	2	3	4	E
A16.	Administrator has standards of performance for self and others.	1	2	3	4	E
A17.	Administrator engages in program planning, implementation, evaluation, refinement.	1	2	3	4	A,B,E
A18.	Administrator develops schedule to support instructional goals, teacher planning, etc.	1	2	3	4	B
	OTHER (Please specify)					
A19.	Administrator consistently and continuely articulates the mission of the school.	1	2	3	4	AB
A20.						
	BASIC SKILLS EMPHASIS					
B1.	Teachers/staff agree on skills to be taught (skill lists, etc.).	1	2	3	4	B
B2.	Basic skills subjects have a minimum of interruptions (by announcements, field trips, etc.).	1	2	3	4	B
B3.	Faculty meetings, committees, etc. focus on basic skill achievement.	1	2	3	4	B,E
B4.	Administrator spends much (over half) time on efforts relating to basic skill emphasis and achievement in school.	1	2	3	4	A,B
B5.	Efforts to reduce teacher time on "clerical" tasks through aides, volunteers, creative scheduling and resources use have been made.	1	2	3	4	A,B
B6.	There is a structure, schedule and model for the teaching (delivery) of basic skills.	1	2	3	4	E
B7.	Alternative (remedial and accelerated) programs are in use (not just "pull-out" programs.	1	2	3	4	A,B
B8.	Written instructional objectives (processes) guide school programs.	1	2	3	4	E

		RESPONSES				SOURCES
B9.	Emphasis on some structured basic skills approach (Mastery Learning, Missouri Math Effectiveness, etc.).	1	2	3	4	,E
B10.	Common lists of skills agreed upon and used at/between grade levels.	1	2	3	4	B,E
B11.	Student achievement scores rising; students achieving "at or beyond" expectations.	1	2	3	4	B,E
OTHER						
B13.						
B14.						
SCHOOL CLIMATE						
C1.	Staff (teachers, administrators) work together to solve school problems and attain school goals.	1	2	3	4	A,B,D
C2.	Pride (sense of community) is evident (sense of "spirit").	1	2	3	4	B,D
C3.	Code of Conduct (consistent, firm, fair) developed, updated, used. This may be written in handbook, posted in hall, etc.	1	2	3	4	D,E
C4.	Motivational devices are evident (buttons, murals, photos, student work on display, slogans) for achievement and behavior (e.g., award days, shared responsibilities, etc).	1	2	3	4	D
C5.	School is neat, clean; vandalism is at a minimum; school appearance seems to be everybody's business. Pride in the facilities is evident.	1	2	3	4	B,D
C6.	Parents, volunteers, committees, etc. are available to support school goals and objectives.	1	2	3	4	B,D
C7.	Students know rules and follow them; teachers feel responsible for good discipline and behaviors of students.	1	2	3	4	B,C
C8.	Teacher/staff absenteeism is low (or has been reduced).	1	2	3	4	E
C9.	Pupil absenteeism/tardiness is low (or has been reduced).	1	2	3	4	E
C10.	Students seem involved in school planning, operation, activity.	1	2	3	4	C
C11.	Teachers/staff seem voluntarily involved in school. (Attend meetings, etc.).	1	2	3	4	B

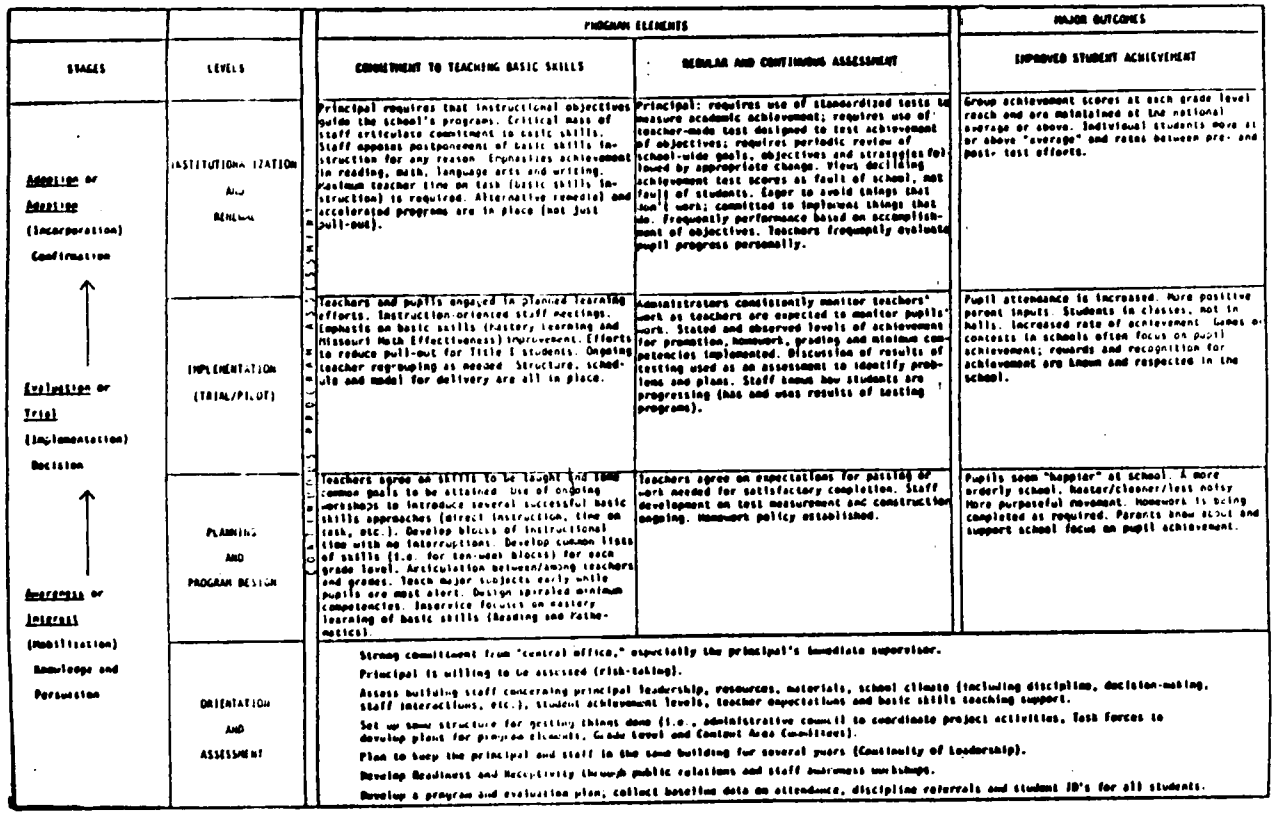
		RESPONSES				SOURCES
C12.	School atmosphere is characterized by being orderly but not rigid; quiet but not oppresive.	1	2	3	4	D
C13.	Students seem "happy" and busily engaged in school.	1	2	3	4	C,D
C14.	Appropriate multicultural activities are evident.	1	2	3	4	B
	OTHER					
C15.						
C16.						
	STUDENT ASSESSMENT					
D1.	Student achievement is monitored regularly.	1	2	3	4	B
D2.	Teacher-made tests are used regularly to identify student progress at achieving instructional objectives.	1	2	3	4	B,E
D3.	Administrator regularly "spot checks" student achievement (reviews report cards, etc.)	1	2	3	4	A
D4.	Administration continuously evaluates teachers on their instructional performance (planning, etc.) rather than on obscure objectives or "traits."	1	2	3	4	A,B
D5.	Teacher lesson plans are in objective form for daily, weekly, quarterly (or unit) lessons. Plans allow for monitoring. Administrator reviews the plans.	1	2	3	4	A,E
D6.	Standardized testing program and teacher made tests are used to monitor school achievement of goals/objectives.	1	2	3	4	B,E
D7.	There are stated levels of performances/achievement for homework, etc.	1	2	3	4	E
D8.	Lists of "minimum competencies," instructional objectives, etc. are used as basis for monitoring progress consistently.	1	2	3	4	E
D9.	Staff development (workshops, courses, faculty meetings) on testing, measurement, test usage, etc., is continuous and comprehensive.	1	2	3	4	A,B,E
D10.	Staff agreement on standards for homework, passing work, etc. (Homework policy; grading standards, etc.) is evident.	1	2	3	4	B,E

		RESPONSES				SOURCES
	OTHER					
D11.						
D12.						
	EXPECTATIONS					
E1.	Building goals/objectives are established using national/regional norms (and school is expected to attain them).	1	2	3	4	B,E
E2.	Number (or percent) of pupils on honor rolls (etc.) increases.	1	2	3	4	E
E3.	Inservice programs focus on expectations, interactions, tests, etc.	1	2	3	4	F
E4.	Students are challenged academically regardless of their ability levels.	1	2	3	4	B,C
E5.	A system of rewards/honors/programs exists for student achievement.	1	2	3	4	B,C
E6.	Administration expects teachers/pupils/parents to support the school (as shown by positive interactions, letters, slogans, etc.).	1	2	3	4	B
E7.	Teachers expect each pupil to perform at least at that pupil's instructional level (as shown by positive interactions, achievement gains, homework, etc.).	1	2	3	4	B,C
E8.	There is emphasis on self discipline (be on time, get work done on time).	1	2	3	4	B,C
E9.	Principal expects teachers both to perform well as teachers and to encourage pupils to perform well (as shown by positive interactions, etc.).	1	2	3	4	A,B
E10.	Staff expects pupils to be responsible for their own behavior; emphasis is on self discipline and orderly conduct.	1	2	3	4	B
	OTHER					
E11.						
E12.						

SOURCES:

A = Principal Interview
B = Teacher Interviews
C = Student Interviews
D = Observation
E = Review of Files and Records

APPENDIX D


STAGES
LEVELS
PROGRAM ELEMENTS
COMMITMENT TO TEACHING BASIC SKILLS
REGULAR AND CONTINUOUS ASSESSMENT
MAJOR OUTCOMES
IMPROVED STUDENT ACHIEVEMENT
Adoption or Adaptive (Incorporation) Confirmation
Evaluation or Trial (Implementation) Decision
Awareness or Interest (Mobilization) Knowledge and Persuasion
INSTITUTIONALIZATION AND RENEWAL
IMPLEMENTATION (TRIAL/PILOT)
PLANNING AND PROGRAM DESIGN
ORIENTATION AND ASSESSMENT
Principal requires that instructional objectives guide the school's programs. Critical mass of staff articulate commitment to basic skills. Staff oppose postponement of basic skills instruction for any reason. Engenders achievement in reading, math, language arts and writing. Maximum teacher time on task (basic skills instruction) is required. Alternative remedial and accelerated programs are in place (not just pull-out).
Principal: requires use of standardized tests to measure academic achievement; requires use of teacher-made test designed to test achievement of objectives; requires periodic review of school-wide goals, objectives and strategies followed by appropriate change. Views declining achievement test scores as fault of school, not fault of students. Eager to avoid things that don't work; committed to implement things that do. Frequently performance based on accomplishment of objectives. Teachers frequently evaluate pupil progress personally.
Group achievement scores at each grade level reach and are maintained at the national average or above. Individual students more at or above "average" and rates between pre- and post- test efforts.
Teachers and pupils engaged in planned learning efforts. Instruction-oriented staff meetings. Emphasis on basic skills (Mastery Learning and Missouri Math Effectiveness) improvement. Efforts to reduce pull-out for Title I students. Ongoing teacher regrouping as needed. Structure, schedule and model for delivery are all in place.
Administrators conditionally monitor teachers' work as teachers are expected to monitor pupils' work. Stated and observed levels of achievement for promotion, homework, grading and minimum competencies implemented. Discussion of results of testing used as an assessment to identify problems and plans. Staff known how students are progressing (has and uses results of testing programs).
Pupil attendance is increased. More positive parent inputs. Students in classes, not in halls. Increased rate of achievement. Games or contests in schools often focus on pupil achievement; rewards and recognition for achievement are known and respected in the school.
Teachers agree on skills to be taught and their common goals to be attained. Use of ongoing workshops to introduce several successful basic skills approaches (direct instruction, time on task, etc.). Develop blocks of instructional time with no interruptions. Develop common lists of skills (i.e. for ten-week blocks) for each grade level. Articulation between/among teachers and grades. Teach major subjects early while pupils are most alert. Design spiraled minimum competencies. Inservice focuses on mastery learning of basic skills (Reading and Mathematics).
Teachers agree on expectations for pacing of work needed for satisfactory completion. Staff development on test measurement and construction ongoing. Homework policy established.
Pupils seem "happier" at school. A more orderly school. Neater/cleaner/less noisy. More purposeful movement. Homework is being completed as required. Parents know about and support school focus on pupil achievement.
Strong commitment from "central office," especially the principal's immediate supervisor.
Principal is willing to be assessed (risk-taking).
Assess building staff concerning principal leadership, resources, materials, school climate (including discipline, decision-making, staff interactions, etc.), student achievement levels, teacher expectations and basic skills teaching support.
Set up some structure for getting things done (i.e., administrative council to coordinate project activities, task forces to develop plans for program elements, Grade Level and Content Area Committees).
Plan to keep the principal and staff in the same building for several years (Continuity of Leadership).
Develop Readiness and Receptivity through public relations and staff awareness workshops.
Develop a program and evaluation plan; collect baseline data on attendance, discipline referrals and student ID's for all students.

STAGES	LEVELS	PROGRAM ELEMENTS		
STAGES	LEVELS	ADMINISTRATIVE LEADERSHIP	SCHOOL CLIMATE	HIGH EXPECTATIONS
Adoption or Adaption (Incorporation) Confirmation	INSTITUTIONALIZATION AND RENEWAL	Principal: coordinates instructional programs; emphasizes achievement; sets school-wide goals and objectives; sets personal goals and objectives; transmits well-defined set of goals to faculty, parents and community; plans and schedules to make optimal use of human and physical resources; accepts responsibility for what goes on at school; emphasizes teacher inservice in specific content areas and classroom management techniques; keeps abreast of research in education; takes assertive dominant role in the selection of instructional materials and in program planning and evaluation; monitors the instructional process; sets standards of performance for teachers and self.	Discipline code outlines consequences of unacceptable behavior; is enforced consistently and fairly; understood and accepted by most parents, teachers and students. School functions as a coherent whole rather than teachers functioning independently. Principal: promotes an atmosphere that is orderly without being rigid, quiet without being oppressive, and generally conducive to the business at hand; enables teachers to teach by limiting housekeeping chores. Acts as resource and aggressively seeks resources for teachers. Fosters trust through positive teacher/principal interaction. Aggressively seeks and obtains political, parental and financial support.	Staff believes all students can master basic objectives. Students are expected to gain one year or more on standardized test for each school year (math, reading, writing). Trend continues as increases each subsequent year. Principal communicates high expectation of self and faculty to achieve school's goals and objectives. Teachers are expected to have expectations for students and to communicate expectations to their students. Staff communicates to students that they can learn and are expected to become good citizens and to graduate from high school.
Evaluation or Trial (Implementation) Decision	IMPLEMENTATION (TRIAL/PILOT)	Principal: focuses on climate, high expectations, basic skills, assessment, pupil achievement (and refocuses staff interest on these); plans with a sense of timing and moves from problem to program orientation; is highly visible (school grounds, hallways, and classrooms); schedules instructional events into the schedule; provides ongoing support to staff while focusing on the key goals of the project; strives to achieve school norms; knows school: pupils, parents, staff and neighborhood; treats parents; students; staff with respect.	Respect and courtesy permeate the building. Sense of community and pride in building is felt and exhibited through potluck meals, informal coffees, etc. Sense of spirit. Staff members feel they are part of the school. Teachers feel responsible for all students and for classroom discipline. If teachers have problems, they phone or visit home (etc.) Mutual respect between and among students and staff. Planning time is for planning (no IV) and scheduled so that groups of teachers are together for planning. Students know that rules and Code of Conduct are implemented and consistently enforced.	Principal focuses on building and individual goals and on national achievement norms. Success is something seen as attainable by everyone. Increased honor roll, good citizenship, attendance and other incentive awards. Ongoing principal/teacher discussions about tests (i.e., CAT). Continuous inservice efforts on expectations, interactions and their relationships to achievement. Many pupils' behaviors exhibit high goals and expectations.
Awareness or Interest (Mobilization) Knowledge and Persuasion	PLANNING AND PROGRAM DESIGN	Principal is a believer; committed; rededicates him/herself to quality education; develops activities consistent with the purposes of education; establishes building goals and sets norms; provides schedule to support such practices as learning blocks and common teacher planning time; fosters open communication, decision-making and problem-solving channels; refocuses his/her efforts on instruction.	Staff analyzes school climate profile and building plans are developed to improve identified problem areas. Committees formed to plan strategies. Instruction and learning are seen as the primary focus of school. However, factors affecting instruction such as discipline, rules, and building plant are still examined. Consistent Discipline Code/Handbook developed/updated. Motivational devices (buttons and murals) stress the positive. Award Days. Lots of student oriented activities. Neat building grounds. A clean environment is promoted as everyone's responsibility.	Principal and staff set national norms or standards for group achievement test results. Staff establishes high expectations for all persons in school. Emphasis on positive expectations. "Critical mass" of teachers become believers.
	ORIENTATION AND ASSESSMENT	Strong commitment from "central office," especially the principal's immediate supervisor. Principal is willing to be assessed (risk-taking). Assess building staff concerning principal leadership, resources, materials, school climate (including discipline, decision-making, staff interactions, etc.), student achievement levels, teacher expectations and basic skills teaching support. Set up some structure for getting things done (i.e., administrative council to coordinate project activities, Task Forces to develop plans for program elements, Grade Level and Content Area Committees). Plan to keep the principal and staff in the same building for several years (Continuity of Leadership). Develop Readiness and Receptivity through public relations and staff awareness workshops. Develop a program and evaluation plan; collect baseline data on attendance, discipline referrals and student IB's for all students.		

Developed by the Midwest Race and Sex Desegregation Assistance Center, Kansas State University.

APPENDIX E

FORMULAS USED IN THE STUDY*

1. Mann Whitney U Test

$$U_1 = N_1 N_2 + \frac{N_1 (N_1+1)}{2} - R_1$$

$$N_1 N_2 - U_1 = U_2$$

2. Spearman's Rho, r_s

$$r_s = 1 - \frac{6 \Sigma D^2}{N (N^2-1)}$$

3. Kendall's Coefficient of Concordance, W

$$W = \frac{S}{(1/12) K^2 (N^3-N)}$$

* Champion, Dean J. (1970). Basic statistics for social research. Scranton: Chandler

VITA

Reginald Morris High, son of Marshall and Eula High, was born on November 4, 1942 at home in Gaston County, North Carolina. He attended the public schools in Dallas, North Carolina and graduated from Dallas High School in 1961. He entered Gardner-Webb Junior College and transferred to Western Carolina University in Cullowhee, North Carolina, from which he graduated in 1966 with a B.S. in Health and Physical Education. He taught and coached at Swain County High School, Bryson City, North Carolina, before moving to Hartsville, South Carolina, where he was a coach and teacher at Hartsville Senior High School and Butler High School. In 1971, he entered Appalachian State University, Boone, North Carolina, from which he received a M.A. in Public School Administration. From 1972 until 1975, he served as principal of Blowing Rock Elementary School, Blowing Rock, North Carolina, before moving to the principalship of Reidsville Junior High School, Reidsville, North Carolina. He became principal of Reidsville Senior High School in 1978, where he remained until June, 1981, when he enrolled in the doctoral program at The University of Tennessee, Knoxville. While completing requirements for the Ed.D. degree in Educational Administration and Supervision, he was program specialist for the Mid-Atlantic Appalachian Race Desegregation Assistance Center (MAARDAC) and graduate assistant in the Department of Educational Administration and Supervision. He received the Doctor of Education in August, 1984.

The author is a member of the American Education Research Association, Association of Supervision and Curriculum Development,

Amercian Association of School Administrators and Phi Delta Kappa. He is married to the former Katherine Huggins and has one son, Matthew.