

RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF PRINCIPAL LEADERSHIP
BEHAVIORS AND INSTRUCTIONAL CHOICES OF READING INTERVENTIONS FOR
AT RISK STUDENTS

by

Marianne Castellon

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF EDUCATIONAL LEADERSHIP

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF EDUCATION

In the Graduate College

THE UNIVERSITY OF ARIZONA

2007

THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation

prepared by Marianne Castellon

entitled Relationship Between Teachers' Perceptions of Principal Leadership Behaviors and Instructional Choices of Reading Interventions for At Risk Students

and recommend that it be accepted as fulfilling the dissertation requirement for the

Degree of Doctor of Education

Dr. John Taylor Date: 4-4-2007

Dr. Alberto Arenas Date: 4-4-2007

Dr. Patricia First Date: 4-4-2007

Dr. J. Robert Hendricks Date: 4-4-2007

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Dr. John Taylor Date: 4-4-2007

STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgment of the source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgment the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED Marianne Castellon

ACKNOWLEDGMENTS

My sincere gratitude to Dr. John Taylor, my university advisor and committee chair, for the guidance, support and encouragement he provided to me during the four years of the doctoral program. Additionally, I would like to thank Dr. Alberto Arenas, Dr. Patricia First and Dr. J. Robert Hendricks, my dissertation committee members, for the invaluable advice given to me during this process. I hope to espouse the leadership and expertise that you have provided to me.

Appreciation and thanks go to the many people who have surrounded me with encouragement and support. Completing four years of study and a dissertation is truly a long and rewarding journey that could not have been accomplished without the many friends who supported me throughout this process. Thank you Allison for the friendship we forged during our doctoral studies together. Thank you to my co-workers in the Marana Unified School District who assisted me when work and studies became arduous. Thank you to Jan and Lynnette who shared with me their experience, advice, and guidance. And thank you to my office staff that assisted me with my professional duties and responsibilities when work became busy.

A special thank you goes to my two children, Nicole and Alex, who demonstrated patience and encouragement when I was away from home studying or when I had a “dissertation weekend”. Many family moments were missed. I couldn’t have completed my dissertation without your support and belief in me. Your love and pride is what kept the momentum going.

Finally, this dissertation is dedicated to my parents who instilled in me the confidence and will to realize my dreams. I wish you were here to share in my accomplishment.

TABLE OF CONTENTS

LIST OF TABLES.....	8
LIST OF ILLUSTRATIONS	9
ABSTRACT	10
CHAPTER 1: INTRODUCTION TO THE STUDY	12
Statement of the Problem	13
Purpose of the Study	16
Research Questions	17
Assumptions of the Study	18
Limitations of the Study	19
Definition of Key Terms	20
Organization of the Study	21
CHAPTER 2: REVIEW OF THE LITERATURE	22
Organizational Change	22
Political Frame	30
Structural Frame	31
Human Resource Frame	32
Symbolic Frame	33
Educational Leadership and School Culture.....	35
Social/Cultural Theory and Student Achievement	39
What is School Leadership?	44
Integrating Organizational Theory, Change, and School Culture	48
Curriculum-Based Measurement	48
Dynamic Indicators of Basic Early Literacy Skills	53
Summary	60
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY.....	64
Purpose of the Study	64
Research Design	65
Population and Sample	66
Instrumentation	67
Data Collection	70
Data Analysis	72

TABLE OF CONTENTS – *Continued*

Research Question 1	72
Research Question 2	72
Research Question 3	73
CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA	74
Purpose of the Study	74
Sample Description	75
Descriptive Findings	76
Research Question 1	76
Research Question 2	79
Research Question 3	89
Identifying and articulating a vision	90
Providing an appropriate model	91
Fostering the acceptance of group goals	92
Providing individualized support	93
Providing intellectual stimulation	95
Holding high performance expectations	96
Principal leadership behaviors and instructional choices ...	96
CHAPTER 5: SUMMARY OF FINDINGS, DISCUSSION OF FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS.....	101
Introduction	101
Overview of the Study	102
Research Questions	103
Summary of Findings	103
Discussion of Findings	106
Research Question 1	106
Research Question 2	107
Research Question 3	112
Implications for Practice	116
Conclusion	128
Recommendations for Further Research	129

APPENDIX A: PRINCIPAL LEADERSHIP QUESTIONNAIRE.....	131
APPENDIX B: ADDITIONAL QUESTION ADDED TO THE PRINCIPAL LEADERSHIP QUESTIONNAIRE	136
APPENDIX C: INTERVIEW SCHEDULE	138
APPENDIX D: RECRUITMENT MATERIALS	140
APPENDIX E: LETTER OF CONSENT	144
APPENDIX F: FOCUS GROUP QUESTION RESPONSES	150
REFERENCES	157

LIST OF TABLES

1. Intercorrelations of Principal Leadership Behaviors.....	78
2. Correlations of Principal Leadership Behaviors and Interventions	80
3. Correlations of Principal Leadership Behaviors and Interventions for Kindergarten	82
4. Correlations of Principal Leadership Behaviors and Interventions for Grade 1	84
5. Correlations of Principal Leadership Behaviors and Interventions for Grade 2	86
6. Correlations of Principal Leadership Behaviors and Years of Teaching and Education	88
7. Percentage of Responses to Focus Group Questions and Principal Leadership Behaviors	98

LIST OF ILLUSTRATIONS

FIGURE 1.1, Principal Leadership Behaviors and Instructional Choices (Conceptual Model)	58
FIGURE 1.2, Principal Leadership Behaviors and Instructional Choices (Revised)	121

ABSTRACT

Reform is a way of professional life for principals and teachers in our school systems. The magnitude of the changes brought about by No Child Left Behind in 2001 has resulted in a significant paradigm shift in the educational system. The nationwide call to increase student achievement is a challenge for principals leading their school to adapt to these fundamental changes. Principals must be equipped with strong leadership behaviors to provide the supports necessary to staff and students to effectuate change. Principal leadership adds value to the impact teachers have on student achievement, and it provides a covenant that fundamental and sustained change can happen. The challenge for principals responsible for facilitating, supporting and changing their school system to adapt to these changes is to establish the infrastructures necessary to support these fundamental transformations. High-quality teachers as well as strong principal leadership are essential to achieve educational reform.

The purpose of this study was to investigate the relationship between teachers' perceptions of the principal's leadership behaviors and teachers' instructional choices of reading interventions for at-risk students. The principal leadership behaviors included (1) provides vision, (2) models appropriate behavior, (3) fosters commitment to goals, (4) provides individualized support, (5) provides intellectual stimulation, and (6) holds high expectations. *Instructional interventions* were defined as instructional choices by teachers for at-risk students in reading that included one-to-one instruction, small group instruction, adapted core reading curriculum materials, and instructional technology. Students defined as at risk did not meet a specified reading benchmark score, the lowest score that predicts reading success as

determined on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS, Institute for the Development of Educational Achievement [Institute], 2002) assessment.

The Principal Leadership Questionnaire (PLQ, Valentine & Lucas, 2000) was administered to kindergarten through second grade teachers in six elementary schools who had students identified as at risk for learning to read. Focus groups were conducted with teachers in four of the six elementary schools to add breadth and depth to some responses from the leadership questionnaire.

The data revealed themes of effective principal leadership in schools undergoing reform. These themes include (1 teachers who had a higher level of education had higher expectations of themselves and their students, and principals had a higher expectation of the teachers; (2 ongoing professional development opportunities for teachers are critical for schools undergoing reform. Therefore, teachers who were supported by their principal through professional development opportunities and adequate resources in their classrooms revealed strong support for their principal's vision for the school; (3 principals who were strong in one principal leadership behavior were also strong in the other principal leadership behaviors; and finally, (4 teachers who perceived their principals as strong in principal leadership behaviors were able to articulate the school vision, worked toward group goals, and promoted school-wide efforts to raise student achievement.

CHAPTER 1

INTRODUCTION TO THE STUDY

This dissertation describes a mixed methods research study of the relationship between teachers' perceptions of the principal's leadership behaviors and teachers' instructional choices of reading interventions for at-risk students. The quantitative component of this study was based on the responses of the teachers on the Principal Leadership Questionnaire (PLQ), an instrument used to assess teachers' perceptions of their principal's leadership behaviors (Valentine & Lucas, 2000). The principal leadership behaviors measured on this instrument included (1) provides vision, (2) models appropriate behavior, (3) fosters commitment to goals, (4) provides individualized support, (5) provides intellectual stimulation, and (6) holds high expectations (Leithwood & Jantzi, 1996). A question developed by the researcher that pertained to the types of instructional choices used by teachers was added as part of this questionnaire. An at-risk student was defined as a student who did not meet a specified reading benchmark score, the lowest score that predicted reading success, in one or more of the Dynamic Indicators of Basic Early Literacy Skills (Institute for the Development of Educational Achievement [Institute], 2002) assessment subtests: phonemic awareness, phonics, fluency with connected text, reading comprehension, and vocabulary. Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment was adopted by several school districts in Arizona as a reliable and cost-effective assessment system to identify the at-risk learner in reading and to help monitor student achievement in specific areas of reading.

In the qualitative stage of this study, pertinent findings from the quantitative study stage were selected to guide the shaping of questions for focus group interviews (Rea & Parker, 1997). The interviews clarified the nature of teachers' perceptions of the principal's leadership support for teaching at-risk students.

The first chapter of this dissertation presents the statement of the problem, purpose of the study, and research questions. It concludes with the assumptions and limitations of the study and definitions of key terms.

Statement of the Problem

In the past 20 years, much attention has been given to educational leadership and its impact on student outcomes. More recently, at the beginning of the 21st century, school accountability initiatives have come to the forefront of educational practice and are more evident than in the past. Recent changes to state and federal education standards have called for ambitious learning for all students. Increased concern by the public for improvements in student learning has intensified the pressure on teachers, principals, and superintendents to be more accountable for student achievement. These current initiatives have increased the complexity of the school environment and have changed the landscape of educational accountability.

The ultimate responsibility for the success or failure of schools has been placed on the school principal who faces increased pressure from policy makers, district-level administrators, teachers, and parents to improve student achievement. Past research has focused on the relationship between effective principals and effective schools (Edmonds, 1982; Lezotte, 1991).

In current and future research, student achievement is the key factor in defining effective principals and schools (No Child Left Behind Act, 2001).

School leaders are progressively more responsible for educational quality based on the belief that students' success or failure is determined by the way a school is run (Fullan & Watson, 2000). These beliefs have resulted in a growing demand for more effective leadership skills and practices described as a change agent, manager, symbolic leader, instructional leader, disciplinarian, decision maker, and policy maker (Cotton, 2003; Marzano, Waters, & McNulty, 2005). Principals are expected to have high expectations for students and teachers, to supervise teachers, to coordinate and oversee the implementation of the curriculum, to emphasize basic skills, and to monitor student progress. They are being held accountable for how teachers teach, how students learn, and how the school is managed. It is evident that increased student achievement and positive educational outcomes are at the helm of education today, and educational administrators must be equipped with leadership qualities that ensure that these expectations are realized.

Assessing the specific leadership behaviors that contribute to student academic achievement is challenging. Leadership is often measured in terms of the perceptions of those who experience it. Much of what is known from empirical research about principals' leadership behaviors is based on teachers' perceptions of such practices (Leithwood & Jantzi, 1996). Leithwood and Jantzi reported on the effects of leadership behaviors and student outcomes in studies they conducted between 1990 and 1996. Leadership behaviors were measured through items on a survey that asked teachers to estimate the effects of various innovative practices being

implemented in their classrooms on student outcomes. These practices were usually the product of school-wide initiatives that were either supported or promoted by principals.

In 2005, Marzano et al. reported that principal leadership had significant effects on student learning, second only to the effects of a sound curriculum and teacher instruction. Marzano et al.'s meta-analysis of school leadership studies indicated that principals influenced learning primarily by initiating efforts associated with ambitious goals and by establishing the conditions that support teachers and help students to succeed.

Therefore, principals must possess the competencies to support teachers' instructional practices that improve student learning and outcomes. But what are those needed competencies, and how do they relate to educational goals, instructional practices, and student outcomes? To answer this question, it is important to conduct small-scale, focused research on teachers' perceptions of how principals influence instruction when first implementing accountability initiatives. Incrementally conducting small research studies permits preliminary testing of questions, which leads to developing precise questions and procedures in larger studies. Castellon (2006) conducted a pilot study to clarify the problem, establish the research questions, and test the Principal Leadership Questionnaire (Valentine & Lucas, 2000) and methodological procedures that lead to more precise research practices. The research results verified the problem and the value of conducting a larger study. The procedures and results of the pilot study are discussed in more detail in Chapter 3.

Purpose of the Study

The requirements for early reading intervention, assessment, accountability, and scientifically based instruction at the kindergarten through third grade level (K-3) under No Child Left Behind (NCLB, 2001) have compelled school administrators nationwide to take a keen look at curriculum, teaching methodology, instructional practices, and student achievement (National Reading Panel, 2004). For school administrators in Arizona, Arizona Reads (2001) established specific assessment criteria in reading and required school districts to adopt one of three state-approved, research-based assessment systems at the K-3 level by 2006. One assessment system, the Dynamic Indicators of Basic Early Literacy Skills (Institute, 2002) (DIBELS) identifies at-risk students based on benchmark scores in one of five areas of reading, and educators are required to provide instruction in the identified area of student need. This requirement has resulted in organizational, curriculum, and instructional change in elementary schools throughout Arizona.

In a review of the literature, a dearth of research exists in Arizona that examines the link between the teacher's perception of principal leadership behaviors and the specific types of instructional choices used by teachers for students identified at risk for learning to read. One reason for the paucity of research is the newness of Arizona Reads (2001), which designated the 2004-2005 school year as a "transition" year with pilot implementation and full implementation of the statute by the end of the 2005-2006 school year.

The purpose of this study was to investigate the relationship between teachers' perceptions of the principal's leadership behaviors and teachers' instructional choices of reading interventions for at-risk students. This research was significant for the following reasons:

1. This research provided quantitative data related to the perceptions of teachers concerning principal leadership behaviors that influenced teachers' instructional choices for at-risk students.
2. This research provided qualitative data that add breath and depth to the quantitative results of the questionnaire.
3. This research provided relevant information for principals and school district administrators to examine ways in which support and help can be provided to teachers.
4. This research provided relevant data to principals and school district administrators to improve leadership behaviors.
5. This research provided greater depth of knowledge about principal leadership behaviors and the teacher instructional choices for at risk students.

Research Questions

The following research questions were examined in this study:

1. What are the relationships between the six principal leadership behaviors (provides vision, models appropriate behavior, fosters commitment to goals, provides individualized support, provides intellectual stimulation, holds high performance

- expectations) as perceived by teachers providing reading instruction to students identified as at risk?
2. Is there a difference between the instructional choices of teachers with at-risk students and the teacher's perceptions of the six principal leadership behaviors?
 3. What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

Assumptions of the Study

The following assumptions are made with regard to this study:

1. Teachers completed the Principal Leadership Questionnaire (Valentine & Lucas, 2000) honestly and accurately, and the results were indicative of teachers' actual perceptions of principal leadership behaviors.
2. Teachers discussed openly and honestly leadership behaviors of principals and their instructional choices for at-risk students in the focus group format.
3. Teachers who participated in this study may have been employed at the same elementary school as the principal. The results of the teacher responses were not affected by any influence from the principal due to the confidentiality and anonymity of the teacher survey results.

Limitations of the Study

The researcher acknowledged the following limitations of the study:

1. The teachers who participated in this study were kindergarten through second grade teachers. The results from this study may not have generalized applicability to other populations.
2. The findings of the study were subject to limitations associated with survey and interview data collection.

Definition of Key Terms

The Principal Leadership Questionnaire (PLQ) was developed by Jerry Valentine and Stephen Lucas in 2000 at the Middle Level Leadership Center. This instrument measures principal leadership behaviors and was based on the work of Leithwood and Jantzi (1996). The PLQ is composed of six factors as follow:

Provides vision. A factor on the PLQ marked by behavior on the part of the principal aimed at identifying new opportunities for his or her school and developing, articulating, and inspiring others with his or her vision of the future.

Models appropriate behavior. A factor on the PLQ marked by behavior on the part of the principal that sets an example for staff to follow consistent with the values the principal espouses.

Fosters commitment to goals. A factor on the PLQ marked by behavior on the part of the principal aimed at promoting cooperation among staff and assisting them to work together toward common goals.

Provides individualized support. A factor on the PLQ marked by behavior on the part of the principal that indicates respect for staff and concern about their personal feelings and needs.

Provides intellectual stimulation. A factor on the PLQ marked by behavior on the part of the principal that challenges the staff to reexamine some of the assumptions about their work and rethink how it can be performed.

Holds high performance expectations. A factor on the PLQ marked by behavior that demonstrates the principal's expectations for excellence, quality, and high performance on the part of the staff.

Key terms unrelated to the PLQ include

Principal. An administrator who was responsible for a kindergarten through fourth grade, kindergarten through sixth grade, or kindergarten through eighth grade elementary school.

Classroom Teacher. A person who instructed kindergarten through second grade elementary students.

Reading First. Federal legislation that provided funding to states and local school districts to establish comprehensive reading instruction by trained teachers in kindergarten through third grade.

Arizona Reads. An Arizona statute that required all publicly funded schools to teach students to read proficiently by the third grade.

Dynamic Indicators of Basic Early Literacy Skills (DIBELS). An assessment that measured growth and development of early literacy skills in kindergarten through third grade (Kaminski & Good, 1996b, 1998).

At-risk. Students identified on the DIBELS assessment who fell below established reading benchmark scores in one or more of the following areas: phonemic awareness, phonics or alphabetic principle, accuracy and fluency with connected text, vocabulary, and comprehension.

Instructional Interventions. Instructional choices used by teachers for at-risk students in reading that included one-to-one instruction, small group instruction, adapted core curriculum materials, and technology.

Organization of the Study

Chapter 1 includes the introduction and purpose of the study. Also provided are a statement of the problem, research questions, assumptions, limitations, and definitions of terms used in the study. Chapter 2 consists of a review of the related literature on leadership, organizational change, and curriculum-based measurement. Chapter 3 describes the research design and methodology, and provides information about the population and sample, data collection, and instrumentation. Chapter 4 includes the presentation and analysis of the data. Chapter 5 consists of the summary and discussion of the findings, implications, and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

Principals must lead their school and their teachers through the intricate changes imposed by the complex educational demands required by No Child Left Behind (2001). One challenge under NCLB is meeting the Reading First requirement to increase reading achievement for all students (Center for the Improvement of Early Reading Achievement, 2001). Emphasis has been placed on reading assessment and intervention strategies at the K-3 level to identify at-risk students early and implement appropriate instructional interventions in every state. Consequently, principal leadership skills are necessary to respond to the challenges of curriculum standards, high-stakes testing, accountability requirements, programmatic changes, and an increasingly diverse student population. Principals must respond to these changes and must be equipped with the necessary leadership behaviors to effect student achievement and to guide their schools through these complex challenges.

Organizational Change

Implementing organizational change is one of the most challenging and complicated tasks in educational leadership. In the spirit of NCLB (2001), it is imperative that all educational leaders understand the change process to facilitate the transition from operating on past practices to embarking on new endeavors. Change is difficult for organizations because stakeholders would rather adhere to traditional philosophy and cling to discordant viewpoints than experience new paradigms. Opposition may come from entrenched values and beliefs or from a lack of

confidence that the organization can successfully change. It is the challenge of the school principal to create a climate, through trust and support, to acknowledge and nurture the present culture while alleviating feelings of trepidation.

Clearly, it is vital for the principal to focus on group problem-solving processes as new techniques and strategies are being developed and implemented in schools. Educators are learning to become empowered problem solvers, to take control over their curriculum, and to change their teaching styles to increase student achievement for all learners. Traditional problem-solving models emphasize problem solving as a means of helping teachers alter their teaching methodology. Most problem-solving models include at least four phases: (a) an input phase, in which a problem is perceived and an attempt is made to understand the situation or problem; (b) a processing phase, in which alternatives are generated and evaluated and a solution is selected; (c) an output phase, which includes planning for and implementing the solution; and (d) a review phase in which the solution is evaluated and modifications are made as needed (Dewey, 1933).

Traditional problem-solving methods reflect Dewey's (1933) five-step model for learning, also known as the Dewey Sequence, which includes the following steps: (1) identify the problem, (2) analyze the problem, (3) suggest possible solutions, (4) suggest the best possible solution, and (5) test and implement the solution. The Dewey Sequence is a reflective thinking process organized as a structured series of questions. School administrators should understand and apply these basic procedures in a shared decision making, team approach to problem solving. To implement any problem-solving approach, a school administrator should have strong

interpersonal skills and group dynamic abilities. He or she should be able to adapt personal style to promote these basic skills in adult learners and form a climate of cohesiveness and group collaboration.

Cuban (2001) defined a problem as a situation in which there is a gap between what is and what ought to be. An example could be a school principal who chooses to continue to use the current means of assessment and intervention or one who chooses to implement a new, innovative assessment and intervention procedure and evaluate the impact implementation might have on student achievement. Principals should realize that inherent in solving problems is change and that change is a solution to problems. Cuban also described problems as complex, messy, and wicked versus tame and filled with power and conflict. According to Cuban, to solve problems it is imperative to examine the process of solving problems and to develop a common language to frame and solve the problem. Cuban postulated that the key ingredient in solving problems was to define the problem.

Because we live in a can-do culture, the result, the solution, the outcome is far more important than how the problem was initially defined. Too often, solutions are mismatched to the problem or simply botched when applied because so little time was spent on determining what the problem really was. I believe it is a serious error to concentrate more on solutions than on figuring out what the problem is. (p. 3)

As schools seek ways to make changes by focusing on the teaching and learning processes dictated by reform in assessment procedures and the implementation of instructional techniques, group problem solving underpins this process. In order for change to have a positive effect on school and student achievement, it is imperative that structures that support teaching and learning are provided. This type of change will not become a reality without the support of the principal, parents, and community members. Support from these groups bring about monumental change by developing new infrastructures within schools to support continuous problem solving and learning.

Much of the current focus on school leadership is a combination of trait theory, situational theory, chaos theory, servant leadership, and transformational theory with some post-modern theory added to the mix. But overall, there is a comprehensive focus on change, systems thinking, problem defining and solving, collaborative and reflective teacher groups, motivating and providing vision, and building school culture. Undergirding these theories is the notion of learning organizations (Fullan, 1993).

According to Fullan (2001), there is a link between leadership qualities and the success of the learning organization. Fullan viewed leaders as individuals skilled in facilitating group problem solving rather than traditional experts with the answers to problems and the knowledge to implement solutions. A different focus on leadership is necessary during this time of educational change and reform under NCLB (2001), because “The big problems of today are complex, rife with paradoxes and dilemmas. For these problems, there are no once-and-for-all answers. Yet we expect our leaders to provide solutions. We place leaders in untenable

positions” (p. 2). Effective leadership in schools is needed to perpetuate deep problem solving and to change from what has been done in the past to what needs to be accomplished for the future.

The process of implementing new NCLB (2001) and Arizona Reads (2001) assessments and intervention procedures is an example of the functionality of Fullan’s (2001) reasoning. This process requires a principal who is open to change and supportive of new ideas. Fullan stated, “Understanding change and the change process is less about innovation and more about innovativeness. It is less about strategy and more about strategizing” (p. 31). Clearly, the focus has shifted the emphasis from the teacher and instructional methods (*A Nation at Risk*, 1983) to include organizational process and change required under NCLB. It is not uncommon for a school organization to keep existing practices in place because of what historically has been done, even though student achievement may be at a standstill. Often, school administrators are unwilling to risk new practices because of the uncertainty change may bring.

Making major changes in a school’s organizational processes and roles was described by Cuban (1988) as either first-order change, “trying to make what already exists more efficient and more effective without substantially altering the ways in which adults and children perform their roles” (p. 342), or second-order change, which “transforms familiar ways of doing things into new ways of solving persistent problems” (p. 342). Cuban believed that first-order change basically left the organization untouched and resulted in insufficient success for all students. First-order change may include alterations to schedules or daily routines or procedures of the

school. It represents superficial change and does not inherently change the culture or beliefs of a school.

Cuban (1988) maintained that second-order change focused on the fundamental way in which a school operated to achieve a difference or improved results in meeting the needs of all types of students. Second-order change represents a transformation or deep change in an organization. An example of second-order change may include the processes, procedures, training, and leadership skills required to successfully implement a different approach to assessment and intervention. The Dynamic Indicator of Basic Early Literacy Skills (Institute, 2002) assessment, which is given to all students at the K-3 grade level, is one example of second-order change within a school. Implementation of this procedure requires a restructuring of the early intervention reading process in schools and strong leadership skills to guide this process. This type of second-order change also requires broad involvement in decision making by staff, tangible and intangible support to staff, and an understanding of the need for this change in order for it to be successful. The DIBELS assessment process is discussed in greater detail later in this study.

Broad involvement by staff in fundamental decision making has been described as site decision making, designed to shift the roles of the typical managerial model of schools to a more open and participatory system. Site-based decision making was identified by Fulbright (1988) as a valid “tool to increase student achievement” (p. 5). This format for decision making identifies the school as the main vehicle for student improvement and requires a change in the governance of the organization. Redistributing the authority to make decisions is placed in the hands of the

principals, teachers, students, and parents who are organized into teams to represent their colleagues. These teams not only make decisions based on a first-order change model but more importantly a fundamental change as in the second-order model. Examples of second-order change decisions include alteration of the curriculum, implementation of new assessment and learning techniques, or proposed staff development. These are decisions that involve areas that impact the teaching and learning process.

Cuban (1988) maintained that restructuring schools involved a major redesign of the ways that schools functioned. All structures, including decision making, take on a new role. Site decision making is more successful in a school where all stakeholders function as a team. School's instructional processes occur more effectively as a collegial effort (Fulbright, 1988). Fulbright further postulated that various factors supported the collegiality and the viability of educational decision making on a campus. These include knowledge, understanding, and the skills needed for the shared decision-making process. The district must make resources available for school personnel to be able to function as a team and develop new skills.

Another factor to consider in site decision making is the school's organizational culture. New roles are formed among students, staff, parents, and the administrator. Teachers develop close collegial relationships as they become actively involved in decision making. The role of the principal changes to one of facilitator of the change process, and parents and students become empowered as their voices are heard in the decision-making process. In a study conducted by Conley (1991) of 14 schools in Oregon that adopted a site-based decision model, the behaviors of principals and teachers changed. Principals were no longer acting as managers but as

developers and facilitators who helped staff create a vision through data-driven decisions. Principals committed resources to support the vision and created committees to broaden the decision-making process. They became the liaison between the school and the community by purporting the school's vision and supporting change for the future.

Educator roles also changed, and they developed a greater sense of efficacy and control. Teachers felt empowered to influence their work environment and began to experience more participation and satisfaction in school decisions and activities. They believed that their increased energy positively influenced their instructional practices and teacher-student interactions.

The culture of the school must be one that is willing to be accepting, trusting, open to change, and willing to take risks (Harrison, Killion, & Mitchell, 1989). It is also important for the staff to demonstrate patience and perseverance. According to Fulbright (1988), a "caring and respectful atmosphere will develop at the school site, and substantive, student related decision making may never occur if the cultural values and norms are not student-directed" (p. 24). A school culture of mutual respect enables the site decision makers, who represent various knowledge bases, experiences, and expertise, to make decisions about the needs of students and how to address them. A school culture that operates synergistically is necessary for successful implementation of this model. The principal's role as school leader is paramount in facilitating a school culture that is flexible, open minded, and able to accept change.

According to a meta-analysis of the research of school leadership conducted by Marzano et al. in 2005, the responsibility of the leader to act as a "change agent" had a high correlation to

student academic achievement. The leader's ability to implement change has been defined as a "leader's disposition to challenge the status quo" (Marzano et al., 2005, p. 44), the ability to "disturb the staff in a manner that approximates the desired outcome" (Fullan, 2001, pp. 44-45), or by viewing change as a "multi-frame undertaking" (Bolman & Deal, 2003). According to Bolman and Deal:

Each frame offers a distinctive view of major issues in change. The human resource frame focuses on needs and skills, the structural frame on alignment and clarity, the political frame on conflict and arenas, and the symbolic frame on loss of meaning and the importance of creating new symbols and ways. Each frame highlights a set of barriers and posits possibilities for making change stick.

(p. 370)

Political Frame

The brief legislative history of educational reform discussed earlier in this paper demonstrated the traditional top down, pyramid viewpoint of the political frame for contemporary national educational decisions. The federal government responded to the voices of multiple constituencies for American schools to prepare students to be equipped to face the challenges and pressures of a competitive global market. Resulting from the pressures to increase student achievement and the accountability requirement embedded in NCLB (2001), states and local school districts responded to the political pressure levied on them by the federal government. During a time when political decisions are guided by goals and policies set at the

top, it is imperative for school administrators to understand and manage the political dynamics of reform from a local, state, and federal perspective and to relay this understanding to staff.

Although it is important to understand the political frame through the lens of NCLB, it is also important for the school administrator to understand that school goal setting and decision making are ongoing processes that are developed by the key stakeholders through negotiation and interaction. Bolman and Deal (2003) described the political frame as a coalition in which “agreement and harmony are easier to achieve when everyone shares similar values, beliefs and culture. This forms interdependence among members” (p. 188). A strong coalitional model in a school embarking on changes in teaching and learning is the necessary ingredient to implement new assessment and intervention procedures. Leaders who have a strong understanding of the political frame are able to resolve conflict based on strategies developed through an integrated approach by staff and administrators.

Structural Frame

The emphasis of NCLB (2001) for all students to reach academic goals resulted in the need for administrators to change the core structure of their schools. The historic practice of a top-down managerial approach to leadership that was hierarchical and role oriented began to shift to one that emphasized flexibility, teamwork, and shared decision making. This shift in school structure was designed to coordinate all efforts to be aligned with a common goal.

Bolman and Deal (2003) stated that “clear, well understood roles and relationships and adequate coordination are key to how well an organization performs” (p. 44). The requirements in NCLB

for increased student performance placed a feeling of urgency on schools to change past practices that demonstrated few outcomes. Current trends toward aligning all school activities and programs toward the goal of accountability and increased student achievement caused administrators to examine the effectiveness of the structural frame of their school and to assess the need for structural change.

Within the structural frame there must be a blend of both vertical and lateral coordination efforts. As described by Bolman and Deal (2003), a vertical coordination structure approach included the “higher levels that coordinate and control the work of subordinates through authority, rules and policies, planning and control systems” (p. 50). Adhering to this traditional structure was no longer acceptable in producing effective schools. There must be a blend of lateral coordination that takes into consideration people’s feelings and the need to dialog and network or to collaborate in decision making. An integrated approach of both structures allows partnerships to be formed, staff efforts to be coordinated, and leadership to grow. A combination of both vertical and lateral structural design in schools will result in an aligned system that embraces a common goal.

Human Resource Frame

The human resource frame champions the idea that organizations can be stimulating, rewarding, and productive. It regards people’s skills, attitudes, energy, and commitment. If an organization concerns itself with people’s welfare and trust, then it will succeed (Bolman & Deal, 2003). Leaders, as change agents, must emulate trust by voicing their positions and

standing firmly by them. The characteristics of trust include reliability and predictability. These traits, embedded in a positive self-regard based on strengths and competencies, have a reciprocal impact on members of the organization. Educators must reframe their current way of thinking and use multiple perspectives to understand the comprehensive picture. Viewing situations through multiple lenses sparks innovation and creativity in seeking solutions (Bolman & Deal, 2003). Change is imminent in education, and it must be viewed as a positive growth opportunity for students and staff. The school administrator must be supportive of staff and respond to the impact of this change on people's needs such as professional opportunities, classroom resources, or seeking ways to nurture staff and grow leaders within the profession. Developing leadership positions empowers people to improve their skills and satisfy the emotional needs of the staff. Meetings where staff members share new ideas that work in their classrooms and collaborate to solve problems can be a simple, effective strategy to increase motivation and collaboration. The administrator must embark on creative ways to strengthen, nurture, and empower staff. These core ideas represent the human resource frame by viewing staff as an investment with the payoff being increased educational opportunities for all students (Bolman & Deal, 2001).

Symbolic Frame

Educators, students, and the community connect in a very deep and powerful way to a school's symbols. Schools are filled with a myriad of symbols and signs, from the flag pole proudly standing at the building entrance to the procedures and routines of daily activities, from the ceremonies celebrating student or staff achievements to the school colors and mascots

identifying them from others. Symbols can be evident in the forms of collegial sharing, school songs, or displays of student work or past awards and achievements. Symbols are a tangible representation of the core values and beliefs of the school. They are the outward manifestation of those things we cannot comprehend on a rational level (Deal & Peterson, 1999). Many times symbols can be powerful markers of past history that have developed and molded the culture of a school. Stakeholders become attached to symbols, and symbols help to unify and form cohesiveness among members of a group. A new school leader must be sensitive to the meaning behind the school symbols. For example, if an administrator tries to revise a school's mission statement to reflect a more contemporary and powerful direction, this change can only be accomplished through careful thought, agreement by all involved, shared decision making, and teamwork. Although the previous mission statement may no longer be used, it represents a historical marker in the core functions and beliefs of the students, staff, and community.

During a time when educators are attempting to make sense of the increased pressure for curriculum change and accountability, symbols can bring deeper meaning to everyday events and provide direction during a time of ambiguity and chaos. Symbols play a significant role in cultural cohesion and pride (Deal & Peterson, 1999). Attachment to symbols can unify a group and give it focus and purpose. Symbols represent the powerful underlying framework for the reasons an organization operates as it does.

Viewing a school organization through the lens of the symbolic frame provides meaning to the daily complexities of the school's activities, routines, and underlying values. A leader who has a key understanding of symbols and utilizes the symbolic frame can promote and enrich

opportunities to enhance the quality of teaching and learning in schools. Symbols, traditions, and ceremonies represent cultural values and form the architecture of the school. Symbols form the linkage between all stakeholders to a deep purpose and meaning. They represent significant events and history that are closely knitted in the values and traditions of the school. An administrator's keen understanding of the power of the symbolic frame can be integral to supporting positive organizational change.

Educational Leadership and School Culture

At the head of school culture is visionary leadership. Deal and Peterson (1999) described symbolic leadership as the key to facilitating a caring culture. These theorists suggested that leaders must focus on the symbolic and cultural side of schools. Deal and Peterson stated, "One of the most significant roles of leaders is the creation, encouragement and refinement of the symbols and symbolic activity that give meaning to the organization" (p. 10). These authors cited vision and values as the "bedrocks" of culture and therefore the base of symbolic leadership. Schein (1992) posited a powerful view of cultural leadership by stating,

There is a possibility underemphasized in leadership research, that the only thing of real importance that leaders do is to create and manage culture and that the unique talent of leaders is to work with culture. Organizational cultures are created by leaders, and one of the most decisive functions of leadership may well be the creation and the management of culture. (p. 2)

Deal and Peterson (1990) argued that “reading” a culture required “watching, sensing, listening, interpreting, using all of one’s senses, and employing intuition when necessary” (pp.16-17). They suggested beginning the process by understanding the history of the organization, its past prominent figures, and the stories and special events that people remember. Simultaneously the school administrator must listen to the voices of the leaders within the staff to determine which key members are influential in coming to a group consensus for desirable changes.

The culture within a school is a deep, historical occurrence that is evident in a variety of behaviors. Schein (1986) defined culture as

the pattern of basic assumptions that the group has invented, discovered or developed in learning to cope with it’s [sic] problems of external adaptation and internal integration, and that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.

(p. 12)

As a school develops solutions to external problems, for example the accountability measures as they pertain to early assessment and intervention techniques required by NCLB (2001), these solutions are based on a history of the thinking, feeling, and developing of solutions that became comfortable to the organization in the past and are now a part of its culture. Internal integration pertains to the way in which members of the organization learn to work and communicate with each other and how they regard the various feelings and perceptions of the group during the problem-solving process. Using the example of the implementation of the

DIBELS (Institute, 2002) procedures, this external and internal framework would include utilizing past practices of implementing changes in testing and curriculum that worked, an understanding of the requirement for this change, and the daily organizational effort needed to adapt procedures and structures to implement this change. The school culture provides meaning to these events.

Schein (1986) further postulated that a unique talent of a leader is the ability to work within the organization's culture and not ignore the underlying assumptions of that culture. Assumptions are patterns that develop from how members of the organization think, feel, and communicate together. They are unconscious beliefs, perceptions, thoughts, and feelings that are taken for granted. The cultural assumptions influence how the organization "sets strategy, develops goals, chooses the means for reaching those goals, decides to measure its progress and controls its output" (p. 31). Schein referred to these cultural assumptions as the external survival problems that an organization faces. These differ from the internal problems of an organization which include developing a common language, communication, managing authority and collegiality, and the roles that create the organization. Assumptions also determine how to remedy situations that are out of alignment with goals. It is imperative for the school administrator to understand that organizational cultural assumptions define how a school sets its goals, determines priorities, decides and implements curriculum, manages student behavior, and celebrates achievement.

As the students, staff, and culture of a school have adapted over many years to solve internal and external problems, they also have learned how to reduce the anxiety such problems

can cause. Proposing a change to embedded cultural assumptions produces anxiety. Cultures cannot be changed at the will or whim of individuals, but evolve through a shared experience of trauma and success, and leaders are the focal point in managing this change process. For example, proposing a change in the way students are assessed for progress relays the message that the old assumption is no longer valid. The school administrator must identify the old assumption and develop processes to support that assumption during the period of change. The school administrator must also provide a safe emotional environment for the staff to let go of the old assumption as a new one is being learned. A clear understanding of these assumptions assists the school administrator in understanding the staff reaction to change and offering support to manage those reactions.

In their book *The Principal's Role in Shaping a School Culture*, Deal and Peterson (1990) provided several strategies that a principal could use to shape, change, or reinforce a school's existing culture. They viewed the principal as a symbol, potter, poet, actor, and healer and offered insights based on these metaphors. The administrator who views organizational culture as a metaphor understands the many facets and uniqueness of the school and the emotional attachment the staff have to the school. It also helps to identify the idiosyncrasies of the school that are connected to the belief systems, common language, and expectations. To understand a school's culture, it is imperative to go beyond the superficial and discover the underlying assumptions. Key points in understanding underlying assumptions include

- Being able to read a culture through a historical perspective,
- Listening to the voices of staff to determine the influential members,

- Understanding the numerous roles of the school leader and staff members, and
- Understanding the established patterns of how members of the organization feel and communicate.

These key points inform the leader about the established culture of a school that must be considered when developing solutions to problems or proposing change. It is imperative for the school leader to understand the key roles of influential people in the organization in order to reach a consensus for change. Deep change will occur with an understanding and respect for the values and beliefs of the organization and a blending of these assumptions into new frameworks.

Social/Cultural Theory and Student Achievement

One of the most important tasks of an elementary school teacher is to teach students how to read. This assignment is typically carried out in a self-contained classroom in which the teacher instructs the same group of students in all subjects for the entire day. Basic reading skills are taught in the kindergarten to first grade level with a solid command of reading typically achieved by the third grade. According to the National Academy Press and the Committee on the Prevention of Reading Difficulties in Young Children (as cited in National Center for Education Statistics, 2004a), “Researchers, policy makers, and practitioners maintain that by the spring of kindergarten children should be able to recognize the letters of the alphabet quickly and effortlessly and understand the letter-sound relationship at the beginning and ending of words” (p. 22).

As children enter school at kindergarten, they bring with them a different set of knowledge and skills in reading, and many children come from culturally diverse backgrounds. Some may recognize the letters of the alphabet, whereas others may know the sounds of those letters. Additionally, some students may enter kindergarten without a proficient ability in the English language. According to the National Center for Education Statistics (2004a) report, *Children's Reading and Mathematics Achievement in Kindergarten and First Grade* (NCES-K-1), "The knowledge and skills they bring with them together with the development of their reading and mathematics knowledge and skills potentially lays the foundation for their later learning and school experiences" (p. 24). This report was third in a series that provided descriptive information on children's gains and experiences in reading and math. This study tracked and monitored the reading and math achievement of a cohort of approximately 20,000 children starting with the kindergarten class of 1998-99. This sample included students of poverty and non-poverty status as well as a comparative sample of White, Black, Asian, and Hispanic children. The report described the reading and math achievement of this cohort of students during the spring of first grade. Later reports (NCES, 2004a) described achievement of this group through the fifth grade and provided information on how children's early literacy skills, approaches to learning, and general health at kindergarten shaped their later achievement. Resources required to maintain and promote continued educational success were identified.

The results of this study (NCES, 2004a) indicated that children who came from a positive literacy environment, who were read to at least three times per week, who possessed a positive approach to learning, and who enjoyed good to excellent general health performed better after

one or two years of schooling compared to children who did not have these resources. There were also differences in achievement by race/ethnicity. In the spring of first grade, White and Asian children were more likely than Black or Hispanic children to recognize words by sight and understand words in context. Hispanic children were more likely than Black children to demonstrate proficiency in these skills during the same time period. This valuable information is pertinent for understanding the implications of the changing demographic nature of our elementary students, particularly in Arizona, and the implications this demographic change has on early assessment and intervention strategies for the at-risk student.

According to U.S. Census Bureau (2004) statistics, between 2000 and 2004, the Hispanic population in Arizona increased by approximately 289,000 people as compared to the Black population which increased by 11,000 people . A combined total of both minority groups represented approximately a 4.5 % increase in population over a period of four years for the State of Arizona. This pertinent information demonstrates the key points of the demographic changes in Arizona and these demographic changes have implications for an increase in minority students in schools.

In a report published by NCES (2004b), of the approximately 1,009,000 elementary teachers in the United States, 40.2% held a master's degree and only 5.1% majored in reading in a graduate program. These statistics reflected teachers who were responsible for teaching core curriculum content areas, including reading. With the combined results from the NCES-K-1 (2004a) study, the increasing minority population in Arizona, and the percentage of elementary teachers who majored in reading, it is imperative that the school administrator and classroom

teacher have knowledge and expertise in issues pertaining to cultural diversity. Teachers must have a plethora of sound instructional strategies for teaching students who are diverse learners in order for them to increase the likelihood of a positive learning experience at school.

The pressure for teachers to change their institutional practices toward work with individual students to accommodate multiple intelligences and meet the needs of students with diverse ethnicities means the culture of the school must also embrace and celebrate the diverse backgrounds of students. In Sonia Nieto's book, *Affirming Diversity* (2000), the author differentiated between racism and prejudices and discussed the effects of discrimination on students. Nieto defined *prejudice* as the "attitudes and beliefs of individuals about entire groups of people" (p. 34). Our society classifies people based on gender, social class, appearance, and perceptions. Often times these classifications, that can be positive or negative, result in gross inequities. Individual classifications have a limiting effect on the entire group as a result of the belief that all people of the same group act in a similar manner. Nieto went a step further by defining *racism* as the "negative or destructive behaviors that can result in denying some group's life's necessities as well as the privileges, rights and opportunities enjoyed by other groups" (p. 34). Nieto contended that the organizational nature of schools, such as teaching ability, inequity in funding, and low expectations for minority students, resulted in "institutional discrimination" (p. 34). The deep-rooted effects of institutional discrimination result in the systematic use of economic and political power in schools. For example, the push toward raising student achievement and school accountability brought to the forefront ethnic groups whose members had been underperforming. These groups of students may be labeled, grouped, or tracked for

additional help with the purpose of raising test scores. Furthermore, there is widespread concern about the underachievement of students with disabilities who are from minority populations, and the disproportionate representation of students from culturally and linguistically diverse groups in special education persists (Banks, 2002). This disproportionate representation has been attributed to the students and their families (Nieto, 2000), but it is important for school leaders to examine the curricular, pedagogical, and organizational structures of schools to identify these inequities. An empowering school culture is one in which all students experience educational equity and choice in all aspects of schooling. Assessment, curriculum, and instruction should reach beyond the traditional measurement techniques to include complex skills measured in all academic areas.

According to Banks, Cookson, Gay, Hawley, Irvine, and Nieto (2004), “Effective citizenship in a multicultural society requires individuals who have values and abilities to promote equality and justice among culturally diverse groups” (p. 6). Banks et al. further contended that schools should use a holistic approach for delivering curriculum rich in multicultural knowledge for all students to experience academic success. The major goal of multicultural education is to allow students to acquire the knowledge, attitudes, and skills they need to succeed in an ethnically and racially diverse nation and world (Banks, 2002). Multicultural education goes beyond instruction and questions basic assumptions about the structure of schools and the purpose of education. Although academic skills are a necessary component for success in our global society, students must have the knowledge, attitude, and

skills necessary to interact positively with people from all cultural backgrounds to expound the social justice we endeavor in our democratic society.

What is School Leadership?

At the core of most definitions of leadership are two functions: providing direction and exercising influence (Hallinger & Heck, 1996). Leaders organize and work with others to accomplish shared goals. Principals, who are the educational leaders of their schools, work with others to create a shared sense of purpose and direction. Principals also establish the conditions that encourage others to be effective. In education, the final result is increasingly focused on student achievement (No Child Left Behind Act). This includes the development of academic goals and the learning of appropriate social and personal behaviors.

Marzano et al. (2005) conducted a meta analysis of the research concerning educational leadership and its relationship to student achievement and successful schools. One conclusion from Marzano et al.'s research was that leadership had significant effects on student learning, second only to the effects of quality of curriculum and the quality of the teacher's instruction. In order to learn, students need access to high-quality instruction and a well-designed curriculum. Following these two points, students benefit most from the positive effects of strong school leadership. This case study of schools with high student achievement indicated that the principals of these schools influenced learning mainly by inciting effort around aggressive school-wide goals and providing the conditions and resources that helped students become successful.

Kenneth Leithwood conducted numerous empirical studies related to the effects of leadership behaviors and positive school outcomes (Leithwood, 1990, 1994, 1995; Leithwood & Jantzi, 1996). These studies were conducted in schools that were undergoing organizational reform and primarily compared principals who were successful at school improvement with their less-effective peers. Leithwood's (1996) study reported positive effects of principal leadership behaviors based on teachers' perceptions of such behaviors. Leithwood used a theoretical framework adapted from the work of Lord and Maher (as cited in Leithwood & Jantzi, 1996) to explain cognitive processes associated with teachers' development of leadership perceptions. According to Lord and Maher, there are two ways teachers' perceptions of leadership behaviors are formed: (1 information on leadership prototypes is stored in the teacher's long-term memory, and the recognition of principal leadership behavior is activated by observed behavior on the part of the principal and compared to leadership behaviors stored in the long-term memory and (2 through a series of observable events and experiences in which the principal is involved, perceptions of the principal result from the teacher's judgment that those events had desirable results. Lord and Maher explained that "The influence associated with leadership depends on a person's behavior being recognized as leadership by others who thereby cast themselves into the role of followers (p. 513)."

According to Leithwood (1990, 1994, & 1995) and his colleagues (Leithwood & Jantzi, 1996), a core set of leadership behaviors provides the foundation for successful school leadership. These leadership behaviors

are well suited to such challenges (school reform) because of their potential for building high levels of commitment to one complex and uncertain nature of the restructuring agenda, and for fostering growth in the capacities school staffs must develop to respond productively to this agenda (1996, p 515).

These leadership behaviors include

1. Provides vision. Behavior on the part of the principal aimed at identifying new opportunities for his or her school leadership team and developing, articulating, and inspiring others with his or her vision of the future. Effective principals help their schools to develop and endorse visions that embody the best thinking about teaching and learning, and they guide others to reach these goals. They communicate the vision clearly and convincingly.
2. Models appropriate behavior. Behavior on the part of the principal that sets an example for others to follow consistent with the values the principal espouses. By modeling desired dispositions and actions, principals can enhance others' beliefs about their own capacities and their enthusiasm for change.
3. Fosters the acceptance of group goals. Behavior on the part of the principal aimed at promoting cooperation among school staff members and assisting them to work together toward common goals. New models of schools as professional learning committees emphasize the importance of shared goals and effort.
4. Provides individualized support. Behavior on the part of the principal that

indicates respect for school staff members and concern about their personal feelings and needs. Principals provide incentives and structures to promote change, as well as opportunities for individual learning and appropriate means for monitoring progress toward improvement.

5. Provides intellectual stimulation. Behavior on the part of the principal that challenges school staff members to reexamine some of the assumptions about their work and rethink how it can be performed. Principals provide information and resources to help people see discrepancies between current and desired practices. They enable teachers and others to understand and gain mastery over complexities of necessary changes.
6. Holds high performance expectations. Behavior demonstrates the principal's expectations for excellence, quality, and high performance on the part of the school staff. Effective expressions of high expectations help people see that what is being expected is in fact possible.

The leadership of any organization is complex and demands certain competencies. Successful educational organizations identify an educational leader who can focus the group's attention and efforts toward a common goal or vision. Leaders establish a direction and vision, serve as role models, are effective communicators, provide convincing leadership, bring out the best in people, are proactive, and are able to make decisions in a time of crisis (Fullan, 2001). Our educational institutions require a versatile leader who has multi-tasking abilities to perform

the necessary daily tasks, which includes providing the necessary resources and supports to teachers to improve student achievement.

Integrating Organizational Theory, Change, and School Culture

There is a substantial amount of literature and research on organizational theory, culture, and change and the effects on student achievement. Yet a review of the literature resulted in a paucity of information connecting leadership qualities, student learning, the implementation of a reading assessment called curriculum-based measurement, and the use of instructional interventions for at-risk students. Although curriculum-based measurement was developed over 30 years ago (Deno, 1998), it is now being used in public schools in Arizona as a response to intervention method for early identification of reading difficulties as required under NCLB (2001).

Curriculum-Based Measurement

Identifying appropriate ways for teachers to assess students' skills in the area of reading is critical in helping all students succeed in school. Some assessments that teachers typically use, such as informal inventories or teacher-made tests, lack reliability and most lack treatment validity (Reschly & Grimes, 2002). Treatment validity is important because it shows that the results of a test can be used to drive instruction. Among the numerous options for assessment is curriculum-based measurement. This is an alternate approach to testing that includes a simple set of procedures for frequent and repeated measurement of student achievement.

Curriculum-based measurement (CBM), developed by Stanley and Phyllis Mirkin (as cited in (Deno, 1998) at the University of Minnesota Institute for Research on Learning Disabilities, is a data-based approach to making instructional decisions. It is designed to be an objective, ongoing measurement system for student outcomes that facilitates enhanced instructional planning. Deno noted that CBM can be used to “create a data base for each student to allow the teacher to evaluate the effectiveness of an individual student’s educational program” (p. 57). This data base allows educators to determine whether a student is making appropriate progress by using a trajectory of scores, given the instruction they are receiving. Used in the general education classroom for monitoring progress, CBM has the potential to differentiate students with disabilities from those needing remedial instruction from those who are progressing well within the regular classroom. CBM is a set of standardized procedures that teachers can use to measure growth in basic skills such as reading, writing, and math. When the expected growth rate is less than expected, the instructor can impart remediation in specific areas of reading based on the data. According to Deno (1998), CBM is part of a formative evaluation system, based on the curriculum and designed to collect data and measure student progress. CBM is not a specific test but a process of gathering information about student achievement based on the same materials used in the classroom.

In recent years, the use of student test data, matched to the curriculum, has been emphasized as an avenue to improve instruction and increase involvement in the general curriculum for low achievers (Gersten, Keating, & Irvin, 1995). According to Shapiro (1996) and Shinn (1989), CBM (Deno, 1998) was established as a reliable and valid measure of academic

achievement in the basic skills of reading, writing, spelling, and mathematics. It can inform educators which students may not be able to attain the desired standards according to state requirements. In order for this method to be effective, critical benchmarks are established, and progress monitoring is performed periodically to determine the progress of students identified as at risk for not meeting the established goals. It can result in reliable feedback on the effectiveness of instructional interventions, further establishing the link between curriculum, intervention, and CBM. According to Shinn, “Teachers could gain specific information about student performance that could be incorporated into instructional planning, intervention to target the strengths and weaknesses that affect reading achievement, and program evaluation regardless of the etiology of the reading difficulty” (p. 98). This information can be used to inform school personnel which students have a high probability of successfully progressing through the curriculum in specific targeted areas. According to Gickling and Havertape (1981), CBM measures are “reliable and yield consistent results” (p. 24). They provide information that leads to improved instruction and educational programs and have provided general education teachers with an efficient tool for measuring student growth and signaling a need to change instructional strategies. Therefore, educators can adjust what and how they teach to effectively meet the needs of each student. It has been demonstrated that students of teachers who use CBM to inform instruction achieve higher grades than students whose teachers do not use CBM data (Fuchs & Fuchs, 1986).

A study conducted by Silby, Biwer, and Hesch (2001) involved the use of CBM (Deno, 1998) as a predictor of success on state reading tests. The results indicated a strong link between CBM oral reading fluency and performance on the state achievement test. This research further

indicated that second grade children reading at 50 words per minute as tested through CBM would have desirable outcomes on future achievement tests. When assessing against state academic standards, which are reflected in the grade level curriculum, more realistic tasks provide information for establishing students present level of performance and the amount and area in which additional intervention is needed (Hargrove, Church, Yssel, & Doch, 2002). CBM can be used to develop curriculum and student skill (Kovaleski, Tucker, & Duffy, 1995). Data-based decisions on early literacy skills can help define the strategies and materials needed to increase achievement in the early years of reading acquisition.

Since the development of CBM (Deno, 1998), there have been numerous articles and books describing how to implement CBM, use it to drive classroom instruction, screen students who are at risk, and use the results for referral for more comprehensive testing. It has only been recently that there has been a shift in focus from the more traditional methods of teaching students to read to instructional practices based on research and evidence. Recent legislation has also prompted a greater attention to CBM. This shift is evident in the No Child Left Behind Act (2001) which emphasized early intervention in reading and the measurement and evaluation of student outcomes. In response to No Child Left Behind, Arizona adopted a prevention model for reading that forms the foundation of the state reading initiative, Arizona Reads (2001). Arizona Reads holds schools and districts accountable for implementing evidence-based programs, materials and instructional practices, using screening, diagnostic and progress monitoring assessments to drive instruction (2001).

A key component in this process is to use a response-to-intervention method of ongoing assessment based on classroom instruction to identify at-risk students and target these students for early (No Child Left Behind Act) intervention methods of teaching. According to the Arizona Department of Education (2004), “By continuously monitoring student progress and adjusting instruction accordingly using evidence-based strategies, we can prevent reading difficulties from becoming reading problems and reverse the cycle of failure many of our students currently experience” (p. 2). Subsections A and D of Arizona Reads provided further explanation and guidance pertaining to the selection and use of early intervention in reading, progress monitoring, assessments, and the use of a response to intervention for students who manifest reading difficulties. Based on the policies outlined in Subsections A and D of Arizona Reads (2001), the State of Arizona formed a task force to review assessment systems that meet those criteria. The three assessment systems, Texas Primary Reading Inventory (Arizona Department of Education, 2004), AIMSweb Curriculum Based Measurement Reading Assessment System (2004), and the Dynamic Indicators of Basic Early Literacy Skills (Institute, 2002) were approved by the Arizona State Board of Education with the intent to provide consistency in instructional practice and assessment across the state. These three assessment systems find their roots in the response-to-intervention method of instruction called curriculum-based measurement and can be used to evaluate and monitor individual student progress and infuse specific reading strategies into the curriculum for the at-risk student.

One component of this research study is focused on the DIBELS (Institute, 2002) assessment approach and the types of teacher interventions used with students identified at risk

for reading failure. As stated earlier, this assessment defines the at-risk student as one who does not meet a specified benchmark score, the lowest score that predicts reading success, in one or more of the following subtests: phonemic awareness, phonics, fluency with connected text, reading comprehension, and vocabulary (Kaminski & Good, 1998). This approach has been adopted by several school districts in Arizona as a reliable and cost-effective assessment system to identify the at-risk learner in reading and to monitor student achievement in specific areas of reading.

Dynamic Indicators of Basic Early Literacy Skills

The Dynamic Indicators of Basic Early Literacy Skills (Institute, 2002) is a curriculum based measurement system intended to provide school-based data to inform instruction and to review school level outcomes (Good, Gruba, & Kaminski, 2001). DIBELS is based on an Outcomes-Driven Model (Good, Gruba, & Kaminski, 2001) to “identify children who need additional support, and to evaluate and modify instruction on an ongoing, formative basis to ensure that all children achieve high stakes reading goals” (p. 679). The DIBELS techniques, used for measuring growth and development of early literacy skills in kindergarten through third grade, were developed at the University of Oregon (Kaminski & Good, 1996a, 1998). These techniques were developed to monitor growth in the development of early literacy skills to (a) identify children in need of intervention and (b) evaluate the effectiveness of intervention strategies.

Evidence substantiates that reading competence is influenced by proficiency on fundamental skills in early literacy. These skills are prerequisite to later reading success and differentiate successful from unsuccessful readers (National Reading Panel, 2004). DIBELS is based on the five reading skills that are crucial to successful reading ability. These skills include phonological awareness, alphabetic principal, accuracy and fluency with connected text, comprehension, and vocabulary (Good et al., 2001; National Reading Panel, 2000). The data are collected on individual students three times per year and are used to determine which students are on target for successful reading achievement in that grade and which students are at risk for reading failure. Students whose test results fall within the strategic or intensive range on one or more of the reading subtests are considered at risk and in need of intensive, slow paced, or individually tailored instruction. This information is used in an Outcomes-Driven Model that includes

- Defining the problem,
- Developing a plan and adjusting the curriculum,
- Implementing of the intervention,
- Evaluating the intervention, and
- Monitoring and adjusting as needed.

In reading, for example, the student reads brief passages from grade level reading material. The passages are read aloud for one minute, and the number of words read correctly is recorded. Because research shows this procedure to be highly related to general reading skills, monitoring words read correctly in reading curriculum is an efficient way to assess reading progress

(Pemberton, 2003). Data collected through measurement of student skill as it is aligned with curriculum can be used to assess instructional strategy and assist individual program delivery. Student progress is monitored and graphed to visually display progress as compared to predetermined goals. This growth can be watched to evaluate whether the instructional intervention is effective and if the child is progressing at the appropriate rate. These goals are determined by establishing a baseline of where the average student is functioning on the state reading standards as compared to the at-risk student. Achievement goals can be established based on the student's instructional deficit. Instruction for the at-risk student is adjusted to the individual area of instructional deficit. Progress monitoring, in the form of post-baseline data points, measures progress after intervention and to establish goals. If a student's rate of growth in performance is not moving in the desired direction toward the selected behavioral objective, a decision can be made to change or adjust teaching strategy. A comparison of learning rates to the progress in the general curriculum can be used to determine the need for further, more comprehensive testing. This Outcomes-Driven Model is based on the problem-solving models of Dewey (1933), Deno (1989), and Shinn (1995) and has been applied by Kaminski and Good (1998) to early literacy skills. This model provides an assessment for prevention and a decision-making model for reading interventions. It is designed to identify early reading difficulties and guide teachers in making intervention decisions based on the assessment data. The model considers a continuous cycle or loop in which teacher instructional decisions are based on identifying the at-risk student, planning and providing instructional interventions, evaluating student progress, and modifying the instructional support. Instructional interventions can include

the use of one-to-one instruction, small group instruction, adapted core curriculum materials, or the use of technology. Based on the student's progress toward a reading goal, the intervention can be changed, the change can be assessed, and the instructional plan can be modified as needed. The cycle is monitored three times per year during the benchmark assessment stage of the process. This assessment-intervention feedback loop is realized when the student is making progress toward a particular reading goal (Good et al., 2001).

At a time when teachers want to know how to best increase student reading performance and how to change beginning reading outcomes, a CBM system, such as DIBELS (Institute, 2002)), can provide frequent and important information on how well students are progressing in learning the early basic literacy skills needed to become a successful reader. This information can be used to drive instruction for at-risk students, monitor progress of all students in the reading curriculum, select materials for classroom instruction, guide professional development, and make sound educational decisions.

For purposes of establishing a conceptual framework for this study, the researcher proposed a model that depicts principals' behavioral influences on teachers' perceptions in selecting instructional methods and displayed them in a model (see Figure 1.1). The model implies and illustrates the sequence and processes of principal leadership behaviors. Teacher's perceptions of the principal leadership behaviors influenced their identification of instructional strategies used with students at risk for learning to read (see Figure 1.1). This model was adapted from the research on principal leadership behavior (Leithwood, 1990, 1994, 1995;

Leithwood & Jantzi, 1996) and on the Outcomes-Driven Model of curriculum-based measurement as reported by Good, et al. (2001).

The model includes Leithwood's (1996) leadership behaviors, which are represented in the boxes vertically on the left in the model. The strength of the model is enhanced for two major reasons: First, Leithwood's research was conducted with teachers in schools undergoing newly implemented initiatives and reform which is exactly the conditions under which this study was conducted: Second, the six principal leadership behaviors were identified as critical behaviors principals must espouse to ensure positive change within their schools. According to Leithwood and Jantzi (1996), under reform conditions, "The most powerful variable explaining teacher's leader perceptions, in-school conditions, encompasses the school's mission, vision and goals; culture; programs and instruction, policies and organization; decision-making structures; and resources" (p. 530). As the researcher's model demonstrates by lines and arrows, the leadership behaviors of principals have a direct effect on teacher's perceptions of those behaviors.

The model, based on the study, loosely infers that the caliber of principal leadership behaviors in a school can have an influence on a teacher's willingness to support the school vision, ability to work toward group goals, and implement the changes to reading instruction as required under NCLB (2001), state, and school district mandates. One such change is the requirement for all schools to adopt a research-based assessment to identify students who are at risk for learning to read. In response to this requirement, the school district in which this study was conducted adopted the Dynamic Indicators of Basic Early Literacy Skills (Institute, 2002) in 2003. DIBELS was one of three assessments approved by the Arizona Department of Education

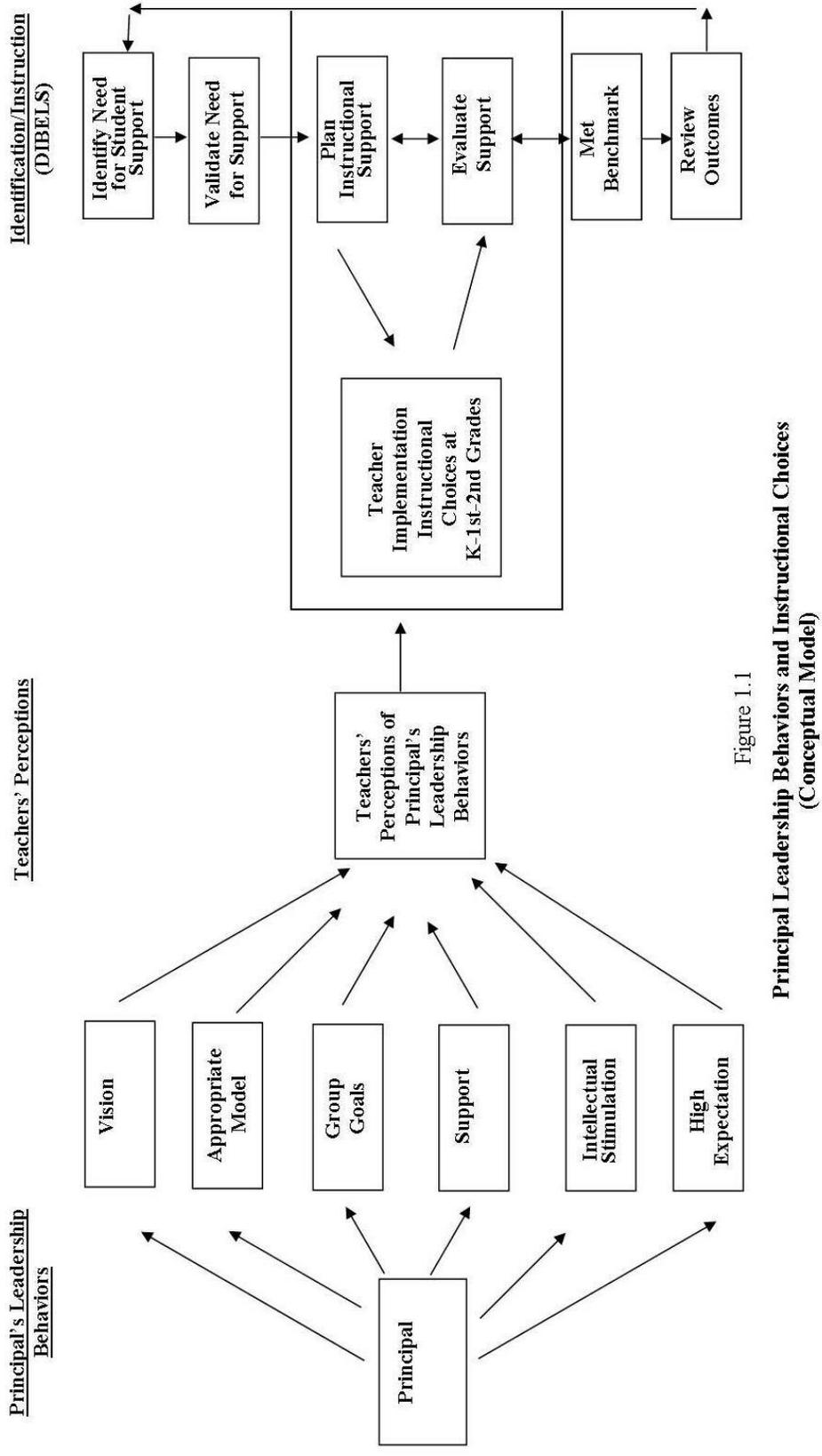


Figure 1.1

Principal Leadership Behaviors and Instructional Choices (Conceptual Model)

Adapted from—Good, et al., 2001
Leithwood & Janzti, 1996

as a reliable assessment system to identify the at-risk learner in reading and to help monitor student achievement in specific areas of reading. This assessment is grounded in the principles of the Outcomes-Driven Model (Good, et al., 2001).

In the illustration, the Outcomes-Driven Model on the right provides the framework for (a) identifying students in need of intervention and (b) evaluating the effectiveness of intervention strategies. First, students are identified based on performance indicators on a curriculum based measurement assessment. Second, informed by these results, teachers plan instructional support in the area of reading that is identified as at risk. Third, teachers implement instructional strategies to provide remediation in the area of need. The reading assessment data are collected on individual students three times per year and are used to determine which students are on target for successful reading achievement in that grade and which students are at risk for reading failure. According to the research of Good et al. (2001), “A premise of the Outcomes-Driven Model is effective instruction incorporates an integrated, ongoing assessment-interaction feedback loop” (p. 697). The model illustrates a continuous cycle in which teacher’s instructional decisions are based on identifying the at-risk student, planning and providing instructional interventions, evaluating student progress, and modifying the instructional support. As shown in the model, the types of teacher instructional choices may be affected by the teacher’s perceptions of their principal leadership behaviors. This process results in a continuous cycle of principal leadership behaviors, teacher’s perceptions of such behaviors, identification of students at risk for reading, and the

impact of the teachers' perceptions of principal leadership behaviors on instructional choices for at-risk students.

Summary

The increased need in our society for citizens who are highly skilled and able to compete in a global economy has resulted in pressure at the school level to increase student achievement. Recent legislation, through No Child Left Behind (2001), will have a far-reaching effect on our delivery of educational opportunities for all students. As schools across the nation monitor and adjust to the challenges of this law, a new wave of creative thought and innovative practice must occur. Leaders at the district and building level must embrace the opportunity to make a profound impact on learning and student achievement through a keen understanding of leadership theory and research. There must be a strong commitment to all students, including understanding the learning styles and cultures of minorities and students with disabilities, to offer equitable learning opportunities for student achievement. It is the leader with a strong drive and commitment, who is willing to risk change and challenge and who believes in shared decision making, who will successfully improve learning opportunities for all students.

The skills described in this chapter in the areas of problem solving and change, as well as organizational, structural, and social/cultural theory, provide multiple lenses through which a school leader can develop an understanding of how issues can be reframed to provide multiple perspectives. The challenge of the school leader is to understand and use these fundamental theories to propel the organization forward,

support teachers, increase student achievement, and provide equal opportunities for all children. A principal who can view situations through multiple lenses and who has the ability to reframe situations will have a long-lasting, positive impact on organizational change. It is the principal who has a positive vision of the future and who can translate that vision into action to unite teachers in a common goal who will improve learning. These leadership qualities are imperative for the school principal because the need for reform is evident, and the increased threat of negative sanctions for schools is prevalent.

Leithwood (1994) described six principal leadership skills that provide schools with rich opportunities to embrace change and increase student achievement. Leithwood's leadership skills of providing an appropriate model, providing intellectual stimulation and providing individualized support clearly emulate the human resource frame of Bolman and Deal (2003). Providing an appropriate model can also be considered as part of the symbolic frame, and fostering the acceptance of group goals can be considered as part of the political frame. Visionary leadership can be identified with the political frame as principals use this leadership behavior to guide staff to new opportunities.

Through the use of curriculum-based measurement, opportunities to enhance the quality of teaching and improve student achievement can occur. The DIBELS (Institute, 2002) assessment can be used to identify students who are in need of additional intervention to improve reading skills at an early age. It can also forecast student success in later years in school. In order for this to occur, staff must have a clear understanding of the DIBELS procedures and must have professional expertise in the area of intervention

techniques. The principal who has a sound knowledge and belief in organizational and cultural theory will be able to guide the staff, students, and parents to partake in the seamless implementation of this assessment. Under the guidance of a principal who embraces shared decision making, Cuban's (2001) notion of second-order change or fundamental change in the way a school operates can successfully occur. Leadership viewed through the model of teamwork envisions leadership role-taking on the part of all professional educators as essential to developing schools as learning organizations. The key components of the four frames to organizational leadership, change theory, problem solving, and shared decision making can provide opportunities that are considered essential to school reform, improvement, and enhanced educational opportunities for all students.

Efforts to improve student achievement should build upon the foundation of well-researched knowledge of educational leadership that already exists. Based on Leithwood and Jantzi's work in 1996, we know that school leadership is most successful when focused on teaching and learning. Marzano et al.'s (2005) analysis synthesized 69 studies on educational leadership and school effects and quantified several key points about school leadership. One key point was the positive relationship between school leadership and student learning, second only to the effects of quality of curriculum and the quality of teacher instruction. Cotton's (2003) narrative review of 56 reports of the effect of principal leadership on student achievement concluded that principal leadership did have an effect on student outcomes, albeit an indirect one. These effects are mediated through teachers.

The empirical research clearly shows a strong nexus between principal leadership, teachers' instruction, and student achievement, but there are still many gaps in our knowledge about effective educational leadership. For example, what is the relationship between principal leadership behaviors and teacher instructional choices for at-risk students? Castellon (2006) conducted a pilot study as an initial inquiry into this question. The purpose of the pilot study was to test the research questions and methodological procedures and to set the stage for a larger research study. The research design is explained in Chapter 3.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Purpose of the Study

The purpose of this study was to examine the relationship between principal leadership behaviors as perceived by teachers and the types of interventions used with at-risk students. The principal leadership behaviors are based on the work of Leithwood and Jantzi (1996). In addition to these leadership behaviors, the study included a second variable inquiring about the types of interventions used by teachers for at-risk students. Students defined as at risk do not meet a specified reading benchmark score, the lowest score that predicts reading success as determined on the Dynamic Indicators of Basic Early Literacy Skills assessment (2002). Instructional interventions are defined as instructional choices used by teachers for at-risk students in reading that include one-to-one instruction, small group instruction, adapted core curriculum materials, and technology.

This chapter outlines the processes and procedures for this research study. The first section provides an overview of the research design, followed by a restatement of the research questions. Subsequent sections describe the population and sample used in the study, instrumentation, data collection, and the data analysis methodology.

Research Design

The principal investigator used a within-stage mixed model research design (Johnson & Christensen, 2004). Using this design, the principal investigator conducted the research stages sequentially. First, the quantitative stage of the study addressed the research questions by administering a questionnaire instrument to 70 kindergarten through second grade teachers. This questionnaire presented six principal leadership behaviors and included a question asking teachers to identify instructional interventions used for at-risk students. The results of the questionnaire were analyzed to determine the relationship between teachers' perceptions of principal leadership behaviors and instructional choices of reading interventions used by teachers with at-risk students. Second, the qualitative stage of the study selected pertinent findings from the quantitative study stage to guide the shaping of questions for the focus group discussion (Rea & Parker, 1997). Focus groups, following the qualitative methods described by Mason (1996), were conducted with volunteer participants from the selected schools. Focus groups were conducted to add breath and depth to some responses from the leadership questionnaire. From transcribed data, the concepts, ideas, and themes of the teachers' perceptions of their principals' leadership behaviors were carefully sorted and reviewed to accurately match with the type of instructional interventions used by teachers for at-risk students. The third stage mixed quantitative and qualitative data analysis to examine descriptive statistics results and identify categories, themes, and patterns from focus group results. The combined results informed the interpretation of the data.

The study investigated the following research questions:

1. What are the relationships between the six principal leadership behaviors (provides vision, models appropriate behavior, fosters commitment to goals, provides individualized support, provides intellectual stimulation, holds high performance expectations) as perceived by teachers providing reading instruction to students identified at risk?
2. Is there a difference between the instructional choices of teachers with at risk students and the teacher's perceptions of the six principal leadership behaviors?
3. What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

Population and Sample

Permission to conduct this study and to review the DIBELS (Institute, 2002) assessment results was obtained from a school district in Southern Arizona. From the pool of DIBELS assessment results, six elementary schools that had students at risk for reading in grades kindergarten through second grade were identified. Seventy teachers from these schools were asked to voluntarily participate in this study. In each school, kindergarten through second grade teachers were asked to participate in the quantitative part of the study. Following completion of the questionnaire, these teachers were asked to voluntarily participate in a focus group discussion. Twenty one teachers were chosen

for the four focus groups, with approximately five kindergarten through second grade teachers in each group. The focus groups were conducted by the researcher.

Instrumentation

The Principal Leadership Questionnaire (PLQ) (Valentine & Lucas, 2000) was the instrument used to collect data for this study (see Appendix A). The PLQ was developed at the Middle Level Leadership Center by Jerry Valentine and Stephen Lucas and was based on the work of Leithwood and Jantzi (1996). The researcher contacted Jerry Valentine, Kenneth Leithwood, and Doris Jantzi (personal communication, February 14, 2006) and received permission to use the PLQ which is composed of 24 Likert-type items. The Likert scale ranges for each item on the questionnaire were (1) strongly disagree, (2) disagree, (3) agree, and (4) strongly agree.

The PLQ (Valentine & Lucas, 2000) measures six principal leadership behaviors that include

1. Provides vision. Behavior on the part of the principal aimed at identifying new opportunities for his or her school leadership team and developing, articulating, and inspiring others with his or her vision of the future. This scale included five items with a reliability coefficient (Cronbach's alpha) of .88 (Cronbach, 1951).

2. Models appropriate behavior. Behavior on the part of the principal that sets an example for school leadership team members to follow consistent with the values the principal espouses. This scale included three items with a reliability coefficient (Cronbach's alpha) of .86.
3. Fosters commitment to goals. Behavior on the part of the principal aimed at promoting cooperation among school leadership team members and assisting them to work together toward common goals. This scale included five items with a reliability coefficient (Cronbach's alpha) of .80.
4. Provides individualized support. Behavior on the part of the principal indicates respect for school leadership team members and concern about their personal feelings and needs. This scale included five items with a reliability coefficient (Cronbach's alpha) of .82.
5. Provides intellectual stimulation. Behavior on the part of the principal that challenges school leadership team members to reexamine some of the assumptions about their work and rethink how it can be performed. This scale included three items with a reliability coefficient (Cronbach's alpha) of .77.
6. Holds high performance expectations. Behavior demonstrates the principal's expectations for excellence, quality, and high performance on the part of the school leadership team. This scale included three items with a reliability coefficient (Cronbach's alpha) of .73.

An additional question developed by the researcher inquiring about the types of interventions used by teachers for at-risk students was included with the PLQ (Valentine

& Lucas, 2000, see Appendix B). This question was reviewed by a panel of five experts to determine clarity and conciseness. The question included

For each item below, indicate a percentage to reflect the amount of time, per week, you use the following interventions for at-risk students you identified from the DIBELS assessment. The total percentage amount should equal 100.

- _____ One to one instruction (teacher: student identified at risk)
- _____ Small group instruction (teacher: 2-5 students identified at risk)
- _____ Optional core reading curriculum materials
- _____ Technology (use of computer programs in the area of identified risk)
- _____ Other (Please explain)

A pilot study was conducted by the researcher to clarify the problem, establish the research questions, and test the questionnaire and methodological procedures that led to more precise practices for this dissertation (Castellon, 2006). Four teachers were selected to voluntarily participate in the completion of the PLQ (Valentine & Lucas, 2000) and to participate in a focus group interview. The focus group interview schedule clarified the nature of teachers' perceptions of the principals' leadership support for teaching at-risk students (see Appendix C). The researcher developed this instrument. The questions were based on the work of Blase and Blase (1999), Glickman (1985), Pajek (1993), and Shon (1988), and the researcher selected pertinent findings from the quantitative study stage to guide the shaping of the questions for the focus group discussion. The results of the pilot study focus group were analyzed to examine descriptive statistic results and identify categories, themes, and patterns. The results from the pilot study focus group

revealed questions that were vague and allowed the researcher to revise the interview schedule to add preciseness and clarity to the questions. The revised questions were further reviewed by a panel of experts to add precision and to guide the shaping of the questions for the dissertation study. The focus group questions included

1. What is your principal's vision for the school?
2. Give examples of how the principal supports his or her vision for the school through daily actions.
3. How does the principal assist staff in working toward common goals?
4. How does the principal support professional development opportunities for staff working with at-risk students?
5. What resources are most important to you when working with at-risk students?
6. How does the principal stimulate you to rethink your instructional interventions and academic goals for at-risk students?
7. What are your principal's expectations for your staff? Students?
8. Given four instructional choices for at-risk students, one-to-one instruction, small group instruction, optional core reading curriculum materials, or instructional technology, what principal leadership behavior influenced you to favor a particular instructional choice?

Data Collection

The Principal Leadership Questionnaire (Valentine & Lucas, 2000) was administered to instructional faculty in kindergarten through second grade in six

elementary schools. These teachers were identified through the DIBELS (Institute, 2002) assessment data as teaching at-risk students. Following a recruitment script (see Appendix D), the researcher explained the purpose of the study and asked for voluntary participants to complete the PLQ and participate in a focus group. A manila envelope that included a letter of consent (see Appendix E) explaining the purpose of the study was distributed to each participant. To ensure confidentiality of the responses, the participants were instructed not to place their name on the questionnaire. After completion of the questionnaire, the participants placed the instrument in the manila envelope, sealed it, and returned it to the researcher.

Also included in the envelope was a request for voluntary participants for the focus group interview. Teachers chose to participate in the focus groups immediately following the completion of the questionnaire.

Teachers were notified in writing and in person that the responses in the focus group would be confidential. Participants were not referred to by name during the interview but by a letter on a card placed in front of them. With the teachers' permission, the focus groups were audio taped, and no names were recorded. Participants were informed that the audiotapes would be maintained in a locked cabinet in the researcher's office. After the study was completed and the dissertation accepted, the audiotapes would be physically destroyed.

Data Analysis

Research Question 1

What are the relationships between the six principal leadership behaviors (provides vision, models appropriate behavior, fosters commitment to goals, provides individualized support, provides intellectual stimulation, holds high performance expectations) as perceived by teachers providing reading instruction to students identified at risk?

Pearson Product Moment Correlations were computed to examine the inter correlations of the six principal leadership behaviors on the Principal Leadership Questionnaire (Valentine & Lucas, 2000). The statistical significance (alpha .05) was examined.

Research Question 2

Is there a difference between the instructional choices of teachers with at-risk students and the teacher's perceptions of the six principal leadership behaviors?

Pearson Product Moment Correlations were computed to examine the correlations between the six principal leadership behaviors on the Principal Leadership Questionnaire (Valentine & Lucas, 2000) and the instructional interventions used by teachers with at-risk students. The statistical significance (alpha .05) was examined.

Research Question 3

What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

A descriptive analysis of the focus group responses was conducted. The audio tapes were transcribed, coded, and analyzed by the researcher according to qualitative methods described by Mason (1996). From the transcribed data, the concepts, ideas, and themes of the teachers' perceptions of their principal's leadership behaviors were carefully sorted and reviewed to accurately match them with the type of instructional interventions used for at-risk students.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

Purpose of the Study

The purpose of this study was to examine the relationship between principal leadership behaviors as perceived by teachers and teachers' types of instructional interventions used to teach reading with at-risk students in kindergarten through second grade. The principal leadership behaviors were based on the work of Leithwood and Jantzi (1996) and include (1 identifying and articulating a vision, (2 providing an appropriate model, (3 fostering the acceptance of group goals, (4 providing individualized support, (5 providing intellectual stimulation, and (6 holding high performance expectations. In addition to these leadership behaviors, the study included a second variable created by the researcher that inquired about the influences of the behaviors on the types of instructional interventions used by teachers for at-risk students.

Instructional interventions are defined as instructional choices used by teachers for at-risk students in reading that include one-to-one instruction, small group instruction, optional core reading curriculum materials, and instructional technology. Students defined as at risk did not meet a specified reading benchmark score, the lowest score that predicted reading success as determined on the Dynamic Indicators of Basic Early Literacy Skills (Institute, 2002) assessment. The State of Arizona adopted DIBELS as a scientifically based reading assessment instrument in compliance with Reading First statues of NCLB (2001).

This study's findings were based on the results of a questionnaire administered to teachers in six elementary schools in Southern Arizona who taught kindergarten through second grade students who scored below a specified reading benchmark score on the DIBELS (Institute, 2002) assessment. Data were also collected through four focus groups with teachers in three of the six elementary schools.

Sample Description

Permission to conduct this study and to review the DIBELS (Institute, 2002) assessment results was obtained from a school district in Southern Arizona. This study was also reviewed and approved through the University of Arizona's Institutional Review Board.

From the district's pool of DIBELS (Institute, 2002) assessment results, six elementary schools that had students at risk for reading in grades kindergarten through second grade were identified. The Principal Leadership Questionnaire (Valentine & Lucas, 2000), which included principal leadership behaviors from Leithwood and Jantzi (1996), was administered to 70 teachers who taught students at risk for learning to read. All of the teachers volunteered to participate in the study, and they were all females. The teachers' educational level ranged from a bachelor's degree with 40 additional college credit hours to a master's degree with 15 additional college credit hours. The average number of years of teaching experience was 15 with a range of 1 year to 30 years. Of the 70 participants, three were in their first year of teaching in the school.

The researcher used purposive sampling because it served the need to conduct the exploratory research in the field. In addition, purposive sampling met the need to identify and select particular types of cases (K-2 teachers) for in-depth investigation. Therefore, the researcher was aware that the sampling was less to generalize to a larger population than it was to gain deeper understanding of types (Neuman, 2004) of teachers in selected school settings and grade levels.

Descriptive Findings

For the purpose of clarity, each of the three research questions is restated and followed by the descriptive analysis.

Research Question 1

What are the relationships between the six principal leadership behaviors (provides vision, models appropriate behavior, fosters commitment to goals, provides individualized support, provides intellectual stimulation, holds high performance expectations) as perceived by teachers providing reading instruction to students identified at risk?

Pearson Product Moment Correlations were computed to examine the inter-correlations among the six principal leadership behaviors. The statistical significance (alpha = .05) and magnitude of the relationships were examined.

All of the correlations among the six principal leadership behaviors were positive and statistically significant, $p < .01$. The correlations were all high or moderately high.

The leadership behavior identifying and articulating a vision was correlated with the leadership behavior provides an appropriate model, $r = .82, p < .01$; fosters the acceptance of group goals, $r = .69, p < .01$; provides individualized support, $r = .72, p < .01$; provides intellectual stimulation, $r = .63, p < .01$; and holds high performance expectations, $r = .69, p < .01$. This indicated that teachers who rated their principals highly for providing vision also rated their principals highly for providing an appropriate model, fostering the acceptance of group goals, providing individualized support, providing intellectual stimulation, and holding high performance expectations. This pattern was consistent for all six principal leadership behaviors (see Table 1).

Table 1

Intercorrelations of Principal Leadership Behaviors (N = 70)

Principal Leadership Behaviors	a	b	c	d	e	f
1. Identifying and Articulating a Vision	1.00	.82**	.69**	.72**	.63**	.69**
2. Providing an Appropriate Model	.82**	1.00	.64**	.78**	.63**	.66**
3. Fostering the Acceptance of Group Goals	.69**	.64**	1.00	.65**	.53**	.60**
4. Providing Individualized Support	.72**	.78**	.65**	1.00	.72**	.54**
5. Providing Intellectual Stimulation	.63**	.63**	.56**	.72**	1.00	.46**
6. Holding High Performance Expectations	.69**	.66**	.60**	.54**	.46**	1.00

Note. a = Identifying and Articulation a Vision, b = Providing an Appropriate Model, c = Fostering the Acceptance of Group Goals, d = Providing Individualized Support, e = Providing Intellectual Stimulation, f = Holding High Performance Expectations. p – values in parentheses.

*p < .05, **p < .01

Research Question 2

Is there a difference between the instructional choices of teachers with at-risk students and the teacher's perceptions of the six principal leadership behaviors?

Pearson Product Moment Correlations were conducted to compare the independent variable, instructional choices used by teachers with at-risk students, and the dependent variable, the principal leadership behaviors. Table 2 reflects the teacher's rating of principal leadership behaviors in relationship to the percentage of time used in each instructional intervention.

The results indicated that a number of variables moved in opposite directions, and there was no significance or strength. Except for one significant correlation, teachers who tended to use optional core reading curriculum materials rated their principals low on providing intellectual stimulation, $r = -.27$, $p < .05$, and no relationship existed between teachers' ratings of their principal leadership behaviors and the percentage of time used for interventions with at-risk students (see Table 2).

Table 2

Correlations of Principal Leadership Behaviors and Interventions (N = 70)

Principal Leadership Behaviors	a	b	c	d	e
1. Identifying and Articulating a Vision	-.12	.09	-.20	.08	.13
2. Providing an Appropriate Model	-.04	-.02	-.13	.16	.09
3. Fostering the Acceptance of Group Goals	.07	-.04	-.07	.03	.05
4. Providing Individualized Support	.07	-.06	-.21	.13	.12
5. Providing Intellectual Stimulation	.11	-.04	-.27*	.06	.15
6. Holding High Performance Expectations	-.08	-.04	-.03	.11	.06

Note. a = one-to-one instruction, b = small group instruction, c = optional core reading curriculum material, d = instructional technology, e = other. p – values in parentheses.

*p < .05, **p < .01.

The teachers were disaggregated into subgroups to reflect grade levels of kindergarten, first grade, and second grade to analyze the principal leadership behaviors and the percentage of time used in each intervention by these groups. The sample sizes were small but serve the purpose of this study. The researcher analyzed the differences among the subgroups.

The correlations in the kindergarten teacher sample consisted of several weak correlations moving in opposite directions. Teachers who rated themselves high in using optional core reading curriculum material rated their principal low in articulating a vision, $r = -.38$, $p < .05$, low in providing an appropriate model, $r = -.41$, $p < .05$, and low in providing individualized support, $r = -.41$, $p < .05$. Teachers who rated themselves high in using one-to-one instruction rated their principals low in holding high performance expectations, $r = -.35$, $p < .05$. Teachers who rated themselves high in using small group instruction rated their principal high in providing an appropriate model, $r = .33$, $p < .05$ (see Table 3).

Table 3

Correlations of Principal Leadership Behaviors and Interventions for Kindergarten (N = 23)

Principal Leadership Behaviors	a	b	c	d	e
1. Identifying and Articulating a Vision	-.26	.26	-.38	-.04	.26
2. Providing an Appropriate Model	-.07	.33	-.41	.02	.10
3. Fostering the Acceptance of Group Goals	-.16	.09	-.20	-.14	.23
4. Providing Individualized Support	-.18	.24	-.41	.16	.17
5. Providing Intellectual Stimulation	-.24	-.06	-.25	.25	.27
6. Holding High Performance Expectations	-.35	.11	-.27	.06	.29

Note. a = one-to-one instruction, b = small group instruction, c = optional core reading curriculum material, d = instructional technology, e = other. *p < .05, **p < .01. p – values in parentheses.

The results in the first grade teacher sample consisted of three significant correlations. Teachers who rated themselves high in using the optional core reading curriculum material rated their principal low in providing intellectual stimulation, $r = -.40$, $p < .05$. Teachers who rated themselves high on using other types of instructional interventions rated their principal low in holding high performance expectations, $r = -.31$, $p < .05$. Teachers who rated themselves high in using instructional technology rated their principal high in providing an appropriate model, $r = .44$, $p < .05$, and high in providing individualized support, $r = .34$, $p < .05$. The results suggested that teachers who tended to use optional core reading curriculum material or other types of instructional interventions tended to rate their principal low in providing intellectual stimulation and holding high performance expectations. Teachers who tended to use instructional technology tended to rate their principal high in providing an appropriate model (see Table 4).

Table 4

Correlations of Principal Leadership Behaviors and Interventions for Grade 1 (N = 26)

Principal Leadership Behaviors	a	b	c	d	e
1. Identifying and Articulating a Vision	-.08	.10	-.07	.32	-.09
2. Providing an Appropriate Model	-.07	-.16	.13	.44*	-.03
3. Fostering the Acceptance of Group Goals	.23	-.22	.20	.27	-.27
4. Providing Individualized Support	.27	-.27	-.03	.34	-.10
5. Providing Intellectual Stimulation	.25	.05	-.40*	.03	.01
6. Holding High Performance Expectations	-.06	.13	.05	.23	-.31

Note. a = one-to-one instruction, b = small group instruction, c = optional core reading curriculum material, d = instructional technology, e = other. *p < .05, **p < .01. p – values in parentheses.

The correlations in the second grade teacher sample consisted of no significant relationship between teachers ratings of their principal leadership behaviors and the percentage of time used for interventions with at-risk students (see Table 5).

Table 5

Correlations of Principal Leadership Behaviors and Interventions for Grade 2 (N = 21)

Principal Leadership Behaviors	a	b	c	d	e
1. Identifying and Articulating a Vision	-.17	.00	-.17	-.14	.19
2. Providing an Appropriate Model	-.08	-.08	-.10	.00	.15
3. Fostering the Acceptance of Group Goals	-.02	.02	-.18	-.05	.11
4. Providing Individualized Support	-.04	-.09	-.10	-.14	.20
5. Providing Intellectual Stimulation	.18	-.03	-.19	-.13	.13
6. Holding High Performance Expectations	.03	-.24	-.16	.06	.10

Note. a = one-to-one instruction, b = small group instruction, c = optional core reading curriculum material, d = instructional technology, e = other. *p < .05, **p < .01. p – values in parentheses.

The teachers were disaggregated into subgroups to reflect the number of years of teaching experience, educational level, and the teacher's rating of their principal's leadership behaviors. Teacher range of experience was 1 to 30 years. Teacher level of education ranged from a Bachelors degree with 40 additional credits to a Masters degree with 15 additional college credit hours. Pearson Product Moment Correlation was used to determine the correlation and level of statistical significance. There was no statistical correlation between the number of years of teaching experience and the teacher's rating of their principal's leadership behavior (see Table 6). There was a statistically significant correlation between the level of a teacher's education and how they rated their principal. Teachers who had a high number of years of teaching experience tended to rate their principal high on holding high performance expectations, $r = .24$, $p < .05$ (see Table 6).

Table 6

Correlations of Principal Leadership Behaviors and Years of Teaching and Education Level
(*N* = 70)

Principal Leadership Behaviors	Years	Education
1. Identifying and Articulating a Vision	.00	.08
2. Providing an Appropriate Model	.03	.14
3. Fostering the Acceptance of Group Goals	.04	.12
4. Providing Individualized Support	.12	.17
5. Providing Intellectual Stimulation	-.01	-.07
6. Holding High Performance Expectations	-.02	.24*

* $p < .05$, ** $p < .01$

p – values in parentheses.

Research Question 3

What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

The researcher conducted four focus groups with teachers (K-2) who completed the Principal Leadership Questionnaire (Valentine & Lucas, 2000). The focus groups were conducted after school hours at four school sites. The researcher began the sessions by reading an introductory script that included an assurance of confidentiality approved by the University of Arizona's Institutional Review Board. The participants signed and returned the consent forms to the researcher. A total of 21 teachers voluntarily participated in the focus group sessions. The focus groups consisted of (1 one with seven kindergarten teachers, (2 one with six first grade teachers, (3 one with six second grade teachers, and (4 one with one first grade teacher and one second grade teacher. During and immediately following the focus groups, the researcher took notes detailing the sessions.

Two interviews were conducted with individual teachers. In these particular schools, the researcher was not able to gather enough participants to administer a focus group interview. Because of the enthusiastic nature of these participants the researcher chose to conduct the interviews. To maintain the strength of the focus group method employed and the integrity of the data from focus group results, responses from the individual interviews were not included in the descriptive analysis.

There were eight focus group questions. Each focus group question referred to one of the six principal leadership behaviors. The principal leadership behaviors include:

(1 identifying and articulating a vision, (2 providing an appropriate model, (3 fostering the acceptance of group goals, (4 providing individualized support, (5 providing intellectual stimulation, and (6 holding high performance expectations. The focus group responses add breadth and depth to this study.

Following qualitative methods as described by Mason (1996), the data from the focus groups were transcribed and analyzed by the researcher (see Table 7 and Appendix F). The data from each focus group were categorized in text segments, each of which was represented by one idea. From this information, concepts, ideas, and themes of the teachers' perceptions of their principals' leadership behaviors were determined. They were matched with the principal leadership behaviors as identified by Leithwood and Jantzi (1996). The concepts, ideas, and themes that matched with each leadership behavior were computed into a percentage for each of the six principal leadership behaviors (see Table 7). The analysis of the focus group percentages of teachers' responses was combined with teachers' descriptive statements on each leadership behavior to further explore and illuminate findings from the correlation study. The direct quotes by teachers are provided to illustrate points from the focus groups. A descriptive analysis follows.

Identifying and articulating a vision. Student achievement clearly emerged as the area with the highest percentage of responses by teachers as their principal's vision for the school. In Table 7, 64 percent of the teachers of the 11 teachers responding to this behavior indicated that student achievement was an element of the principal's vision for the school.

The teachers communicated that “making annual yearly progress is the school priority” and the principal emphasized that students must be “life-long learners and always strive to improve test scores.” The teachers were not able to communicate their school or district vision statement but emphasized the pressure of state-mandated tests and the need to continually improve test scores.

One teacher said, “If our test scores are high we will be appreciated and valued as a member of the school.” Likewise, another teacher said, “We are always being judged by the public on our test scores.” Some teachers reported that their principal was aware of the “publicity schools receive from the pressure of No Child Left Behind and the implications of low test scores”. Teachers also indicated the school vision was directed at making students responsible and respectful citizens with a 27 % response from the 11 teachers responding to this behavior. The principal “talked everyday about what is responsible and respectful behavior and she keeps this in the forefront of our minds.” Daily school wide announcements included examples of appropriate behavior. Announcements were student led and the teachers reported that this practice “gave the students ownership of their behavior.” However, a minuscule 9 % of the 11 teachers responding to this behavior indicated that compliance to NCLB (2001) emerged as part of the principal’s vision.

Providing an appropriate model. The teachers were able to give several examples of how the principal supported his or her vision for the school through daily actions. Fifty seven percent of the 12 teachers responding to this behavior indicated support for tutoring programs before, during, and after school hours and homework help.

Additional, one school offered Saturday school that included enrichment activities or reinforcement of academic activities. Eight percent of the 12 teachers responding to this behavior communicated that their principal “listens to their concerns,” and the tutoring programs were a result of their voiced input.

In one focus group, teachers thought, “Funds were always available for reading programs.” The principal identified a grade level need through discussions with the teachers and received grant funds to support a reading technology program. Teachers thought the reading technology program served as a supplemental choice for students who were at risk. In addition to reading instruction in the classroom, students attended the computer lab two times per week and received additional instruction through reading computer programs.

One teacher said, “Students who have difficulty learning to read through the daily readers, can now use the computer reading program.”

Fostering the acceptance of group goals. The concept that emerged related to the principal leadership behavior of fostering a commitment to group goals was clearly connected to the principal’s emphasis on collaboration among staff members. Eighty percent of the 15 teachers responding to this behavior reported the principal allowed time for leadership team meetings, weekly grade-level meetings, monthly staff meetings, and time for teachers to communicate between grade levels.

One teacher commented, “The principal eats lunch with us and discusses our grade-level and school goals.” Likewise, another teacher noted, “She always eats lunch

with us, and we feel supported by her.” Teachers noted that the principal discussed grade-level student test data and celebrated increased student test scores.

One teacher said, “If we have a concern in between grade-level meetings, we can meet with her at any time, and we feel welcome.” Teachers felt supported by their principal and noted the “past principal did not allow grade-level meetings, and there was more stress or problems between teachers. At least now we feel as though we are being heard and something is getting done.”

Providing individualized support. There were a high number of teacher responses in the leadership area of providing support to teachers. Sixty percent of the 20 teachers responding to this behavior reported the opportunity to attend conferences or trainings.

One teacher commented that the principal “trusts us to do the right thing and provides professional development opportunities for us to improve our skills.”

Teachers were given the opportunity to attend professional conferences and several attended conferences specific to their grade level.

One teacher noted that she attended a “yearly conference about kindergarten curriculum and student issues.” It was also noted by several participants that building inservices “focused on one or two issues and the principal tries not to overload us with speakers.”

When the staff implemented a new reading program, the principal provided training specific to that reading program. The principal also provided time for teachers to observe each other using the newly adopted materials. Likewise, when the DIBELS (Institute, 2002) assessment became a requirement at the school, the principal provided

training on the testing process and interpretation of test results. However, only 15 % of the 20 teachers responding to this behavior indicated principal support through book study sessions or peer mentoring.

One teacher noted she had a weakness in computer skills and the principal “really encouraged me and sent in people from district technology to help me. She first of all made it mandatory for me to read my e mail, but she started small. She wanted me to read it twice a month and then weekly. She encouraged me to seek help from my colleagues and she was not in my face about it. She insisted that I use the computer but provided support. She was very encouraging.”

Principals also provided support through making resources available to teachers. Thirty seven percent of the 19 teachers responding to this behavior indicated that instructional technology in the form of computer programs and computer assistance was available to teachers and students. Supplemental materials and weekly newsletters that focused on new teaching strategies were available as reported by 21 % of the 19 teachers responding to this behavior. Teachers felt supported by their principals by having adequate materials necessary for instruction. One school adopted a new reading program, and all teachers agreed that sufficient books and supplemental materials were available for all students.

One teacher commented, “This year we were given some extra money to spend and we bought tons of hands-on materials, including a fantastic reading computer program.”

Additionally, 21 % of the 19 teachers responding to this behavior commented that additional staff support was available. In one school, the principal designed the master schedule to allow support services for students to be delivered within the general education setting. Teachers described a reading specialist, highly trained assistants, or the resource teachers working within the general curriculum as a “push in model rather than a pull-out model.” Teachers preferred the specialists providing small group instruction within their classrooms. Teachers believed small group instruction by the specialist directly focused on targeted reading skills produced positive results.

“This is unique to our school and we have seen incredible results. Every day we finish a group, we say ‘Wow, this was amazing.’”

Providing intellectual stimulation. Teachers from all groups seemed to have a difficult time addressing examples of the leadership behavior provides intellectual stimulation. Of the 21 focus group participants, 13 responded. The highest percentage, 38 %, included principal-led staff discussions about new instructional ideas, examining test scores, or the challenges of working with at-risk students. Thirty eight percent of the 13 teachers responding to this behavior indicated the focused discussions assisted them to rethink their instructional strategies with at-risk students.

One teacher commented, “She gives us suggestions based on her experiences and is always looking for new ideas for us.” Another teacher who demonstrated progress on students’ DIBELS (Institute, 2002) assessment scores said, “She celebrated our success by announcing it to the school and putting an article in the school newspaper. That made me rethink how I was teaching the students that [sic] did not show the same success.”

Holding high performance expectations. Teachers provided insight into ways principals held high expectations for staff. The majority of responses appeared to be equally focused on increasing student achievement (56 % of the nine teachers responding to this behavior) and quality of work through daily preparedness for classes (44 % of the nine teachers responding to this behavior). One teacher commented that the principal expected staff to teach one full hour of reading and one full hour of written language. A two-hour block of instructional time was embedded within the daily master schedule. Teachers felt the lengthy time spent on teaching core academic subjects attested to the principal's vision of the school.

In addition to the principal's strong emphasis on academic instruction, appropriate student behavior was valued. Forty three percent of the seven teachers responding to this behavior indicated appropriate student behavior was a priority.

One teacher commented that "Students are expected to be good citizens, be prepared for school, and have good quality work." Several teachers commented their principal "challenges students to have respectful and responsible behavior and she gives recognition for good behavior." Another principal was highly visible, and ate lunch with students and staff, and often assisted in the cafeteria during lunch. One teacher commented, "She knows all the students by their first name."

Principal leadership behaviors and instructional choices. The teachers were asked if there was one principal leadership behavior that influenced the type of instructional choices used for at-risk students. Teachers in all focus groups seemed to have a difficult time addressing examples of principal leadership behaviors. Several

teachers asked for clarification of the question. Teachers cited principal support, honesty, trust, and confidence in staff as important behaviors, but they did not think these behaviors influenced them to choose a particular instructional intervention. Most teachers described their instructional choices and identified whole group or small group instruction as their preferred intervention. One teacher commented, “Because our reading program has leveled readers, there is a big emphasis on small group instruction.” Small group instruction was cited in another school because “support services come into the classroom, and students are divided into small groups according to ability.” (Researcher note: *leveled readers* means grade-level reading materials presented at a lower ability level.)

Table 7

Responses to Focus Group Questions

Questions	Percentages
1. What is your principal's vision for the school? (vision) (N = 11)	
a. Student achievement	64%
b. Respectful student/staff	27%
c. Compliance (NCLB)	9%
2. Give examples of how the principal supports his or her vision for the school through daily actions. (appropriate model) (N = 12)	
a. Tutoring programs	58%
b. Daily announcements	17%
c. Available funding	17%
d. Listens to concerns	8%
3. How does the principal assist staff in working toward common goals? (group goals) (N = 15)	
a. Meetings/collaboration	80%
b. Team decision making	20%

Table 7 (continued)

Questions	Percentages
4. How does the principal support professional development opportunities for staff working with at-risk students? (provides support) (N = 20)	
a. Conferences/trainings	60%
b. Book study	15%
c. Mentoring/tutoring	15%
d. Class observations	10%
5. What resources does the principal provide to support teaching at-risk students? (provides support) (N = 19)	
a. Instructional technology	37%
b. Provides new ideas	21%
c. Classroom materials	21%
d. Additional staffing	21%
6. How does the principal stimulate you to rethink your instructional interventions and academic goals for at-risk students? (intellectual stimulation) (N = 13)	
a. Discussions	38%
b. Intervention suggestions	23%
c. Professional support	15%
d. Reflection	8%
e. Evaluation	8%
f. Celebrate success	8%

Table 7 (continued)

Questions	Percentages
7. What are your principal's expectations for your staff? Students?	
(expectations)	
Staff (N = 9)	
a Student achievement	56%
b. Quality of work	44%
Student (N = 7)	
a. Behavior	43%
b. Preparedness	28.5%
c. Quality of work	28.5%

CHAPTER 5
SUMMARY OF FINDINGS, DISCUSSION OF FINDINGS,
IMPLICATIONS, AND RECOMMENDATIONS

Introduction

School principals are held accountable for educational quality in the belief that students' success or failure is determined by the way a school is run (Fullan & Watson, 2000). With the advent of No Child Left Behind (2001), principals are expected to have higher expectations of teachers and students, have greater influence and supervision of teachers' instructional decisions, coordinate and oversee the implementation of curriculum and school-wide initiatives, emphasize basic skills such as reading, and monitor student progress. Today the success of a school is based on student achievement, and principals must be equipped with leadership qualities to ensure that this expectation is realized for all students.

Principal leadership is often measured by thinking in terms of the perceptions of teachers who experience it. Much of what is known from empirical research about principal leadership behaviors is knowledge about teachers' reliable perceptions of these behaviors. Although teacher perceptions offer indirect evidence of student effects, there is evidence of high correlations between such evidence and direct measures of student achievement. Therefore, principals must possess the competencies to support teachers' instructional practices that improve student learning and outcomes (Leithwood & Jantzi, 1996).

The reform of schools to comply with the requirements under No Child Left Behind (2001) has resulted in deep organizational change for school curriculum and teachers' instructional strategies. Thus, in elementary schools, teachers are spending an inordinate amount of time on the identification of students at risk in reading and the implementation of instructional practices aimed at improving achievement. Few studies have directly examined the relationship between teachers perceptions of principal leadership behaviors and teacher instructional choices (Blasé & Blasé, 2000; Sheppard, 1996; Short, 1995) in dealing with reforms in reading. Given the newness and impact of the No Child Left Behind requirement, this area of study is in its infancy, particularly in relationship to implementing scientifically based reading instruction (Arizona Reads, 2001; National Reading Panel, 2000).

Overview of the Study

The purpose of this study was to examine the relationship between principal leadership behaviors as perceived by teachers and teachers' types of interventions used with at-risk students. The principal leadership behaviors were based on the work of Leithwood and Jantzi (1996).

This study was based on the results of a questionnaire administered to 70 kindergarten through second grade teachers in six elementary schools in Southern Arizona. The teachers instructed students who scored below a specified reading benchmark score on the DIBELS (Institute, 2002) assessment. Data were also collected through four focus groups with 21 teachers in three of the six elementary schools.

Research Questions

The following research questions were examined in this study:

1. What are the relationships between the six principal leadership behaviors (provides vision, models appropriate behavior, fosters commitment to goals, provides individualized support, provides intellectual stimulation, holds high performance expectations) as perceived by teachers providing reading instruction to students identified at-risk?
2. Is there a difference between the instructional choices of teachers with at-risk students and the teacher's perceptions of the six principal leadership behaviors?
3. What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

Summary of Findings

Following is a summary of the findings from this study:

1. The intercorrelations of the six principal leadership behaviors were consistently high or moderately high. Teachers' ratings of their principal's leadership behaviors were statistically significant at the $p < .01$ level.
2. Teacher's rating of principal leadership behaviors in relation to the percentage of time used for instructional interventions revealed a number of variables that moved in opposite directions. Except for one significant correlation, there

was no relationship between principal leadership behaviors and the percentage of time used for interventions with at-risk students. Teachers who rated themselves high in the use of optional core reading curriculum materials rated their principal low in providing intellectual stimulation should be recognized.

3. The subjects were disaggregated into subgroups to reflect grade levels of kindergarten, first grade and second grade. The correlations in the kindergarten sample revealed the teachers who tended to use optional core reading material rated their principal low in articulating a vision, providing an appropriate model and providing individualized support. Kindergarten teachers who tended to use small group instruction tended to rate their principal high in providing an appropriate model. The correlations in the first grade subgroup revealed teachers who tended to use instructional technology rated their principal high for providing an appropriate model and high in providing individualized support. Teachers who tended to use optional core reading materials tended to rate their principals low in providing intellectual stimulation. Teachers who tended to use other forms of instructional interventions tended to rate their principal low in holding high performance expectations. Although these correlations may not be significant because of the small sample size (kindergarten $N = 23$; first grade $N = 26$; second grade $N = 21$), their magnitude indicates a relationship may exist.

No significant relationship was revealed between the ratings of principal

leadership behaviors and the percentage of time used for interventions with the second grade subgroup.

4. No significant relationship existed between the number of years of teaching experience and the teacher rating of the principal leadership behaviors. There was a positive relationship between teachers' level of education and how they rated their principal on holding high performance expectations.
5. Focus group results revealed a high percentage of teachers indicated increasing student achievement as the principal's vision for the school. A high percentage of teacher responses was obtained for quality of work and student achievement as the principal's expectations of staff.
6. Focus group results indicated a high percentage of staff felt supported in working toward common goals through meetings and time for collaboration.
7. The majority of teachers responded their principal supported professional development by providing opportunities to attend conferences or training sessions.

Discussion of Findings

For clarity, each research question is restated followed by a discussion of the findings.

Research Question 1

What are the relationships between the six principal leadership behaviors as perceived by teachers providing reading instruction to students identified at risk?

All of the correlations of principal leadership behaviors moved in a positive direction and were statistically significant at the $p < .01$ level. The highest correlation was between teachers who rated their principal high in providing an appropriate model and the rating of their principal high in identifying and articulating a vision (.82). Another significant correlation revealed teachers who rated their principal high in providing an appropriate model also rated their principal high in providing individualized support. Overall, teachers rated their principals high among the six principal leadership behaviors.

These high correlations supported the research of Leithwood and Jantzi (1996). The six principal leadership behaviors were the core set of leadership practices that provided the foundation for successful school leadership. These practices are well suited to meet the challenge of school reform under NCLB (2001) because of their potential to foster growth in the area teachers must develop to respond positively and productively to this agenda. The significance of these findings suggested principals who espoused a

vision of increasing student achievement must exhibit the six principal leadership behaviors to effect positive change within their schools.

Research Question 2

Is there a difference between the instructional choices of teachers with at-risk students and the teacher's perceptions of the six principal leadership behaviors?

The independent variables created by the researcher were instructional choices used with at-risk students: (1 one-to-one instruction, (2 small group instruction, (3 optional core reading curriculum material, (4 instructional technology, and (5 other instructional choices. The dependent variables were the six principal leadership behavior identified by Leithwood and Jantzi (1996).

The aggregated correlation results of the teachers' rating of principal leadership behaviors in relationship to the percentage of time used in each instructional choice revealed one significant correlation. Teachers who tended to use optional core reading curriculum materials tended to rate their principals low on providing intellectual stimulation (- .27). The data were disaggregated into subgroups of kindergarten, first grade, and second grade teachers. Correlations in the kindergarten subgroup reflected similar findings. Kindergarten teachers who tended to use optional core reading curriculum materials tended to rate their principals low on articulating a vision (- .38), low on providing an appropriate model, (- .41) and low in providing individualized support (- .41) This finding suggests that kindergarten teachers who used the optional core reading curriculum materials tended to rely less on their principals to challenge them

to reexamine some of the assumptions of their work and rethink how it could be performed. The teachers tended not to see their principals as inspiring them through a vision of the future, setting examples for staff consistent with the values the principal espoused, or providing support either personally or professionally.

Kindergarten teachers who tended to use one-to-one instruction tended to rate their principals low in holding high performance expectations. Teachers who tended to use small group instruction tended to rate their principals high in providing an appropriate model. This finding suggested kindergarten teachers who used small group instruction perceived their principal as setting an example for them consistent with the values the principal espoused.

Teachers in this study were required to use the district-adopted core reading curriculum for all students. Focus group teachers reported the majority of teachers used the optional core reading curriculum materials with small group instruction for students identified at risk. Principals encouraged small group instruction through staff discussions, in-services to teachers, and grade-level collaboration time.

The correlation data did not support the use of a particular instructional intervention by teachers. This clearly was in contrast to the focus group data. The majority of focus group participants could articulate the principal's vision, felt supported through professional development opportunities and the availability of resources, and believed principals had high expectations of themselves and of students. Teachers supported the principal's vision and observed daily practices that were consistent with this belief.

Correlations in the first grade subgroup revealed teachers who rated themselves high in using optional core reading curriculum materials rated their principal low in providing intellectual stimulation. First grade teachers who tended to use other instructional choices tended to rate their principal low in holding high performance expectations. Teachers who tended to use instructional technology tended to rate their principals high in providing an appropriate model and high in providing individualized support.

Leithwood (1990, 1994, 1995; Leithwood & Jantzi, 1996) described leadership behaviors as part of a core set of leadership practices that provided the foundation for successful school leadership. Marzano et al. (2005) concluded through a synthesis of leadership research the importance of these leadership behaviors to effect fundamental change within a school and to improve student achievement. Because schools have a profound impact on student achievement, it is critical that principals be equipped with the leadership behaviors necessary to support student learning and to ensure these expectations are realized.

An analysis of the results of this study revealed one significant correlation between the level of teacher education and the principal leadership behavior of holding high performance expectations. Teachers with a higher level of education tended to perceive their principals as expecting excellence, quality, and high performance. Federal and state requirements for early intervention and school accountability underscored the growing importance of teacher education on student outcome (No Child Left Behind,

2001). Teachers' knowledge of the content they taught was consistently a strong predictor of student performance (Darling-Hammond, 2005).

Numerous studies have revealed the tremendous impact teachers have on student achievement. Research by Goldhaber & Brewer (1996) reported the presence of teachers with a major in their subject area was the most reliable predictor of student achievement scores in science and math. The results from this study also concluded advanced degrees in general were not associated with higher student achievement, but an advanced degree that was specific to the subject area a teacher taught was associated with higher student achievement. This study not only revealed the characteristics of a good teacher, it revealed how these characteristics contributed to student learning.

A study on teacher effectiveness conducted by Sanders & Horn (1994, as cited in Marzano, 2005) revealed a 39 percentage point difference in student achievement between students with "most effective" and "least effective" teachers. In classrooms taught by teachers considered "most effective," students gained approximately 53 percentage points in academics over one school year, whereas in classrooms taught by teachers considered "least effective," there was approximately a 14 percentage point gain in student achievement (Marzano, 2003). In addition, research conducted by Darling-Hammond (as reported in the National Institute of Child Health and Human Development, (National Reading Panel, 2000) demonstrated a direct connection between teacher level of education in the content area, teacher certification, and positive student outcomes. Furthermore, this research suggested teachers who had a higher level of education had higher expectations for themselves and for their students. The findings in

this study directly related to the research of Darling-Hammond. The correlation results indicated teachers who had a higher level of education perceived their principals as having a higher level of expectation for them. Case notes taken by the researcher during focus group sessions revealed three first-year teachers. Veteran teachers who were more experienced and had a higher level of education acted in mentorship roles to the first year teachers. Mentors and first-year teachers sat beside each other during the focus group interviews. It appeared that mentor teachers felt responsible for novice teachers and supported them both verbally and symbolically throughout the focus group session. Evidence of a close, collegial relationship was apparent. As one mentor teacher expressed, “She’s new and it has been wonderful to be able to help her and to work with her this year.” During the discussions, the novice teachers tended to triangulate their responses between the researcher and their mentor teacher. This phenomenon indicated the deep level of support and collegiality each teacher expressed toward the other.

The results of this research suggested teachers who have a higher level of education have higher expectations of themselves and their students and principals have a higher expectation of them. Because the level of teacher education can have a profound impact on student learning, it is crucial that principals establish continuous professional development opportunities to support teacher learning.

The provisions for highly qualified teachers under NCLB (2001) intensified the importance of teacher preparedness. Teachers must demonstrate mastery in the content area they teach to meet existing certification requirements. The challenge for principals is to ensure that every classroom is staffed with a *highly qualified teacher*. Therefore,

principals must consider a teacher's level of education in reading instruction to effect levels of student achievement. School districts must provide opportunities for teachers to become masters of their content area and support teachers in their efforts toward acquiring a high level of education.

Research Question 3

What is the nature of the relationship between principal leadership behaviors and teacher perception of the principal's influence on teacher instructional choices?

Teachers in the focus groups clearly identified increasing student achievement as their principal's vision for the school. The majority of the teachers believed the accountability requirements of No Child Left Behind (2001) resulted in an urgency to focus their teaching practices on improving student test scores. Fifty eight percent of the teacher responses identified newly implemented school initiatives directed toward the school vision. Participants identified daily before and after school tutoring programs designed to raise test scores for students identified at risk in reading and written language. One school conducted instructional sessions for homework assistance during the lunch hour.

Parents were encouraged to participate in school activities and one school encouraged parents to volunteer in "Saturday school" tutoring sessions. Additionally, teachers offered classes to parents on home-based activities that promoted student success. Monthly newsletters encouraged parents to participate in school functions and included advice on the importance of student preparedness to learn.

One important theme emerged from the focus group discussions. Teachers were clear on the fundamental purpose of the school. In this study, the commitment on the part of the principals and staff to increase student achievement as their school vision was evident in the majority of teachers (64% of responses). Additionally, it was apparent the school vision had not been superimposed on them.

One teacher commented, “We are all here to help the students become better adults and to work hard to make them successful.” Likewise, daily behavior on the part of the principal was directed toward the school vision. Principals were highly visible and could be observed interacting with students and staff. Principals exhibited genuine pride in student accomplishments through morning announcements celebrating student success and promoting respectful student behavior. Tutoring programs, ongoing information to parents, and school-wide announcements were identified by the teachers as evidence of the principal’s daily support of a clear vision to increase student achievement.

Deal and Peterson (1999) described visionary leadership as the cornerstone of change. Fullan (2001) described vision as “a series of experiences that will galvanize the deep energies and commitment of organization members to make desirable things happen.” (p. 115). It is evident the principals in this study were able to attract the energy and commitment of the teachers through their daily actions. Principals were able to provide the direction and exercise the influence needed to support change in their schools (Hallinger & Heck, 1996). Principals understood the importance of espousing a clear vision, one that was believed throughout their school to effectuate fundamental change. In education, visionary leadership, as espoused by the principals in this study, will

provide the ability to navigate through the fundamental changes occurring in their schools as a result of NCLB (2001) requirements.

In addition to principals espousing a clear vision for their school, a second major theme emerged from the results of this study. The focus on student achievement was evident in principal's support to teachers. Three principals formed leadership teams and provided time for collaborative efforts. Staff meetings were focused on professional development for teachers and provided training specific to the school's goals. Collaboration among teachers clearly resulted in cohesiveness between grade levels and support of the principal's vision for the school.

The results from this study indicated that principal's leadership hinged on the development of teachers as learners who collaborated with one another. Teachers indicated that conversations on student learning promoted reflective thinking. Principals seemed to understand that collaborative networks and team building were essential components to successful teaching. In so doing, principals established the fundamental structures within their schools to promote collegial conversations. In many instances these conversations focused on inquiry about the core reading curriculum and new instructional strategies or served as a means to problem solve difficult issues within the classroom. Principals in this study seemed to recognize focused conversations led to teacher learning. In turn, teachers were able to make informed instructional decisions concerning student progress.

Restructuring schools to promote collaborative teams supports the research of Cuban (1988) and results in a major redesign of the way schools function. The results of

this study indicated the schools instructional processes occurred more effectively as a collegial effort supporting the research of Fulbright (1988). Principals of these schools provided the resources necessary for teachers to be able to function as a team and develop new skills.

Teachers felt supported individually through opportunities to attend professional conferences. At one school, teachers were encouraged to share new information learned at conferences with staff members. Individual support was also evident through mentoring programs for new teachers, and principals allowed time for peer collaboration on a weekly basis. Overall, teachers felt validated by the principal's support of professional development opportunities.

The teachers in each of the schools reported many examples of resources the principal made available to support teaching students identified as at-risk. Principals provided adequate core reading materials, sufficient supplemental reading materials, and support with technology through instructional computer programs and teacher training. Additionally, principals hired staff to support reading instruction. At one school the assistant principal, reading specialist, and teacher assistants were scheduled into classes and conducted small group instruction in reading alongside the general education teacher.

Principals in this study recognized change was evident in their schools. Teachers were keenly aware of sanctions imposed on schools by the state and the community for students' failure to meet grade-level standards in reading. In order for change to have a positive effect on student achievement, it appeared important to principals to provide the structures needed to support teaching and learning. These structures included changing

the way the school operated to achieve improved achievement results. Principals in this study provided the resources necessary to support second-order change, fundamental change that occurs at the core of an organization (Cuban, 1988). One such change under NCLB (2001) was the requirements for early identification of at-risk students and the use of scientifically based instructional methods to improve student learning. Principals provided the resources necessary to promote second-order change by implementing procedures, offering professional development opportunities to teachers, and providing daily resources to support the successful implementation of the DIBELS (Institute, 2002) assessment and to support teacher instructional interventions for at-risk students.

Implications for Practice

In recent years there has been a shift from traditional methods of reading instruction to practices that are evidence based, peer reviewed and founded in scientific research (Arizona Reads, 2001; No Child Left Behind, 2001). The reports of the National Reading Panel (2000, 2004) showed clear evidence on how children learn to read, which skills determine reading success, and what instructional practices are most effective. The National Reading Panel reports added to a growing body of reading research that formed the foundation of the No Child Left Behind Act. Title I, Part B, Reading First in NCLB articulated the requirements for assessment, early intervention, accountability and scientifically based reading instruction at the kindergarten through third grade level. Arizona Reads (2001) established specific criteria for early identification and required scientifically based intervention for students identified at risk

for learning to read. School districts are required to monitor student reading achievement, and districts were required to adopt evidence-based instructional practices by the end of the 2005-2006 school year. In Arizona a dearth of research exists that examines the link between teachers' perceptions of principal leadership behaviors and the specific types of instructional choices used by teachers with at-risk students. One reason for the paucity of research is the newness of Arizona Reads (2001) which designated 2004-2005 as a "transition year" with pilot implementation and full implementation by the end of the 2005-2006 school year.

The school district in which this study was conducted adopted the DIBELS (Institute, 2002) assessment to meet the NCLB (2001) early identification requirement. The school district was in its third year of DIBELS implementation. Principals were required to lead their schools through the intricate changes imposed by NCLB and support staff and students through these complex demands. Principal leadership behavior was at the forefront and a premier factor in effecting fundamental change within their schools. Because of the newness of the NCLB requirements, research in this area is in its infancy. This research study is one of the first studies in Arizona that examined the relationship between principal leadership behaviors and the types of instructional choices of teachers for at-risk students and forms the foundation for future research.

For purposes of summarizing, discussing, and presenting implications and recommendations of findings from this study, the researcher extrapolated key/selective features from the results and displayed them in a model (see Figure 1.2). Figure 1.2 is an expansion of the model in Figure 1.1 which established a conceptual framework for this

study. The model depicts principals' behavioral influences on teachers' perceptions in selecting instructional methods. The model implies and illustrates the sequence and processes of principal leadership behaviors and teacher's perceptions of the principal leadership behaviors that influenced teachers' identification of instructional strategies used with students at risk for learning to read. This model was adapted from the research on principal leadership behavior (Leithwood, 1990, 1994, 1995; Leithwood & Jantzi, 1996) and on the Outcomes-Driven Model of curriculum-based measurement as reported by Good et al., (2001).

Sections of the model in Figure 1.2 have been highlighted to emphasize critical findings. Key findings from the correlation data indicated the leadership behaviors of appropriate model, support, and high expectations as areas of importance. The boxes on the left have been highlighted in dark grey to emphasize the correlation data area of importance. The focus group findings revealed the leadership behaviors of vision, appropriate model, group goals, support, and high expectations as crucial behaviors. The boxes on the left have been highlighted in light grey to indicate the focus group area of importance. The dark grey and light grey color coded boxes on the left of the model display the shared similarities in correlation and focus groups results. The leadership behaviors of appropriate model, individualized support and high expectations were areas of critical importance to teachers revealed through the correlation and focus group results.

The black shaded boxes located in the middle of the model display the progression from principal leadership behaviors to actual teacher practices in the

classroom. The black boxes on the right indicate the continuous cycle of planning instructional support, teacher instructional choices, and the evaluation of student progress. This model provides a visual nexus between principal leadership behaviors, teacher's perceptions of those behaviors, and the effects principal behaviors have on teacher instruction.

The correlation results revealed several similarities and differences between the aggregated and disaggregated data. The aggregated data revealed no significant relationship between teacher's perceptions of principal leadership behaviors and teacher instructional choices. Overall, the results indicated both variables moved in opposite directions with no significance. An analysis of the data from the three subgroups clearly indicated the differences. The kindergarten teachers who used small group instruction rated their principal high in providing an appropriate model ($r = .33$). Similar findings were revealed in the first grade data. First grade teachers who used instructional technology rated their principal high in providing an appropriate model ($r = .44$) and high in providing individualized support ($r = .34$). In the model, the boxes on the left for the leadership behaviors of appropriate model and providing individualized support have been shaded in dark grey to indicate the findings from the kindergarten and first grade correlation data. There were no significant findings from the second grade correlation data.

Reading development is at a critical stage at the kindergarten and first grade levels (National Reading Panel, 2000). Skill acquisition in reading at this developmental stage forms the foundation for future reading success. Teachers in kindergarten and first

grade instruct students with distinct developmental needs. Kindergarten students are developing proficiency in the reading areas of phonological awareness, alphabetic principle, and letter naming fluency (Good et al., 2001). It is common in schools for kindergarten teachers to use small group instruction to deliver these fundamental reading skills. Teachers in first grade use as a foundation the kindergarten reading skills to build proficiency in reading fluency and reading comprehension. First grade teachers are exposing students to beginning computer skills, and by the end of first grade teachers may rely on instructional technology to supplement the core reading program. The results from the kindergarten and first grade correlation data revealed the importance of leadership behavior on the part of the principal to provide an appropriate model and individual support to teachers. Principals whose vision is to advance student achievement must ensure that technology support in the form of classroom computers, instructional technology programs, and professional development on computer literacy is available to students and teachers. Behavior by principals in these leadership areas result in setting an example to staff consistent with the values the principal espouses.

The aggregate data of teacher's number of years of experience and education level revealed one significant correlation. Teachers who had a higher level of education tended to rate their principals as holding high performance expectations of them. In Figure 1.2, the box on the left for high expectations has been shaded in dark grey to indicate this correlation data as an area of importance. Research conducted by the National Reading Panel (2000), revealed the importance of ongoing professional development once teachers are in the classroom. "In all but a few cases the results (from this study)

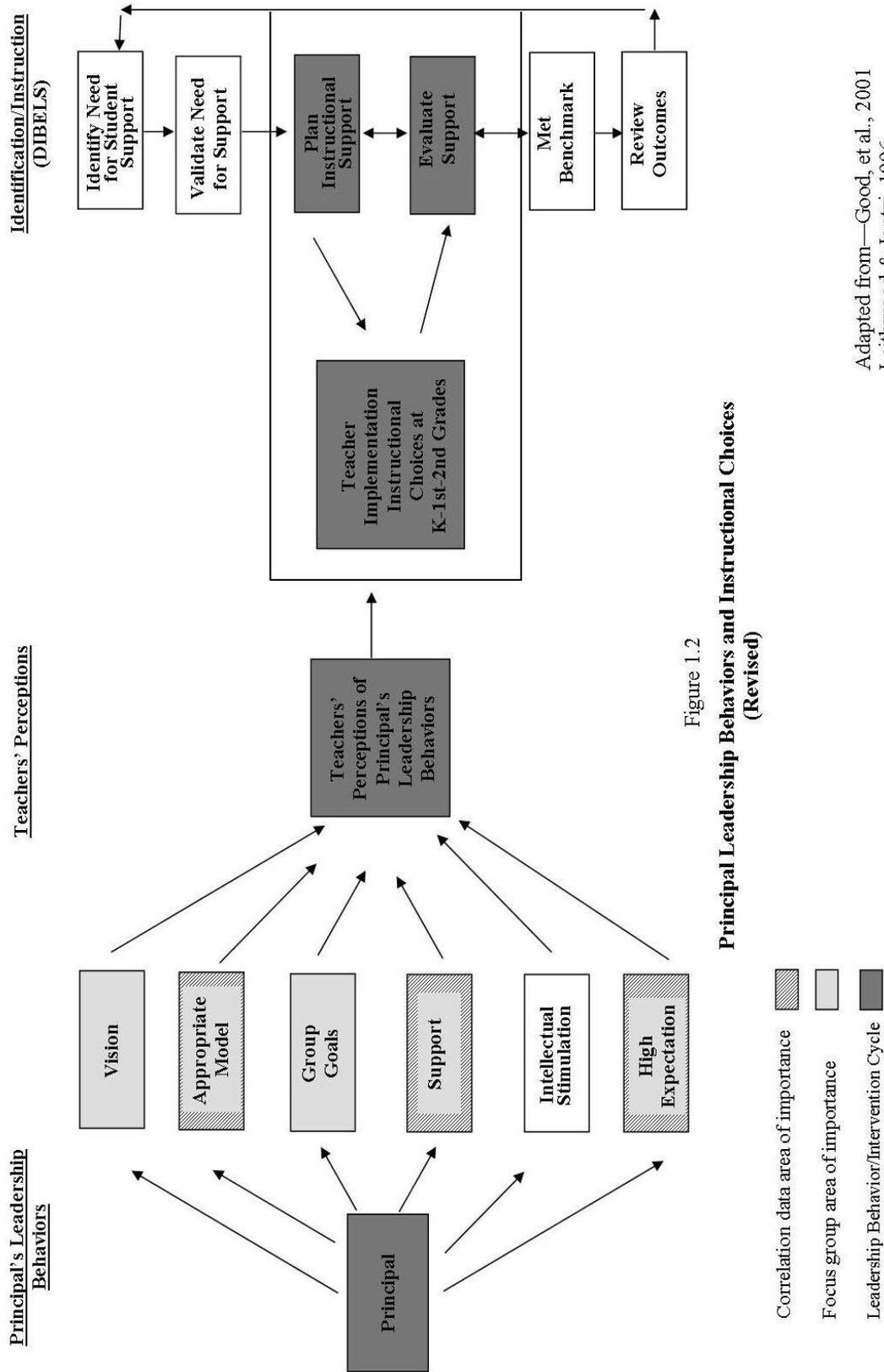


Figure 1.2

Principal Leadership Behaviors and Instructional Choices (Revised)

Adapted from—Good, et al., 2001
Leithwood & Jantzi, 1996

showed that the intervention in professional development produced significantly higher student achievement” (p. 5-2). The results of this dissertation study supported the findings of the National Reading Panel Report. Principals from this study clearly understood that teacher preparedness directly resulted in increased student achievement. Principals restructured their school master schedule to allow time for focused group discussions and on-site trainings in current research-based reading practices and supported the district professional development in-service classes. As a result, teachers who had a higher level of education had a higher expectation for themselves and for their students.

Focus group data analysis of the principal leadership behaviors indicated a high percentage of teachers responded vision (64%), providing an appropriate model (58%), group goals (80%), providing individualized support (60%), and high expectations (56%) as areas of importance. The corresponding boxes on the left in Figure 1.2 have been shaded in light grey to highlight these results. The focus group data clearly informed and added depth to the correlation data. Focus group data illuminated the importance of principal leadership behaviors with teachers that underscored the critical factors that contributed to how teachers planned instructional support and the instructional choices used by teachers for at-risk students.

Prior to approving the research study in the six elementary schools, each principal met with the researcher and discussed the study. It was evident from these conversations that principals possessed a keen barometric sense of their school culture. Principals were acutely aware of the pressure they felt implementing the requirements of NCLB (2001) to

raise student achievement and the changes needed within their schools. Dispositions common to all of the principals included an extraordinary passion for students and staff. Passion was harnessed by the belief in equitable education for all students and a commitment by the principal to staff and students to achieve this means. The belief that increasing student achievement was a priority provided the impetus to promote reform within their schools.

Principal leadership behaviors and teacher's perceptions of those behaviors provided the first stage in the continuous cycle of the researcher's model (Figure 1.2). Teachers who were responsible for planning, implementing, and evaluating instructional support for at-risk students clearly were influenced by their principal leadership behaviors. The results of this study indicated principals who espoused and modeled their vision for the school, provided appropriate support to teachers, focused on group goals, and had high expectations for staff and students had an indirect effect on student achievement. These results clearly supported the research of both Leithwood & Jantzi (1996) and Marzano et al. (2005). It was those leadership behaviors that influenced the way a teacher interacted with students, planned instructional support, and provided daily lessons to students that would have a direct effect on student achievement.

A meta analysis conducted by Marzano et al. (2005) indicated the primary effects on student achievement were the classroom teacher and a sound curriculum. Principals have a secondary effect on student achievement through the efforts associated with ambitious goals and the conditions established to support teachers. Therefore, it is important for principals to possess the leadership behaviors described by Leithwood and

Jantzi (1996) to focus school staff toward a common vision and provide the conditions and support required to realize the vision.

One of the most challenging issues in schools is the lack of clarity about what is important (Deal & Peterson, 1999). The results of this research study clearly supported the importance of a shared vision. Most teachers agreed increasing student achievement was the fundamental purpose of the school. The clarity of purpose was an important factor in guiding procedural and curricular decisions. Focus group data revealed teachers were trained and knowledgeable in the identification and assessment procedures for at-risk students, and teachers structured their schedules and curriculum to address student needs. The principal created systems to foster the structures needed to implement the DIBELS (Institute, 2002) assessment process. Systems included the development of a master school schedule for reading and written language, reallocation of funds to provide adequate materials, fostering teacher training opportunities, and providing goal-focused teacher collaboration. Systems such as these embed conditions in schools that cultivate positive organizational change.

Deep and sustained reform are dependent on all of the stakeholders. According to Fullan (2001), “A school principal can become much more effective by focusing on a small number of core aspects of leadership and by developing a new mind-set about the leader’s responsibility to himself or herself and to those with whom he or she works” (p. 2). Results from this study clearly indicated principals who are required to lead their schools through a multitude of interconnected requirements under NCLB (2001) must focus on a few key leadership behaviors to effectuate this reform. Teachers in this study

were able to identify those leadership behaviors. Research that supports these findings can be found in the work of Leithwood & Jantzi (1996, principal leadership behavior), Marzano (2005, student achievement), Darling-Hammond (2005, professional development) and Fullan (2001, organizational change and culture).

Leithwood & Jantzi (1996) identified behavior on the part of the principal that set an example for staff to follow consistent with the values the principal espoused. The results of this study clearly supported behavior on the part of the principal that manifest these values. Teachers reported specific examples in which the principal modeled a commitment to student achievement. Principals reallocated resources to support school priorities. Students were provided supplemental time for learning through tutoring programs when they experienced difficulty. Additionally, increased staffing in classrooms supported instruction in small groups, using adapted core reading materials that targeted specific reading skills. Adequate resources were available in the form of reading materials, computers, and instructional technology. This research study identified schools undergoing fundamental changes in procedures and processes in response to the accountability requirements of NCLB (2001). Principals responded to these requirements by providing the resources and supports to teachers that were necessary to effectuate the change.

Although there is no silver bullet that guarantees that every student will learn to read effectively, principal leadership adds value to the impact teachers have on student achievement, and it provides a covenant that fundamental and sustained change can happen. A principal cognizant of teacher practices that impact student learning is crucial.

This research study provided insight into the characteristics of effective principals and the behaviors needed to maximize student performance. The results of this study indicated that principals who desired to promote change in teaching and learning within their schools must distill their current practices and identify a core set of leadership behaviors that produce effective schools (Edmonds, 1982; Lezotte, 1991; Marzano, et al. 2005). Without principal leadership and support to teachers, there is a smaller possibility that student learning will increase.

As stated earlier, research has consistently demonstrated that teacher quality, as measured by content knowledge, is strongly related to student achievement (Darling-Hammond, 2005). This study revealed evidence that principals accepted responsibility for creating conditions that promoted and enhanced learning for both teachers and students. Principals created opportunities for teachers to stay focused on school goals by providing collaboration time for grade-level teachers, staff meetings focused on improving student achievement, or leadership team meetings. Principals formed coalitions of teachers to problem solve and share ideas. Collegial conversations among teachers resulted in an adherence to school wide goals on how to improve the quality of student education.

It is well known that teachers are the architects of their classroom. Although research has confirmed the critical role the principal has on student achievement, it is the classroom teacher who has the most direct effect. It is the daily interactions between student and teacher, instructional strategies, learning opportunities, and high expectations that are at the core of student success.

Throughout their practice in the educational field, teachers should have access to on-going professional development opportunities that are rigorous, relevant, and content specific. Extensive research has been conducted on the effect of teacher in service training on student achievement. The National Reading Panel (2000) conducted a meta analysis of the research on the effects of teacher in-service training and student achievement. The majority of the studies reviewed demonstrated a significant increase in student achievement as a result of professional in-service classes to teachers. A deep understanding of instructional strategies and content material through teacher in-service training is the key ingredient to increasing student achievement (Darling-Hammond, 2005; Marzano, 2005; National Reading Panel, 2000; Sparks, 2002). Teachers must be proficient in methods that are research based in order to further positive changes in student performance.

The focus group data in this study revealed principals created opportunities for teachers to learn new teaching strategies, current educational research, and how to apply research in the classroom through professional development or mentor opportunities. Teachers felt they were able to expand their reservoir of knowledge through in-service opportunities afforded by the principal. Principals cultivated a respectful and trusting relationship with staff, and teachers felt valued.

Professional development programs that lack these fundamental postulates will portend less than desirable teaching capabilities and student learning experiences. The positive effects associated with being taught by a highly effective teacher should drive

the research, development, and implementation of professional development programs by school districts, resulting in increased opportunities for all students.

Conclusion

Reform is a way of professional life for principals and teachers evident in our school systems. The magnitude of the changes brought about by No Child Left Behind in 2001 has resulted in a significant paradigm shift in the educational system. The challenge for principals responsible for facilitating, supporting, and changing their school system to adapt to these changes is to establish the infrastructures necessary to support these fundamental transformations. High-quality teachers as well as strong principal leadership are essential to achieve educational reform. Given the great pressure placed on principals and teachers to improve student outcomes, an inordinate amount of instructional time has been devoted to this endeavor. The requirements for early identification, research-based instruction, and accountability imposed on schools have been in place for five years. Despite the fact that there is much research on principal leadership and the effect on reform initiatives, there is little research on the effects a principal has on teacher instructional choices. Because of the newness of the NCLB requirements, research pertaining to the effect principals have on teachers' instructional choices is in its infancy. This research study provided the first step in capturing these effects. The study is a contribution to our understanding of the influence principals have on teacher's instructional choices while implementing a critical area of educational reform. This study is at the crux of the educational reform movement and illuminates the

effect principals and teachers have on improving educational opportunities for all students.

Recommendations for Future Research

Recommendations for future research are detailed below.

1. This research study was limited to one school district in southern Arizona. The sample size consisted of a small pool of schools and was limited to female teachers. A broader sample size across several school districts is recommended.
2. When this study was conducted, the DIBELS assessment was available to kindergarten through third grade students. Recently, the DIBELS (Institute, 2002) assessment was made available for grades four through eight. The structures and processes in elementary school are very different than in middle school. Research involving teachers from different school levels is necessary to examine the effects of principal leadership behaviors and the instructional choices of teachers in elementary grades as compared to middle school grades.
3. Research on in service training in reading and the effect on student achievement at the elementary level has been conducted. Research is needed on the effect of in service training in reading with teachers who instruct students identified at risk at the secondary level. Pre and post data on student achievement should be collected to determine the quality of in service training at the secondary level with teachers who attend in service training.

4. A follow up longitudinal study with teachers and principals at different points in time would provide data to determine trends. A trend study using various principal and teacher samples would provide valuable information to principals to determine what supports are valued by teachers undergoing educational reform.
5. School districts in Arizona are experiencing the requirements to implement early identification measures and instructional interventions for at-risk students. This study was conducted in a populated, low to medium socio economic area in Arizona. Comparative research is recommended to examine the effects of educational reform in terms of teachers' perceptions of principals support of their instructional choices in low socio economic rural school districts with low socio economic school districts located in populated areas.
6. Research to determine ways to provide a feedback loop of information to principals in schools experiencing educational reform is needed. Study results would provide valuable assistance to principals on the supports needed by teachers in their schools and assist principals in improving their leadership behaviors.

APPENDIX A
PRINCIPAL LEADERSHIP QUESTIONNAIRE

PRINCIPAL LEADERSHIP QUESTIONNAIRE

Teacher Form

Please answer the following questions by considering how well the statements apply to your principal's actions in relation to his or her work with the school's faculty. Use this scale to answer the following questions:

1 - Strongly disagree 2 – Disagree 3 – Agree

4 – Strongly Agree

The principal

1. Has both the capacity and judgment to overcome most obstacles. 1 2 3 4

2. Command respect from everyone on the faculty. 1 2 3 4

3. Excites faculty members with visions of what we may be able to accomplish if we work together. 1 2 3 4

4. Makes faculty members feel and act like leaders. 1 2 3 4

5. Gives the faculty a sense of overall purpose for its leadership role. 1 2 3 4

6. Leads by “doing” rather than simply by “telling.” 1 2 3 4
7. Symbolizes success and accomplishment within our profession. 1 2 3 4
8. Provides good models for faculty members to follow. 1 2 3 4
9. Provides for our participation in the process of developing school goals. 1 2 3 4
10. Encourages faculty members to work toward the same goals. 1 2 3 4
11. Uses problem solving with the faculty to generate school goals. 1 2 3 4
12. Works toward whole faculty consensus in establishing priority for team goals. 1 2 3 4
13. Regularly encourages faculty members to evaluate our progress toward achievement of team goals. 1 2 3 4

14. Provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.
- 1 2 3 4
15. Provides the necessary resources to support my implementation of the school program.
- 1 2 3 4
16. Treats me as an individual with unique needs and expertise.
- 1 2 3 4
17. Takes my opinion into consideration when initiating actions that affect my work.
- 1 2 3 4
18. Behaves in a manner thoughtful of my personal needs.
- 1 2 3 4
19. Challenges me to reexamine some basic assumptions I have about my work at the school.
- 1 2 3 4
20. Stimulates me to think about what I am doing for the school's students.
- 1 2 3 4

21. Provides information that helps me think of ways to implement the school program. 1 2 3 4
22. Insists on only the best performance from the school faculty. 1 2 3 4
23. Shows us that there are high expectations for the faculty as professionals. 1 2 3 4
24. Will not settle for the second best in the performance of our work as a faculty. 1 2 3 4

Developed by the Middle Level Leadership Center (Valentine & Lucas, 2000) based upon the work of (Leithwood & Jantzi, 1996).

APPENDIX B
ADDITIONAL QUESTION ADDED TO THE PRINCIPAL LEADERSHIP
QUESTIONNAIRE

ADDITIONAL QUESTION ADDED TO THE PRINCIPAL LEADERSHIP
QUESTIONNAIRE

Grade_____ Gender_____

Number of years teaching_____ Highest degree earned_____

For each item below, indicate a percentage to reflect the amount of time, per week, you use the following interventions for at-risk students you identified from the DIBELS assessment. The total percentage amount should equal 100.

_____ % One-to-one instruction (teacher: student identified at risk)

_____ % Small group instruction (teacher: 2-5 students identified at risk)

_____ % Optional core reading curriculum materials

_____ % Technology (use of computer programs in the area of identified risk)

_____ % Other (Please explain)_____

APPENDIX C
INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

For Focus Groups

Introduction: The purpose of this interview is to learn your views of a principal's leadership behaviors that contributed to your instructional choices before and during your teaching of at-risk students identified on the DIBELS assessment. Please respond to the questions by providing examples of how each principal's behavior supported or did not support your selection and use of instructional choices.

1. What is your principal's vision for the school?
2. Give examples of how the principal supports his or her vision for the school through daily actions.
3. How does the principal assist staff in working toward common goals?
4. How does the principal support professional development opportunities for staff working with at-risk students?
5. What resources does the principal provide to support teaching at-risk students?
6. How does the principal stimulate you to rethink your instructional interventions and academic goals for at-risk students?
7. What are your principal's expectations for your staff? Students?
8. Given four instructional choices for at risk students: one to one instruction, small group instruction, optional core reading curriculum materials, or technology, what principal leadership behavior influenced you to favor a particular instructional choice?

APPENDIX D
RECRUITMENT MATERIALS

RECRUITMENT MATERIALS

Thank you for allowing me the time to discuss with you a research study that I am conducting as part of my doctoral studies in Educational Leadership at the University of Arizona. The purpose of my study is to understand how K-3 classroom teachers' perceive principals' leadership behaviors when making instructional choices in teaching reading to at-risk students.

The [Name] School District in conjunction with the University of Arizona has granted approval for me to conduct this research study. The study uses a questionnaire and a focus group interview to obtain information about teachers' perceptions of how principals' leadership behavior influences instructional choices before and during the teaching of at-risk students. It will take approximately 30 minutes to complete the questionnaire and form. The focus group activity will require a time period of approximately one hour.

I am seeking volunteers from K-3 classroom teachers who have students identified at risk on one or more subtests of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment to participate in the study. The study will provide participants with the opportunity to rate and express opinions about principals' leadership behaviors that influence the types of instructional choices used when teaching at-risk students. Some questions will specifically ask about your principal's leadership behaviors. This study is not intended to be an evaluation of your principal but the leadership skills of principals in general and the types of instructional interventions you choose for at-risk students. The principal's name or school will not be used or identified

in this study. This study is voluntary and participants can withdraw from the study at any time. The benefit that participants may reasonably expect is the sense of helping a doctoral student with research that informs ways to improve practice in schools.

Participants will be asked to complete the Principal Leadership Questionnaire (PLQ) and participate in a focus group interview. In completing PLQ questions, participants are requested to think how the answers apply to their selection and use of instructional choices. There are no right or wrong answers, so participants are asked to not hesitate to respond honestly. Participants and their school will not be personally identified and participants are not to place their names on the questionnaires.

After completion of the questionnaire and form, participants are asked to please place them in the manila envelope, seal the envelope, and return it to the researcher. Following the completion of the questionnaires, participants are requested to voluntarily participate in a focus group interview. The following measures will ensure that others, outside this focus group, do not learn your identity or what you share in the focus group.

1. No names will be used in transcribing from the audiotape or in writing up notes. Each person will be assigned a letter as follows: A, B, C, or D. No principals' names or schools will be used in the discussion.
2. Signed consent forms will be kept in a locked cabinet in Room EDUC 232 at the University of Arizona, College of Education.
3. The audiotapes will be reviewed only in my home or in the office of my dissertation adviser.

4. After the study is complete and the dissertation is accepted, the questionnaires will be shredded and the audiotapes physically destroyed.
5. What is discussed by individual participants during our focus group will be kept confidential by me. Information revealed in the focus group interview will not be shared with district administration by the researcher. In the process, trust and rapport are hopefully developed, and individuals within the group will agree to keep information confidential as well.

If you are interested in voluntarily participating in the focus group interview, please write your name and phone number on the sign up sheet when you return the questionnaire. I will contact you with a time, date, and location for the focus group interview.

Thank you in advance for considering my invitation to participate in this study.

APPENDIX E
LETTER OF CONSENT

LETTER OF CONSENT

The Relationships Between Teachers' Perceptions of Principal Leadership Behaviors and Instructional Choices of Reading Interventions for At Risk Students

Introduction

You are being invited to take part in a research study. The information in this form is provided to help you decide whether or not to take part. Study personnel will be available to answer your questions and provide additional information. If you decide to take part in the study, you will be asked to sign this consent form. A copy of this form will be given to you.

What is the purpose of this research study?

You are being invited to participate voluntarily in the above-titled research project. The purpose of the project is to determine the classroom teacher's perception of principal leadership behaviors. You will have the opportunity to express your opinions about the leadership behaviors of principals and the types of instructional choices you make with at-risk students. I will be asking you questions about your principal and principals in general. This study is being conducted to determine the classroom teacher's perception of principal leadership behaviors and is not intended to be an evaluation of your principal, but the leadership skills of principals in general.

Why are you being asked to participate?

You are being invited to participate in this study because you are a K-3 classroom teacher who teaches students identified at risk on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment.

How many people will be asked to participate in this study?

Approximately 60-80 persons will be asked to participate in this study.

What will happen during this study?

1. You will be asked to complete the Principal Leadership Questionnaire. Please do not put your name on the questionnaire. After completion of the questionnaire, please place it in the manila envelope, seal the envelope, and return it to the researcher.
2. Following completion of the questionnaire you will be asked to participate in a focus group interview. There will be four focus groups with approximately 6 teachers in each group. If you would like to participate in a focus group interview, please write your name, phone number and email address on the sign up sheet. I will contact you to give you the date, time and location of the focus group interview.

How long will I be in this study?

It will take approximately 30 minutes to complete the questionnaire.

It will take approximately 45 minutes to one hour for the focus group interview.

Are there any risks to me?

The things that you will be doing have minimal risk of breach of confidentiality. Because of the focus group discussion format, it is not possible to guarantee strict confidentiality. It is possible that the information revealed in the focus group interview may be discussed by participants at a later time and result in negative effects for the participants. The confidential nature of the discussions will be emphasized with the participants and the Principal Investigator will stress the information should not be revealed outside the focus

group interview. Although we have tried to avoid risks, you may feel that some questions we ask will be stressful or upsetting. If this occurs you can stop participating immediately.

Are there any benefits to me?

You will not receive any benefit from taking part in this study. The broader benefit to your participation is that the results will provide greater depth of knowledge about principal leadership behaviors and the teacher instructional choices for at risk students. This study will add to the body of leadership research to inform administrators on ways to improve leadership behaviors.

Will there be any costs to me?

Aside from your time, there are *no* costs for taking part in the study.

Will I be paid to participate in the study?

You will not be paid for your participation.

Will video or audio recordings be made of me during the study?

We will make an audio recording during the focus group interview so that we can be certain that your responses are recorded accurately only if you check the box below:

I give my permission for audio recordings to be made of me during my participation in this research study.

Will the information that is obtained from me be kept confidential?

The only persons who will know that you participated in this study will be the principal researcher, Marianne Castellon, and her University advisor, Dr. John Taylor.

Your records will be confidential. You will not be identified in any reports or publications resulting from the study.

May I change my mind about participating?

Your participation in this study is voluntary. You may decide to not begin or to stop the study at any time. Your refusing to participate will have no affect on your employment. You can discontinue your participation with no affect on your employment. Also, any new information discovered about the research will be provided to you. This information could have an effect on your willingness to continue your participation.

Who can I contact for additional information?

You can obtain further information about the research or voice concerns or complaints about the research by calling the Principal Investigator, Marianne Castellon, M.A. at 520-403-1775. If you have questions concerning your rights as a research participant, have general questions, concerns, or complaints or would like to give input about the research and can't reach the research team, or want to talk to someone other than the research team, you may call the University of Arizona Institutional Review Board office at (520) 626-6721. (If out of state, use the toll-free number, 1-866-278-1455.) If you would like to contact the Institutional Review Board by e-mail, please use the following email address: <http://www.irb.arizona.edu/suggestions.php>.

Your Signature

By signing this form, I affirm that I have read the information contained in the form, that the study has been explained to me, that my questions have been answered and that I agree to take part in this study. I do not give up any of my legal rights by signing this form.

Name (Printed)

Participant's Signature

Date signed

Statement by person obtaining consent

I certify that I have explained the research study to the person who has agreed to participate, and that he or she has been informed of the purpose, the procedures, the possible risks and potential benefits associated with participation in this study. Any questions raised have been answered to the participant's satisfaction.

Name of study personnel

Study personnel signature

Date signed

APPENDIX F
FOCUS GROUP QUESTION RESPONSES

FOCUS GROUP QUESTION RESPONSES

	1. Vision	2. Appropriate Model	3. Group Goals	4. Provides Support
Group	What is your principal's vision for the school?	Give examples of how the principal supports his or her vision for the school through daily actions.	How does the principal assist staff in working toward common goals?	How does the principal support professional development opportunities for staff working with at-risk students?
1	- lifelong learners (teachers/students) - responsible, respectful students	- morning announcements support respectful and responsible behavior - student run announcements – kids have ownership of behavior	- collaboration/communicate between grade levels - provides inservices on goals - group decision making	- provides research books to staff - inservices to staff - conferences - book studies

	1. Vision	2. Appropriate Model	3. Group Goals	4. Provides Support
2	- making AYP- student achievement - improve test scores	- after school tutoring - during school tutoring - Saturday school - homework help - seminars for new programs	- team decisions monthly meetings- grade school - principal eats lunch with us- discuss goals - collaboration time	- observe other classes - conferences - guest speakers - DIBELS training - attends workshops w/staff - seminars for specific new curriculum
3	- increase student achievement	- listens to our concerns - daily materials available - writes grants	- regular staff meetings	- conferences

	1. Vision	2. Appropriate Model	3. Group Goals	4. Provides Support
4	<ul style="list-style-type: none"> - respected as a school - NCLB compliance - student achievement - respect for teachers - increase writing scores 	<ul style="list-style-type: none"> - \$ for reading programs - tutoring programs 	<ul style="list-style-type: none"> - team decisions - team meetings - staff meetings - weekly collaboration time - leadership meetings - team collaboration 	<ul style="list-style-type: none"> - Thursday-staff development day - staff training – reading, writing programs - group discussions, selected topics - conferences - promotes district offered classes

	5. Provides Support	6. Intellectual Stimulation	7. Expectation	
Group	What resources does the principal provide to support teaching at-risk students?	How does the principal stimulate you to rethink your instructional interventions and academic goals for at-risk students?	What are your principal's expectations for your staff? Students?	
			Staff	Students
1	<ul style="list-style-type: none"> - volunteered books - emails new ideas - technology support through programs and training - after school tutoring 	<ul style="list-style-type: none"> - curriculum coach observes, provides support/interventions - evaluations – challenges you to work with at risk kids 	<ul style="list-style-type: none"> - challenges us to be the best 	<ul style="list-style-type: none"> - quality work - responsible/respectful students

	5. Provides Support	6. Intellectual Stimulation	7. Expectation	
2	<ul style="list-style-type: none"> - supplemental materials - classroom computers - assistant principal, resource - weekly newsletter, teaching ideas - classroom aides - computer programs - monthly newsletter - emails - technology support 	<ul style="list-style-type: none"> - I talk with her anytime - Opportunities to observe each other - encouraged to try new things - celebrates success with staff (DIBELS results) 	<ul style="list-style-type: none"> - increase student achievement 	<ul style="list-style-type: none"> - do best work
3	<ul style="list-style-type: none"> - computer programs - classroom books - tutoring - computer lab (reading lab) - reading specialists - DIBELS tutoring 	<ul style="list-style-type: none"> - staff discussions - grade level discussions on topics - intervention notebooks – log strategies for student – reflection. 	<ul style="list-style-type: none"> - do what’s best for students - do our job - student academic growth 	<ul style="list-style-type: none"> -be prepared to learn

	5. Provides Support	6. Intellectual Stimulation	7. Expectation	
4	- computer reading programs - tutoring	- offers suggestions	- do best for kids, school reputation - full hr. LA instruction - hr. – reading instruction daily	- behave properly - good citizens

REFERENCES

- Arizona Department of Education. (2004). *Arizona Reads: Board policy*. Retrieved December 4, 2004, from www.ade.az.gov
- Arizona Reads. (2001). 15-704.
- Banks, J. A. (2002). *An introduction to multicultural education*. Boston: Allyn & Bacon.
- Banks, J. A., Cookson, P., Gay, G., Hawley, W., Irvine, J., & Nieto, S. (2004). *Diversity within unity: Essential principles for teaching and learning in a multicultural society*. Seattle: University of Washington.
- Blase, J., & Blase, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Leadership Quarterly*, 35(3), 249-278.
- Bolman, L., & Deal, T. E. (2001). *Leading with soul: An uncommon journey of spirit* (2nd ed.). San Francisco: Jossey-Bass.
- Bolman, L., & Deal, T. E. (2003). *Reframing Organizations: Artistry, Choice, and Leadership* (3d ed.). San Francisco: Jossey-Bass.
- Castellon, M. (2006). *Relationship between teachers' perceptions of principal leadership behaviors and instructional choices of reading interventions for at risk students: A pilot study*. Unpublished manuscript, University of Arizona, Tucson.
- Center for the Improvement of Early Reading Achievement. (2001). *Reading first: The research building blocks for teaching children to read*. Jessup, MD: National Institute for Literacy.

- Conley, D. T. (1991). Lessons from laboratories in school restructuring and site-based decision making, Oregon's "2020" schools take control of their own reform. *Oregon School Study Council*, 34(7), 1-61.
- Cotton, K. (2003). *Principals and student achievement: What the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Cuban, L. (1988). A fundamental puzzle of school reform. *Phi Delta Kappan*, 69(5), 341-344.
- Cuban, L. (2001). *How can I fix it? Finding solutions and managing dilemmas*. New York: Teacher's College Press.
- Darling-Hammond, L., & Bransford, J. (Ed.). (2005). *Preparing teachers for a changing world*. San Francisco: Jossey-Bass.
- Deal, T. E., & Peterson, D. (1990). *The principals role in shaping a school culture*. Washington, DC: U.S. Department of Education, Office of Educational Research and Development.
- Deal, T. E., & Peterson, D. (1999). *Shaping school culture: The heart of leadership*. San Francisco: Jossey-Bass.
- Deno, S. L. (1989). Curriculum-based measurement and special education services: A fundamental and direct relationship. In M. Shinn (Ed.), *Curriculum-based measurement: Assessing special children* (pp. 1-17). New York: Guilford.

- Deno, S. L. (1998). Academic progress as incompatible behavior: Curriculum-based measurement as intervention. *Preventing School Failure, 36*(2), 5-10.
- Dewey, J. (1933). *How we think*. Boston: Heath.
- Edmonds, R. (1982). Programs of school improvement: An overview. *Educational Leadership, 12*, 4-11.
- Fuchs, L. S., & Fuchs, D. (1986). The burden of proof: Validity as improvement of instructional practice. *Exceptional Children, 61*, 510-519.
- Fulbright, L. (1988). *School Based Management: A Strategy for Better Learning*: American Association for School Administrators, National Association of Elementary School Principals & National Association of Secondary School Principals.
- Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London: Falmer.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fullan, M., & Watson, N. (2000). School-based management: Reconceptualization to improve learning outcomes. *School Effectiveness and School Improvement, 4*, 453-473.
- Gersten, R., Keating, T., & Irvin, L. (1995). The burden of proof: Validity as improvement of instructional practice. *Exceptional Children, 61*, 510-519.
- Gickling, E. E., & Harvertape, S. (1981). *Curriculum based assessment*. Minneapolis: School Psychology In-service Training Network.

- Glickman, C. D. (1985). *Supervision of instruction: A developmental approach*. Boston: Allyn & Bacon.
- Goldhaber, D. D., & Brewer, D. J. (1996). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis, 22*, 129-145.
- Good, R. H., Gruba, J., & Kaminski, R. A. (2001). Best practices in using Dynamic Indicators of Basic Early Literacy Skills (DIBELS). *Best Practices in School Psychology, 4*, 679-700.
- Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research. *Educational Administration Quarterly, 32*(1), 5-44.
- Hargrove, L., Church, K., Yssel, N., & Doch, K. (2002). Curriculum based assessment: Reading and state academic standards. *Preventing School Failure, 46*(4), 148-159.
- Harrison, C. R., Killion, J. P., & Mitchell, J. E. (1989). Site-based management: The realities of implementation. *Educational Leadership, 46*(8), 55-58.
- Institute for the Development of Educational Achievement. (2002). *Dynamic indicators of basic early literacy skills*. Retrieved March 3, 2005, from <http://dibels.uoregon.edu/measures>
- Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed methods approaches*. (2nd ed.). Boston: Pearson.

- Kaminski, R. A., & Good, R. H. (1996a). Toward a technology for assessing basic early literacy skills. *School Psychology Review, 25*, 215-227.
- Kaminski, R. A., & Good, R. H. (1996b). Toward a technology for assessing basic early literacy skills. *School Psychology Review, 25*, 215-227.
- Kaminski, R. A., & Good, R. H. (1998). Assessing early literacy skills in a problem-solving model: Dynamic Indicators of Basic Early Literacy Skills. In M. Shinn (Ed.), *Advanced applications of curriculum-based measurement* (pp. 113-142). New York: Guilford.
- Kovaleski, J., Tucker, J., & Duffy, D. (1995). School reform through instructional support: The Pennsylvania initiative. *Communique, 23*(8), 8-22.
- Leithwood, K. (1990). The principal's role in teacher development. In *Changing school culture through staff development, 1990 ASCD yearbook* (pp. 71-90). New York: Association for Supervision and Curriculum Development.
- Leithwood, K. (1994). Leadership for school restructuring. *Educational Administration Quarterly, 30*(4), 21.
- Leithwood, K. (1995). *Effective school district leadership: Transforming politics into education*. New York: State University of New York Press.
- Leithwood, K., & Jantzi, D. (1996). Toward an explanation of variation in teachers' perceptions of transformational school leadership. *Educational Administration Quarterly, 32*(4), 512-538.
- Lezotte, L. W. (1991). *Correlates of effective schools: The first and second generation*. Okemos, MI: Effective Schools Products.

- Marzano, R., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results*. Aurora, CO: Mid-continent Research for Education and Learning.
- Mason, J. (1996). *Qualitative researching*. London: Sage.
- A Nation at Risk*. (1983). Retrieved October 14, 2005, from <http://www.ed.gov/pubs/NatAtRisk/risk.html>
- National Center for Education Statistics. (2004a). *Children's reading and mathematics achievement in kindergarten and first grade*. Retrieved January 6, 2006, from <http://nces.ed.gov>
- National Center for Education Statistics. (2004b). *Who teaches reading in public elementary schools? The assignments and educational preparation of reading teachers*. Retrieved January 6, 2006, from <http://nces.ed.gov/surveys/sass>
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. Bethesda, MD: National Institute of Child Health and Human Development.
- National Reading Panel. (2004). *Report from the National Reading Panel: Teaching children to read*. Retrieved June 18, 2006, from <http://www.nichd.nih.gov/publications/nrpubskey.cfm>
- Neuman, W. L. (2004). *Basics of social research: Qualitative and quantitative approaches*. Boston: Pearson.

- Nieto, S. (2000). *Affirming diversity: The sociopolitical context of multicultural education*. New York: Addison Wesley Longman.
- No Child Left Behind Act. (2001). Pub. L. No.107-110.
- Pajak, E. (1993). *Approaches to clinical supervision: Alternatives for improving instruction*. Norwood, MA: Christopher-Gordon.
- Pemberton, J. (2003). Communicating academic progress as an integral part of assessment. *Council for Exceptional Children, 35*(4), 16-21.
- Rea, L. M., & Parker, R. A. (1997). *Designing and conducting survey research: A comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass.
- Reschly, D. J., & Grimes, J. (Eds.). (2002). *Best practices in intellectual assessment*. Bethesda, MD: National Association of School Psychologists.
- Schein, E. H. (1986). What you need to know about organizational culture. *Training and Development Journal, 30*-33.
- Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco: Jossey-Bass.
- Shapiro, E. S. (1996). *Academic skill problems: Direct assessment and intervention*. New York: Guilford.
- Sheppard, B. (1996). Exploring the transformational nature of instructional leadership. *The Alberta Journal of Educational Research, 42*(4), 325-344.
- Shinn, M. (Ed.). (1989). *Curriculum based measurement: Assessing special children*. New York: Guilford.

- Shinn, M. (Ed.). (1995). *Best practices in curriculum-based measurement and its use in a problem-solving model*. Washington, DC: National Association of School Psychologists.
- Shon, D. A. (1988). Coaching reflective thinking. In P. P. Grimmett & G. F. Erickson (Eds.), (pp. 19-30). New York: Teachers College Press.
- Short, E. C. (1995). A review of studies in the first 10 volumes of the Journal of Curriculum and Supervision. *Journal of Curriculum and Supervision*, 11(1), 87-105.
- Silby, D., Biber, D., & Hesch, A. (2001). Establishing curriculum based measurement oral reading fluency performance standards to predict success on local and state tests of reading achievement. *AHSD*, 25.
- Sparks, D. (2002). *Designing powerful professional development for teachers and principals*. Oxford: National Staff Development Council.
- U.S. Census Bureau. (2004). *Census 2004 demographic profile highlights*. Retrieved January 9, 2006, from <http://factfinder.census.gov/servlet.SAFFFacts>
- Valentine, J. W., & Lucas, S. (2000). *Principal leadership survey*. Unpublished manuscript.