McREL INSIGHTS

From Knowledge to Wisdom: Using Case Methodology to Develop Effective Leaders

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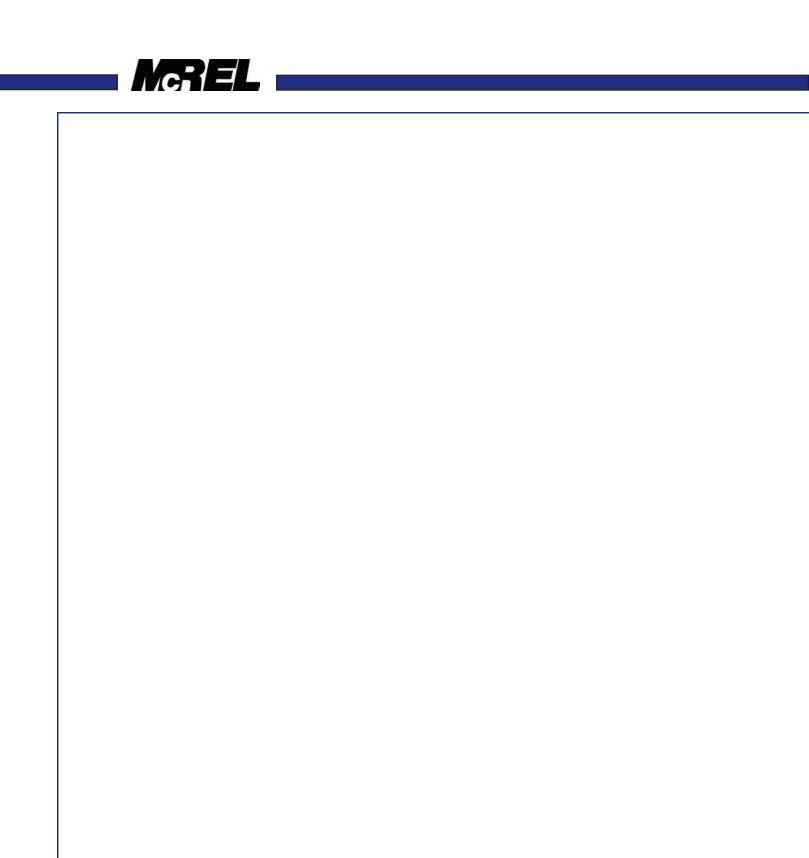**McREL**

"Knowing a great deal is not the same as being smart; intelligence is not information alone but also judgment, the manner in which information is collected and used."
   -Dr. Carl Sagan, scientist & writer

TABLE OF CONTENTS

I. Introduction

On an average day, a school principal will likely engage in hundreds of separate interactions with a variety of stakeholders, including students, parents, teachers and community members. Sometimes, the day's challenges require careful and thoughtful analysis, such as determining whether a child's poor attendance is due to health problems, bullying from another student, or transportation problems; other times, principals must make quick decisions or immediately react when a child is injured and needs life-saving first aid. School leaders are expected to discern and explain the causes of lower performance among particular subgroups with the same ease that they recall the times and locations of upcoming events. As Coles (2002) notes, principals are expected to "engage in complex and unpredictable tasks on society's behalf."

To learn more about the impact a principal's actions have on student achievement, McREL conducted a meta-analysis and published the findings in its report, *Balanced Leadership: What 30 Years of Research Tells Us about the Effect of Leadership on Student Achievement* (Waters, Marzano, & McNulty, 2003). This study began in 2001 with a review of more than 5,000 other studies claiming to have examined the effects of principal leadership on student achievement. Only 69 studies met McREL's rigorous criteria, but with these studies, we were able to quantitatively demonstrate that principal leadership has a positive influence on student achievement. As explained in the meta-analysis, the statistically significant correlation between principal behavior and student achievement is .25. This means, for example, that if we were to increase a principal's leadership ability from the 50th percentile to the 99th, over time, we would predict the average achievement of the school to rise to the 72nd percentile.

In McREL's leadership development program, we focus first on providing participants with an overview of this and other research findings on school leadership as found in our publication, *School Leadership that Works*

(Marzano, Waters, & McNulty, 2005). During the program, participants explore 21 responsibilities of highly effective school leaders and learn about the importance of shared leadership, creating purposeful communities, and managing what we call "first-" and "second-order" changes. In addition, they learn 11 research-based influences on student achievement identified by our research and reported in the ASCD publication, *What Works in Schools* (Marzano, 2003). But that alone is not enough to become a highly effective school principal. A second component to our program is case methodology. Using cases in conjunction with a thorough examination of the research is a simple but powerful method for helping current and aspiring school leaders gain the deep levels of knowledge they need to develop true professional wisdom.

II. The Role of McREL's Balanced Leadership Framework® in Leadership Development

With the results of our meta-analysis in hand, school leaders had, for the first time, a set of clearly defined responsibilities for instructional leadership. But they needed help learning and applying these responsibilities, so McREL developed *The Balanced Leadership Framework* (Waters & Cameron, 2006). The four components of the Framework are 1) leadership, 2) purposeful community, 3) magnitude of change, and 4) focus of change. Each component represents McREL's conclusions and recommendations for how school leaders can implement the research findings in their leadership practice.

Purposeful Community

Leadership

Purposeful Community

Leadership

FOCUS

School practices

Classroom practices

Student

MAGNITUDE

Create demand

Implement

Manage transitions

Monitor & evaluate

Leadership

Purposeful Community

Leadership

Purposeful Community

LEADERSHIP

Leadership is the foundational component of the Framework and permeates all of the other components. It includes 21 responsibilities with 66 associated practices.

PURPOSEFUL COMMUNITY

The second component of the Framework is purposeful community. Everything that happens in a school community happens within the context of its members, including students, parents, teachers, staff, central office administrators, the school board, other agencies, and businesses. When all the members agree upon and pursue shared purposes for increasing student achievement, school practices become more effective and sustainable.

MAGNITUDE OF CHANGE

The third component, magnitude of change, acknowledges the reality that substantive school reform is difficult to lead and maintain. Among the 21 leadership responsibilities, there are seven (knowledge of curriculum, instruction, and assessment; optimize; intellectual stimulation; change agent; monitor/evaluate; flexibility; ideals/beliefs) that help a principal create demand for a change initiative and assist individuals with the personal transitions they often experience when they move outside of their comfort or skill level.

FOCUS OF CHANGE

Focus of change is the final component of the Framework. The improvement initiative the principal and leadership team selects as its focus is critical to improved student achievement. Elmore (2003) concluded that knowing the right thing to do is the central problem of school improvement: "Holding schools accountable for their performance depends on having people in schools with the knowledge, skill, and judgment to make the improvements that increase student achievement" (p. 9).

III. The Role of Case Methodology in Leadership Development

A Taxonomy for Developing Professional Knowledge

Developing leaders with the knowledge, skills, and judgment that Elmore calls for requires doing more than simply telling leaders what to do. It requires that they know when to use specific leadership responsibilities and why using those particular leadership responsibilities in a certain situation is important. McREL's "knowledge taxonomy" captures this idea and highlights the types of knowledge that leaders need to develop true professional wisdom:

- Declarative: knowing *what* to do

- Procedural: knowing *how* to do it

- Contextual: knowing *when* to do it

- Experiential: knowing *why* it is important

Effective leaders certainly master the declarative and procedural knowledge, but they also go beyond that to the skillful application of contextual and experiential knowledge. To facilitate this process, McREL has found that case methodology can be an effective strategy for providing school leaders with opportunities to analyze practice and reflect in a structured environment.

A Vehicle for Linking the Science and Art of Leadership

Case methodology (also referred to as case method analysis or problem-based learning) is integral to the preparation of lawyers, medical doctors, and business executives. Harvard Law School has used the case method since 1870 (Garvin, 2003); Harvard Business School followed suit in 1920. In 1985, Harvard Medical School began using cases. In all of these professional schools, the case method is the vehicle whereby professionals link the science of their fields with practical problems. C. Roland

Christensen (1987) at Harvard Business School provides this description of a business case as provided by Barnes et al. (1994b, p. 44):

> A case is a partial, historical, clinical study which has confronted a practicing administrator or managerial group. Presented in narrative form to encourage student involvement, it provides data—substantive and process—essential to an analysis of a specific situation for the forming of alternative action programs, and for their implementation, recognizing the complexity and ambiguity of the practical world. (p. 2)

School principals, like lawyers, doctors, and business professionals, benefit when they have the opportunity to critically deliberate about actual cases with their colleagues. Case methodology requires principals to reflect on their past decisions and the consequences of those judgments and to interact with colleagues around the real-life problems presented in the cases. Principals, like the rest of us, benefit from exposure to new problem-solving approaches. In this regard, case methodology exemplifies best practices for adult learning.

Case methodology also is supported by the latest findings from neuroscience, which suggest that learning at a deep level requires connecting current information to previous knowledge or experience. When neural connections are strengthened and the learning becomes long-term through reinforcement and repetition, individuals may actually change their behavior (Wolfe, 2001). Many teachers already integrate similar approaches in their instruction. For example, they will ask students to reflect on what they already know about a topic before studying it more deeply. Or, they might ask students to use any of several research-based strategies, such as K-W-L charts and similar advance organizers, to facilitate students' access to their own prior knowledge. The advantages for students hold true for adult learners. Sandra Stein, chief executive officer of the New York City Leadership Academy, observed this about effective methods for adult learners: "The more a program ... reflects the actual work of school

leadership, the more effective its graduates will be at leading instructional improvement" (2006, p. 523).

While case methodology or problem-based learning is hardly a new idea, it remains far from the norm in education leadership preparation or development programs. "Few [administrator preparation] faculty members have observed or experienced PBL (problem-based learning). And, as much as Ed Schools claim to focus on teaching and learning, they typically pay scant attention to their own faculties' pedagogical practices" (Stein, 2006, p. 523). Stein calls for those who develop leaders to get clear about "what parts of the curriculum need to be simulated, what parts need to be taught directly, and what parts are best learned on the job" (p. 523).

A PROGRAM FOR DEVELOPING DEEPER KNOWLEDGE

McREL built its development program on exactly this notion—that some knowledge (namely, declarative and procedural) can be taught directly, while deeper knowledge (namely, contextual and experiential) is best developed, at least in part, via case methodology. The cases are real-life stories from practicing principals. Each story evokes emotion and creates a sense of connection that helps principals remember the situation and its resolution. These stories illustrate the strengths and challenges associated with understanding the leadership responsibilities and selecting the appropriate responsibilities to emphasize in particular situations. (see Appendix A for an example of a case principals examine in our leadership development program). Case studies are an essential element in a constructivist approach to leadership development and help leaders in at least three areas: 1) clarify what they know and believe, 2) apply critical concepts in a practical context, and 3) reflect and reinterpret situations and decisions. When principals challenge their current ways of thinking, acting, and leading, they are better able to align their leadership behavior with research-based practices.

The three stages of McREL's case methodology process

McREL uses a process adapted from Mauffette-Leenders, Erskine, and Leenders (2005) to help participants build their understanding of the cases through individual preparation time, small-group discussion, and large-group discussion. During the individual preparation time, participants read and analyze the case and take notes using a variety of tools. As they move into small group discussions, three or four participants share initial insights and their interpretations of the case. They might also clarify misunderstandings and eliminate major misconceptions in interpretation. During the third stage, which is large-group discussion, a facilitator guides the group through an in-depth conversation about the case. Facilitators listen to the discussion, insert applicable content, and make connections that ensure that the learning objectives for the case are met. Facilitators also track participation, ask thought-provoking questions, and capture key insights from participants.

IV. How Leaders Develop Wisdom

From knowledge to sound judgment

Throughout McREL's leadership development program, school leaders refine their knowledge and develop sound professional judgment. The ability to apply good judgment—deciding on the most appropriate thing to do in a specific situation—is the hallmark of professional practice.

One way to think of good judgment is as an informed opinion based on numerous past experiences. It results from a feedback loop created by experience, reflection on experience, and the ability to predict what might happen in a similar situation (Gookin, 2004). In King and Kitchener's (1994) model of how reflective judgment is developed (see Exhibit 1), good judgment is achieved in stages six and seven.

Exhibit 1: Development of professional judgment

Stage	Characteristics
1	• Uses "Black & white" thinking • Is a characteristic of young children • Assumes knowledge is absolute
2	• Assumes there is a correct answer, but not everyone knows it • Looks to "higher-ups" (people in authority) to know the answers • Has trouble handling ambiguity and making judgments
3	• Is unable to distinguish between beliefs or opinions and factual evidence • Assumes knowledge is absolute, but confuses fact & opinion, seeing both as fact
4	• Believes no one can know everything with absolute certainty • Makes judgments that often reflect a great deal of bias
5	• Makes judgments within a particular context based on evaluation of the evidence
6	• Recognizes that knowledge is uncertain and must be understood in relationship to the context and the evidence available
7	• Seeks cohesive and coherent explanations • Fosters a sense of community among those they lead by involving others in decision making • Considers all opinions fairly & provides stakeholders with information necessary to understand judgments made • Considers multiple points of view because of understanding that knowledge is constructed through critical inquiry

The research on leadership development supports the thinking that expertise is gained primarily through experience and subsequent reflection on the judgments made (Hughes, Ginnett & Curphy, 2002; McCall, Lombardo & Morrison, 1988; Sternberg et al., 2000). But experiential learning often means learning from failure, which is the underlying message in the folk wisdom, "experience is the best teacher." While first-hand experience may be the best teacher, the lesson is often an expensive one. A leader may discover he or she is not prepared to deal with a situation requiring judgment, and in some instances, lack of good judgment produces disastrous results. The challenge for leadership developers is to create a psychologically safe, risk-free environment where principals can learn from experience without harming others. Case methodology creates such an environment.

From judgment to wisdom

In a thought-provoking piece that delineates training from development, Gandz (2002) asserts this: "In the pursuit of leadership talent, organizations tend to hire for knowledge, train for skills, develop for judgment—and hope for wisdom" (p. 8). Wisdom is what allows a leader to be consciously aware of the theories, models, and beliefs that inform his or her unconscious practice of leadership. A wise leader intuitively reacts to a new challenge with an optimally accurate response that results from years of continually fine-tuning judgment through the experience-reflection-prediction cycle. Wisdom cannot be formally taught; rather, it develops through experience, reflection, and dialogue with respected peers around "the critical reconstruction of practice" (Coles, 2002).

Developing sound judgment and wisdom requires time and interdependence within a community of colleagues. Through facilitated dialogue among participants, principals can develop "reciprocal relationships," where they learn together and from one another. In such a collegial group, principals are invited to reflect on the thinking and assumptions behind their practices.

In our own experience, we have found that participants in our leadership development programs often report that it is case methodology which helps them make sense of what they are learning. As one participant, an experienced school leader from Montana, reported,

> When I started [the case methodologies], it was as if a light went on. The concepts fell into place and suddenly made sense. I am able to think in terms of focus, first- and second-order change, leadership responsibilities and all the rest of it. Most important, it has helped me refine my skills to focus on increasing student achievement.

This sort of epiphany reflects the true value of case methodology in that it helps school leaders (even experienced ones) translate knowledge to judgment and ultimately, judgment into the wisdom to successfully address the complex challenges they face every day.

V. Summary

McREL's findings from its meta- and factor-analyses of the effect of principal leadership on student achievement appear in the ASCD book, *School Leadership that Works*. Participants in our Balanced Leadership program immerse themselves in learning about the meta-analysis and the 21 leadership responsibilities identified in the research, each with statistically significant correlations to student achievement.

McREL's *Balanced Leadership Framework* is a conceptual tool to help school leaders better grasp the research findings. It organizes and groups the 21 leadership responsibilities; integrates them with other research-based knowledge on change management, diffusion theory, collective efficacy, living systems theory, asset utilization, community development, and school improvement; and provides a structure for developing principals' professional knowledge and skills.

Traditional professional development focuses on declarative and procedural knowledge. That is, participants usually learn what to do and how to do it rather than when to do it and why it is important. Often, we hear from school leaders in our program that it is the case methodology that we employ throughout the second year that helps them fully grasp the entire spectrum of the taxonomy and make sense of what they are learning. Data we have collected from more than 400 participants supports this. Evaluation results indicate that overall, participants in the program rate the case methodology sessions as good or excellent (96%). Ninety-two percent of participants reported they had greater understanding of McREL's research that identifies leadership responsibilities correlated with student achievement, and 95 percent rated the sessions as relevant to their work. Perhaps most telling was that 93 percent of participants rated the statement, "I expect to use the research/information and strategies/tools from this session in my work" as a 4 or 5 on a 5-point scale.

By reflecting on problems of practice and interacting with fellow principals, professionals can make sense of the consequences of decisions faced by the decision maker in a particular case. By examining the judgments the leader in the case made and reflecting on the results of those decisions, professionals, over time, can develop better judgment. By studying several cases, school leaders shorten their experience curve, compressing the experiences of others into a shorter span of time with the added benefit of not actually suffering the consequences of the mistakes made by the leaders in the cases.

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Appendix A

A Sample Case: Smith Creek Elementary

In May, 2005, Ms. Thompson, Smith Creek's principal, received reading scores from the state's third-grade assessment. Despite her years of working with the staff to improve instruction and a three-year process of building a learning community, reading scores had leveled off, and teachers said they expected that to happen. Ms. Thompson knew she needed to help her staff believe that together they could make a bigger impact on student achievement than they had in the past. She now needed to make a decision on how to proceed.

The School

Smith Creek Elementary served 475 students from a suburban/rural community, near a large city in the western United States. The school served a stable, middle-class community and did not qualify for Title I funding. The school was rated as high achieving by the state's department of education.

The staff of Smith Creek consisted of 27 teachers and 8 support staff. The average teaching experience at Smith Creek was five years. Ms. Thompson had been the principal of the school for eight years.

Developing Community

When Ms. Thompson became the principal of Smith Creek in 1997, she arrived at an opportune time to make changes in literacy instruction. Smith Creek's teachers had already begun conversations about adopting a balanced literacy program. As the new literacy program was implemented, reading scores began to climb. By 2001, however, scores were stagnant. Teachers began to make comments about how they had taken their students

as far as they were capable of going. Teachers reported that the pressure to keep scores where they were was enough and to expect scores to keep rising was unrealistic, given that some students would never be able to live up to the high expectations of the school.

Ms. Thompson believed, however, that she and her staff had the knowledge and skills needed to raise achievement. She thought that her teachers had done a great job of working individually to meet the needs of students. She also thought that if collegiality and collaboration improved in her school, it would likely influence student achievement. To build the type of community Ms. Thompson envisioned, though, she knew she would need to be much more intentional.

THE TIMELINE

2001: Ms. Thompson began having conversations with her staff about developing a professional community focused on increasing student achievement. The first step Ms. Thompson took as a result of these conversations was to schedule time for teachers to begin looking at student work in a collaborative setting.

2002: Ms. Thompson thought the staff was ready for the next step. Along with her leadership team, which consisted of team leaders from each grade level, as well as specialists, she began attending formal professional development sessions on professional learning communities. As a result of this professional development, Ms. Thompson and her leadership team restructured the process of teaming. They replaced grade-level teams with vertical teams. This new structure gave teachers from different grade levels and specialist areas the opportunity to work together around student achievement issues. Staff met twice a month to look at student work.

Leadership team members facilitated these sessions. Vertical teams began reading articles about effective teaching practices and having discussions about the purpose of the school and student achievement outcomes.

2003: Members of vertical teams began discussing the beliefs, philosophies, and assumptions that defined the purpose of the school. The teams identified high levels of student achievement as the outcome for the school, and the new vision statement reflected this change.

2004: The staff formalized agreements, which included a strong expectation of staff collaboration around achievement. They developed new policies and processes, such as allotting time for teachers to meet and look at student work.

Despite these changes in how the staff worked together, student achievement still stagnated. It became clear to Ms. Thompson that although her staff had stated that high achievement was their purpose, they had not agreed upon a definition of high achievement. Ms. Thompson defined high achievement as continually doing better. Many of the school's teachers defined high achievement as where the school was currently scoring on state tests. Ms. Thompson explained that with their current resources, class sizes, and literacy support, she could not see a reason why scores had flat-lined through the previous years. Some teachers could not understand why Ms. Thompson was not satisfied by the current level of reading proficiency. Others felt her crusade for higher levels of proficiency was misguided.

Fall, 2004: The leadership team collaboratively set a target for 85 percent of Smith Creek's students to score proficient or above on the state spring reading assessment. She asked the team leaders to go back to their teams and set a goal for the team that would support the school-wide goal. She wanted them to find out how many students each team felt they would have performing at proficient levels in reading for the next round of state tests. She asked the team leaders to report back their findings at the next meeting.

Fall, 2004, two weeks later: Ms. Thompson eagerly listened to reports from the leadership team. The grade-level teams reported out that their team members realistically expected around 70–75 percent of their students to score in the proficient range on the state test. One grade level reported that they thought 80 percent of this year's students would be proficient on the state test. Ms. Thompson was disappointed. When she asked her team leaders why the teachers did not expect higher achievement, she was told that after looking individually at each student, teachers believed that having 70 percent of the school's students score proficient in reading was as good as the students could do. Most teachers reported that they did not think they were able to go beyond this level of proficiency. "To believe otherwise," they said, "would put unrealistic stresses on the staff and students."

THE DECISION

May 2005: Ms. Thompson received the first set of reading scores from the state assessment. Students scored very close to where her teachers had expected. She believed that her school had the knowledge, skills, assets, and community to do better. She knew that she had to get her teachers to believe that higher achievement was possible. Now she had to decide what she should do to get her teachers to believe that they could make a bigger difference in student achievement.

This case was written by Greg Cameron, David Livingston, Monette McIver, and Jane Schumacher. It was prepared solely to provide materials for class discussion. The authors do not intend to illustrate either effective or ineffective examples of leadership practice. The authors may have disguised certain names and other identifying information to protect confidentiality.

The opening question for large group discussion:

If you were the principal of Smith Creek Elementary School, what would your next steps be?

Additional questions:

- *What elements of a purposeful community could you take to a higher level in this case? Describe your plan of action.*

- *How does the school's level of collective efficacy influence the other elements of purposeful community?*

- *What leadership responsibilities would you emphasize as the principal of this school? Which leadership responsibilities would you share with other members of your staff?*