School Leadership *that Works*

From Research to Results

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SCHOOL LEADERSHIP

THAT WORKS

FROM RESEARCH TO RESULTS

Preface v

Part 1: The Research Base

1 In Search of School Leadership 3

2 Some Theories and Theorists on Leadership 13

3 The Meta-Analysis 28

Part 2: Practical Applications

4 The 21 Responsibilities of the School Leader 41

5 Two Types of Change 65

6 Doing the Right Work 76

7 A Plan for Effective School Leadership 98

Epilogue 123

Technical Notes 124

Appendix A: Reports Used in the Meta-Analysis 171

Appendix B: Cotton's 25 Leadership Practices and the 21 Responsibilities 178

References 180

Index 188

About the Authors 193

Preface

Unlike many other books about school leadership, this one blends practical advice and research. Most books on the topic address one or the other, but not both. We believe that, at this particular time in the history of K–12 education in the United States, a book like this one is not only useful but also necessary because calls for research-based practices have never been as strong as they are now. Similarly, calls for school leadership that translates into enhanced student achievement have never been as strong. To answer both calls we conducted a meta-analysis of the research on school leadership spanning 35 years and found studies from 1978 to 2001 that met our selection criteria. Additionally, we conducted a factor analysis of a survey derived from our meta-analysis and administered to more than 650 building principals.

To answer those who rightfully will want to know the specifics of our methodology and the assumptions underlying our conclusions, we provide what we consider to be all requisite technical information in a series of notes beginning on page 124. To provide practical guidance for those who face the daily challenges of leading a school, we translate all of our findings into specific recommendations for practice. We believe that our advice will help those interested in our research methodology better understand our purpose and focus. Alternatively, we believe that our discussion of the research will help those interested in our practical advice understand the solid research base underlying our recommendations.

For those who want to more closely examine their own leadership challenges, we offer McREL's Balanced Leadership Profile 360™, a subscription-based online survey and professional development tool based on the 21 principal leadership responsibilities described in this book. You may access the principal self-assessment

version of the survey and receive immediate feedback on your fulfillment of the 21 leadership responsibilities as they apply to a specific school or districtwide improvement initiative that you identify. The Balanced Leadership Profile 360™ also provides principals with a variety of online professional development resources and tools associated with the 21 leadership responsibilities and change leadership.

McREL is pleased to offer you a discount subscription to the survey. To access the discount, please visit www.mcrel.org, click Balanced Leadership Profile 360™, and enter the registration code **reader.** Then follow the directions. If you have questions concerning the survey, please call McREL at 800-781-0156.

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Part 1

The Research Base

1

In Search of School Leadership

Each school day more than 53.6 million students (National Center for Education Statistics, 2002b) walk into more than 94,000 K–12 schools (National Center for Education Statistics, 2002a) in the hopes that the 13 years of schooling they will experience will dramatically enhance their chances of success in the modern world. Indeed, evidence of income in 2001 supports these hopes. According to the U.S. Census Bureau (March 2002), the earning potential (that is, the median income) of a student who graduates from high school is $19,900, compared with $11,864 for a student who does not. If the high school graduate completes college, that earning potential increases to $37,203. A master's degree increases the figure to $49,324. A doctorate raises annual income to $63,952, and with a professional licensure, it reaches $71,606. School, then, can be the door to advancement—at least financial advancement—in our complex society. For a particular school to be the launchpad to the levels of success sought by students, however, it must operate effectively.

Whether a school operates effectively or not increases or decreases a student's chances of academic success. Marzano (2003) has shown that students in effective schools as opposed to ineffective schools have a 44 percent difference in their expected passing rate on a test that has a typical passing rate of 50 percent. To illustrate, consider two schools—School A and School B. In terms of how they are run, School A is effective and School B is ineffective. (In Chapter 6 we consider the specific characteristics of effective versus ineffective schools.) Now assume that the two schools have a typical population of students—some with many advantages in their home environment and background experiences; some with few if any advantages; most somewhere in the middle. If students in both schools take a

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test that has a typical passing rate of 50 percent, we would expect 72 percent of the students in the effective school to pass the test and only 28 percent in the ineffective school to pass—a difference of 44 percent. This is depicted in Figure 1.1. (For an explanation of this scenario, see Technical Note 1 on p. 124.)

Although the difference in expected student achievement in "effective" versus "ineffective" schools is dramatic, the difference is even greater when we contrast "highly effective" schools with "highly ineffective" schools—more specifically, the top 1 percent of schools with the bottom 1 percent. This scenario produces a difference in passing rates of 70 percent. In the top 1 percent of schools we would expect 85 percent of students to pass a test that has a typical passing rate of 50 percent; in the bottom 1 percent of schools we would expect only 15 percent to pass that same test. (See Technical Note 2 on p. 129 for a more detailed explanation.)

FIGURE 1.1
Percentage of Students Expected to Pass or Fail a Test in Effective Versus Ineffective Schools

	Expected Pass Rate	Expected Fail Rate
Effective School (A)	72%	28%
Ineffective School (B)	28%	72%

The central question addressed in this book is this: To what extent does leadership play a role in whether a school is effective or ineffective? That is, How much of a school's impact on student achievement is due to the leadership displayed in that school? We begin with some past and current beliefs about leadership.

Past and Current Beliefs About Leadership

If we consider the traditions and beliefs surrounding leadership, we can easily make a case that leadership is vital to the effectiveness of a school. In fact, for centuries people have assumed that leadership is critical to the success of any institution or endeavor.

The concept of leadership dates back to antiquity. According to Bass (1981), the study of leadership is an ancient art. Discussions of leadership appear in the works of Plato, Caesar, and Plutarch. Additionally, leadership is a robust concept that "occurs universally among all people regardless of culture, whether they are isolated Indian villagers, Eurasian steppe nomads, or Polynesian fisher folk" (p. 5).

Theories of leadership abound. They include approaches such as the "great-man" theory, which suggests that, for example, without Moses the Jewish nation

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would have remained in Egypt and without Churchill the British would have acquiesced to the Germans in 1940; trait theories, which contend that leaders are endowed with superior qualities that differentiate them from followers; and environmental theories, which assert that leaders emerge as a result of time, place, and circumstance. Regardless of the theory used to explain it, leadership has been intimately linked to the effective functioning of complex organizations throughout the centuries.

The traditions and beliefs about leadership in schools are no different from those regarding leadership in other institutions. Leadership is considered to be vital to the successful functioning of many aspects of a school. To illustrate, the list below depicts only a few of the aspects of schooling that have been linked to leadership in a school building:

- Whether a school has a clear mission and goals (Bamburg & Andrews, 1990; Duke, 1982)
- The overall climate of the school and the climate in individual classrooms (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979; Brookover et al., 1978; Brookover & Lezotte, 1979; Griffith, 2000; Villani, 1996)
- The attitudes of teachers (Brookover & Lezotte, 1979; Oakes, 1989; Purkey & Smith, 1983; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979)
- The classroom practices of teachers (Brookover et al., 1978; Brookover & Lezotte, 1979; McDill, Rigsby, & Meyers, 1969; Miller & Sayre, 1986)
- The organization of curriculum and instruction (Bossert, Dwyer, Rowan, & Lee, 1982; Cohen & Miller, 1980; Eberts & Stone, 1988; Glasman & Binianimov, 1981; Oakes, 1989)
- Students' opportunity to learn (Duke & Canady, 1991; Dwyer, 1986; Murphy & Hallinger, 1989)

Given the perceived importance of leadership, it is no wonder that an effective principal is thought to be a necessary precondition for an effective school. To illustrate, a 1977 U.S. Senate Committee Report on Equal Educational Opportunity (U.S. Congress, 1970) identified the principal as the single most influential person in a school:

> In many ways the school principal is the most important and influential individual in any school. He or she is the person responsible for all activities that occur in and around the school building. It is the principal's leadership that sets the tone of the school, the climate for teaching, the level of professionalism and morale of teachers, and the degree of concern for what students may or may not become. The principal

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> is the main link between the community and the school, and the way he or she performs in this capacity largely determines the attitudes of parents and students about the school. If a school is a vibrant, innovative, child-centered place, if it has a reputation for excellence in teaching, if students are performing to the best of their ability, one can almost always point to the principal's leadership as the key to success. (p. 56)

Given the perceived importance of leadership in schools and the central role of the principal in that leadership, one might assume that suggestions regarding leadership practice in schools are based on a clear, well-articulated body of research spanning decades. Unfortunately, this assumption is incorrect for at least two reasons. First, far less research on school leadership has been done than one might expect. To illustrate, in a review of the quantitative research from 1980 to 1995, Hallinger and Heck (1996) identified only 40 studies that address the relationship between school leadership and student academic achievement. In our analysis of the research over the last 35 years, we found more than 5,000 articles and studies that address the topic of leadership in schools, but only 69 that actually examine the quantitative relationship between building leadership and the academic achievement of students. (We discuss our study in depth in Chapter 3.) In spite of the relative paucity of empirical studies on school leadership, books recommending leadership practices for educational administrators abound.

Second, the research that has been done on school leadership is quite equivocal, or at least is perceived as such. For example, some assert that it provides little specific guidance as to effective practices in school leadership. As Donmoyer (1985) explains:

> Recent studies of schools invariably identify the principal's leadership as a significant factor in a school's success. Unfortunately these studies provide only limited insight into how principals contribute to their school's achievements. (p. 31)

Others assert that the research does not even support the notion that school leadership has an identifiable effect on student achievement. For example, a recent synthesis of the research on school leadership concluded that statistically there is almost no relationship between school leadership and student achievement. Specifically, as a result of their analyses of 37 studies conducted internationally on the impact of building leadership on student achievement, Witziers, Bosker, and Kruger (2003) report almost no direct relationship. We deal with this particular study in Chapters 2 and 3. However, taken at face value, the findings from this study would lead one to conclude that little effort should be put into developing leaders at the school building level.

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A Different Perspective

The conclusions we offer in this book stand in sharp contrast to those suggesting that the research on school leadership provides no guidance as to specific leadership behaviors and to those suggesting that school leadership has no discernable direct effect on student achievement. Our basic claim is that the research over the last 35 years provides strong guidance on specific leadership behaviors for school administrators and that those behaviors have well-documented effects on student achievement. A logical question is, How can we make such claims in light of the previous statements regarding the research (or lack thereof) on school leadership? The answer lies partially in the research process we employed—a methodology referred to as meta-analysis—which is specifically designed for synthesis efforts such as ours.

The Nature and Function of Meta-Analysis

There have been a number of calls for a new paradigm of research in educational leadership (see Heck & Hallinger, 1999; Hill & Guthrie, 1999). These calls come at a time when the methodology of meta-analysis has provided impressive advances in the art and science of synthesizing studies within a given domain.

The term *meta-analysis* refers to an array of techniques for synthesizing a vast amount of research quantitatively. The technique was formally developed and made popular by Gene Glass and his colleagues in the early 1970s (see Glass, 1976; Glass, McGaw, & Smith, 1981). Since then, individuals in a variety of fields have used meta-analysis to construct generalizations that were previously unavailable (see Hunt, 1997). For example, in his book *How Science Takes Stock: The Story of Meta-Analysis,* Hunt provides compelling illustrations of the successful use of meta-analysis in medicine, psychology, criminology, and other fields.

In simple terms, meta-analysis allows researchers to form statistically based generalizations regarding the research within a given field. We discuss some of the more technical aspects of meta-analysis in Technical Note 3 (see p. 130). Here we briefly consider some aspects of meta-analysis that are particularly important to our assertions about the research on school leadership and our reasons for using this particular methodology.

At least two questions might come to mind about our decision to use meta-analysis. First, why did we choose to synthesize the research of others as opposed to conducting a study of our own? That is, why didn't we study the relationship between school leadership and student achievement by examining a number of high- and low-performing schools and the leadership in those schools instead of

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examining the research of others? The answer is that any study we would have conducted, no matter how well constructed, would have contained "uncontrolled error" influencing its outcome.

As an example, assume we had been able to identify 10 principals who were strong leaders and 10 principals who were weak leaders and randomly assign them to serve for three years in 20 schools with about the same average academic achievement. In educational circles, this type of study would be considered strong. In fact, the No Child Left Behind Act of 2001, passed by an overwhelming margin in both houses of Congress in December 2001 and signed into law on Jan. 8, 2002, recommends the use of research designs (like our hypothetical example) that employ random assignment to experimental and control groups as a form of what it refers to as "scientifically based research" (see Goodwin, Arens, Barley, & Williams, 2002). However, educators quickly note that using a design like our hypothetical example is not only impractical from a resource perspective (for example, how can you find 20 principals willing to work for three years in a school to which they have been assigned?), but unacceptable from an ethical perspective (how can you in good conscience assign 10 principals to schools knowing that they are weak leaders?). Nevertheless, for illustrative purposes, let's assume that we employed this rather "tight" empirical design. Even with this tight level of control, the findings from the study might be strongly influenced by uncontrolled factors, such as substantive differences in the background and experience of the teachers and in the family circumstances of the students in the various schools. Such factors are sometimes referred to as "sampling error."

In practice, it is impossible to control all the error that might creep into a study. This is precisely why researchers assign a probability statement to their findings. That is, when a researcher reports that her findings are significant at the .05 level, she is saying that her findings could occur 5 times in 100 or less if they are a function of some type of uncontrolled error. If she reports that her findings are significant at the .01 level, she is saying that there is even less of a chance—1 in 100 or less—that her findings are a function of this uncontrolled error. Meta-analysis helps control for this error by examining findings across many studies. Doing this tends to cancel out much of that uncontrolled error. Whereas the findings in one study might be influenced positively by the background of the teachers, let's say, another study might be influenced negatively by this same factor. Across many studies the effect of this factor tends to cancel out.

The second question our use of meta-analysis might prompt is, Why did we use a quantitative approach to synthesis research as opposed to the more traditional approach others have used (for example, Cotton, 2003)? Indeed, every doctoral

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