

The Ripple Effect

A Synthesis of Research on Principal Influence
to Inform Performance Evaluation Design



About This Brief

This brief draws upon research literature on principal effectiveness and policy documents created by scholars and national organizations concerned with principal professional practice and its effects.

Research on principal effectiveness was located through a keyword search of electronic catalogs, including ERIC and EBSCO. In addition, the researchers asked nationally recognized leadership scholars to recommend research studies for inclusion in the review. The researchers specifically sought meta-analyses of research studies that identified principal knowledge or behaviors influencing student learning and teacher instructional decisions. Articles were screened for their relevance, quality, and scholarly rigor as determined by the transparency of methods and peer review process. Articles advocating a position were excluded from the search. The literature was reviewed and findings categorized according to strength of evidence and direct/indirect relation to principals' work. As a result of the review, a framework for understanding principal influence emerged.

The researchers also reviewed and analyzed policy documents, produced by national policy entities, which define principal effectiveness and principal professional standards. Effectiveness definitions and standards were reviewed, and a typology emerged.

While the researchers have attempted to be thorough, they also recognize that the search may not have been exhaustive and that new research continues to emerge. The review is limited, in part, because a large number of databases were not referenced and multiple, independent reviewers were not employed to screen and analyze the literature.

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Introduction

Public education is a cornerstone of our democracy, a prerequisite for economic recovery, and a key lever in achieving our national commitment to equal opportunity for all. Although the nearly 90,000 public school principals constitute a relatively small percentage of the public education sector, their work can have a “ripple effect” on the 3.4 million teachers and 55 million PK–12 students in the United States. Principals affect school direction through policy interpretation, resource allocation, and community relations. They manage the pragmatic day-to-day school activities, from the football field to the classroom, and balance competing priorities to provide high-quality educational services to students. Although many factors in student learning have not been fully explained, leadership is the second most influential school-level factor on student achievement, after teaching quality (Hallinger & Heck, 1998; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Waters, Marzano, & McNulty, 2003).

We know, intuitively, that an effective principal can influence school performance, but what makes for an effective principal? Nationally, policymakers and practitioners are taking up this question when designing principal evaluation systems. An explicit definition of principal effectiveness drives all aspects of evaluation system design (Clifford et al., 2012). Principal effectiveness is defined as the intended or expected effects of principals’ work. Ensuring that new evaluation systems are valid, fair, and useful requires them to reflect an accurate definition of principal effectiveness. Policymakers and practitioners must create systems that provide a holistic depiction of performance and are feasible to implement in diverse school contexts.

Principals’ voices, at times, have been lost in efforts to create better performance evaluation systems.

To develop definitions of principal effectiveness, policymakers must reference policy, seek principals’ perspectives on their work, and review available research on principal effectiveness to create new performance evaluation designs. Principals’ voices, at times, have been lost in efforts to create better performance evaluation systems. In many ways, principals are best positioned to construct a realistic and nuanced definition of effective leadership that accurately reflects the context of schooling.

Research also should play a role in defining principal effectiveness because empirical studies can identify how principals influence schools, teaching, and learning—and how they do not. This brief provides a synopsis of the growing body of scholarly educational research literature on principal effectiveness. After providing a short historical overview of the changing role of school principals, the brief presents two policy perspectives on principal effectiveness and, finally, introduces a research-based framework for defining principal effectiveness.

Changing Roles, Changing Effectiveness

The national discussion on what constitutes an effective principal is shaped, in part, by changes in principal roles and responsibilities throughout the last century. Principals’ work is more diverse and demanding than ever before. Analyzing daily logs of principals’ activities, researchers found that how principals allocate their attention varies from school to school, even within a single district. Principals in more advantaged schools spend their time in a greater spread of different types of activities, while principals in more challenging

settings focus their attention, most frequently, on either instructional leadership or student affairs (Goldring, Huff, May, & Camburn, 2007; Goldring, May, & Huff, 2010).

The multitude of principal actions, qualities, and impacts that frequently circulate in policy debates have their roots in different visions of principal leadership (see Figure 1). Traditional views of the principal as the authoritative school manager that focuses on the efficient management of instruction have been extended to include the principal as an instructional leader who shares decision making with teachers and actively facilitates professional communities of reflective practitioners (Darling-Hammond, LaPointe, Meyerson, & Orr, 2007; Davis, Kearney, Sanders, Thomas, & Leon, 2011; Lambert et al., 2002; The Wallace Foundation, 2008).

While different visions of school leadership are apparent, we note that a single leader will assume multiple leadership roles depending on the leadership context. For example, a principal may be a “traditional manager” on certain issues and an “adaptive leader” on other issues. Today, we are asking principals to be “instructional leaders,” a role that encourages them to deeply engage with teachers in student learning issues, while also asking them to retain roles described in Figure 1. Recognizing that principals assume multiple roles and have many responsibilities, some states and districts are attempting to redistribute leadership tasks to allow principals time and focus.

Figure 1. Changing Conceptions of Principal Leadership

	Approach to Principal Leadership	Definition of Effectiveness
Traditional Manager	Leaders uphold traditions in school and community and work to create a more efficient system to attain goals. School and district administrators are the sole leaders.	Provides efficient management of student and staff time and financial resources.
Supervisor of Standards	Leaders shape staff and student behaviors to meet organizational or societal standards and ensure that people adhere to established norms. School and district administrators are the sole leaders.	Develops a system of rewards and sanctions, ensuring that teachers and students meet standards for quality performance and achievement.
Adaptive Leader	Leaders work closely with each teacher and adjust leadership approaches to move individuals toward achievement of organizational goals. School and district administrators are the sole leaders.	Knows and understands strengths, weaknesses, and styles of different groups of teachers and adapts leadership styles to match teacher developmental needs and assist in professional growth.
Instructional Leader	Leaders encourage teachers to problem solve and revise practice by facilitating self-reflection and collaborative learning. School administrators lead curriculum improvement, monitor progress, and give teachers a role in the process.	Establishes a strong vision and high expectations and programs to model good instruction, coach teachers, and provide opportunities for teachers to engage in reflection and problem solving.
Leader Among Leaders	Leaders recognize their limitations and the limitations of their position and the capacity of other to lead. Leaders work to establish organizational systems that distribute leadership and support organizational learning.	Facilitates democratic decision making and processes to take place among communities of professionals.

Source: Clifford (2012); Walker (2002)

Early understanding of school leadership envisioned the principal primarily as an authoritative, efficient manager of the building, class schedules, and financial resources. By the mid-1970s, the principal's role shifted to include supervising teacher quality and student learning. This shift was then followed by a push for principals to differentiate among teachers based on their developmental level. An effective principal adapted his or her leadership practices for each teacher's needs and monitored the teacher's progress toward certain goals or standards.

The move toward shared school leadership in the last two decades accompanied a new focus on the principal's role in leading instruction in the building. An effective principal in this approach not only sets high expectations and articulates a strong vision but also models good instruction, observes and coaches teachers, and provides teachers with opportunities to reflect on and improve their practices. The most recent conceptualization of school leadership views an effective principal as one who creates a democratic community of practice by sharing authority and distributing leadership roles to teachers whose skills and capacities match with the task at hand (Walker, 2002). This change in principal roles is reflected in recent standards- and performance-based principal evaluation processes that emphasize instructional and collaborative leadership practices (Davis et al., 2011; Weindling, 2003).

Many of the perspectives on principal leadership assume that the principal is responsible for leading a school, but new conceptions of principal leadership recognize the importance of teachers and other staff in leading a school. According to The Wallace Foundation, the role of the school principal is moving away from “superheroes or virtuoso soloists” and toward an “orchestra conductor” who shares leadership and distributes it across the building (The Wallace Foundation, 2006, p. 2). This reconceptualization of the principalship parallels broader conceptualizations of leadership as contingent upon the task and organizational situation at hand (Spillane, Halverson, & Diamond, 2004).

Changes in principals' roles have raised new and challenging questions about principal effectiveness. The 21st century principal has vastly expanded spheres of influence compared with his or her early 20th century counterpart. Principals now share their authority and take different leadership approaches, depending on their school and district context. How should we define principal effectiveness in light of these changes? As the following section elaborates, the current policy discussion is framed around two distinct perspectives on principal effectiveness—perspectives that echo aspects of the approaches to principal leadership introduced above.

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Two Emerging Policy Perspectives on Principal Effectiveness

In response to federal initiatives such as Race to the Top, state- and district-level policymakers have begun to redesign principal performance evaluation systems. Often embedded in policy statements are implicit definitions of principal effectiveness and the purpose of performance evaluation. Our review of state principal evaluation frameworks and supporting policy documents suggests two emergent perspectives on principal effectiveness:

1. A *practice perspective* from which principal effectiveness is defined by the quality of the principal's leadership or administrative practices
2. An *impact perspective* from which principal effectiveness is defined by the principal's impact on his or her school

In practice, national and state policies for principal evaluation fall somewhere in between these two perspectives and often incorporate both perspectives in measures of principal performance. Considering each perspective is useful because it provides insight on how policymakers define principal effectiveness.

The Practice Perspective: Focus on Principal Knowledge, Skills, and Practices

The first perspective on what defines an effective principal focuses on the quality of the principal's work in the school, answering questions on what the principal knows, values, and does. The practice perspective focuses on the judicious, ethical, and humane practices that school leaders are to exhibit. For example, the Council of Chief State School Officers (CCSSO) defined effective school leaders in the original Interstate School Leaders Licensure Consortium (ISLLC) standards as follows:

Effective school leaders are strong educators, anchoring their work on the central issues of learning and teaching and school improvement. They are moral agents and social advocates for the children and the communities they serve. Finally, they make strong connections with other people, valuing and caring for others as individuals and as members of the educational community. (CCSSO, 1996, p. 5)

Since then, national principal professional organizations, school leadership organizations, and researchers have produced standards and indicators documents that define principal effectiveness in terms of the knowledge, skills, attitudes, and behaviors of principals. The lists of standards and indicators have continuously expanded and tend to focus on the quality of principals' leadership. A scan of current principal standards include, but are not limited to, time management, modeling ethical and professional behaviors, showing initiative and persistence, engaging in ongoing reflection and learning, using data to inform strategy, judiciously allocating human and financial resources, and ensuring compliance with district, state, and federal policy.

As these descriptions suggest, the practice perspective focuses on the motivation, beliefs, and actions of individual principals as leaders within their schools.

Articles and policy documents reviewed for this brief identify several challenges to the practice perspective on principal effectiveness. First, observing or otherwise capturing principal practice is challenging because principals' work is not isolated to a single location, such as a classroom, which is a challenge to evaluation. Unlike teachers, the most salient features of principals' practice may not be observable in a single location, so multiple observations or other forms of evidence are needed to create a holistic evaluation of principal practice. Second, principals' work is context dependent, which means that principals' approaches to motivating staff or influencing a school may change over time and with context. A practice that works well in one type of school may not be deemed effective in another context, or context may limit principals' opportunity to display all competencies included on an evaluation form.

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The Impact Perspective: Focus on Results for Students

In contrast to the practice perspective is the impact perspective, which defines principal effectiveness as the ability to attain specific, observable changes. Our review of emergent district and state frameworks suggests that the most common impact measures focus on student academic participation (e.g., school attendance rates) or achievement (e.g., test scores, high school graduation, college enrollment). For example, the U.S. Department of Education recently defined a highly effective principal in terms of student outcomes. Specifically, a highly effective principal is defined as one whose students achieve high rates of growth, defined as an example as one and one-half grade levels in an academic year (U.S. Department of Education, 2011). While allowing for supplemental measures of principal effectiveness, this federal definition requires that student growth must factor as a "significant" part of the evaluation of a principal.

States, districts, and other entities vary in their interpretation of how significant student achievement measures should be considered when determining principal effectiveness and how student achievement should be measured. For example, New Leaders for New Schools has suggested that student learning outcomes should make up at least 70 percent of a principal effectiveness measure, and practice measures would constitute the remaining percentage (New Leaders for New Schools, 2010). States and districts have tended to place less weight on student achievement and more weight on principal practices and school-level performance measures. For example, Delaware requires that 20 percent of a principal's evaluation be based on annual student growth, and 10 states have specified that 50 percent of a principal's summative evaluation be derived from student growth or value-added measures.

The impact perspective is appealing because of its apparent simplicity. However, associating principal practice with student impact requires sophisticated statistical models.

As evidenced by federal and state principal evaluation frameworks, principal effectiveness can be defined by impact on schools, teachers, and teaching quality. Federal and state principal evaluation frameworks also may include additional impact measures, but these measures were assigned less weight in state summative assessments of principal evaluation. Examples of other impact measures include, but are not limited to, school climate, teacher retention, evidence of teacher learning, relationships with parents, and quality of school partnerships with other institutions.

When using the impact perspective, a number of important questions should be considered. These include:

- What is the appropriate weight assigned to student achievement gains, and how is student achievement best measured so judgments of effectiveness are accurate and fair?
- How long should a new principal be given to improve student achievement scores?
- What additional measures of student performance should be included in principal evaluations? How, if at all, should teaching quality and teachers' work factor into a definition of principal effectiveness?
- Should all principals, regardless of experience level or years in a school, be held to the same expectations of impact?

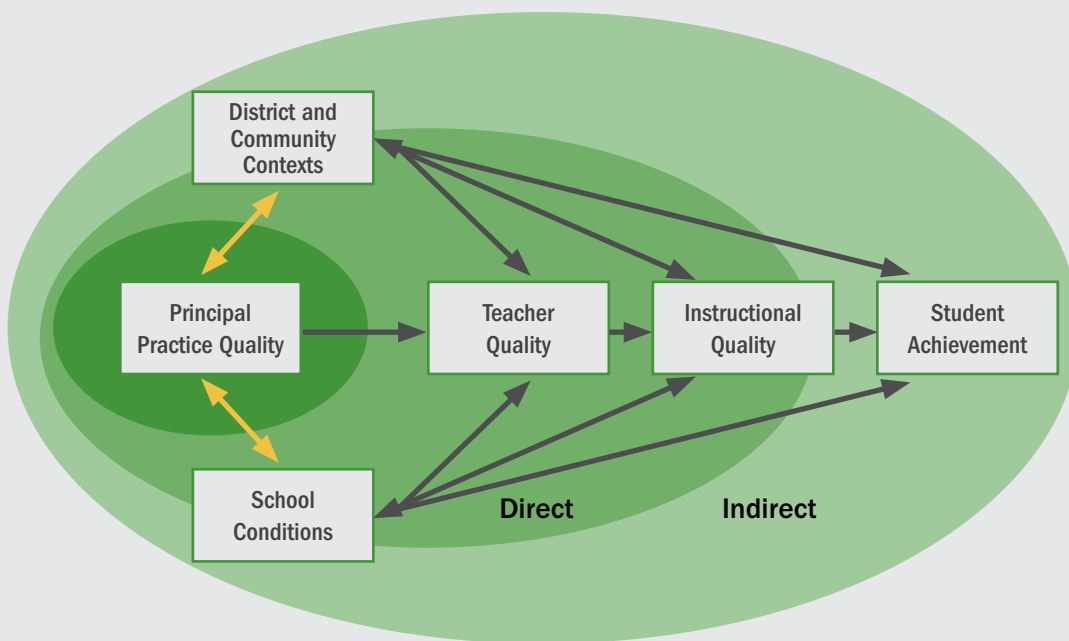
On its face, the impact perspective is appealing in its simplicity. However, associating principal practice with student impact requires sophisticated statistical models (Hallinger & Heck, 1998) that must be carefully developed and explained to principals. In addition, feedback on impact attainment alone likely will not yield actionable feedback to principals because principals must work through others to improve student performance.

The Ripple Effect: A Research-Based Framework for Principal Effectiveness

State policymakers' efforts to build principal evaluation systems provide some insight into the ways principal effectiveness is being defined in the field. Research provides an additional perspective. The number and quality of school leadership, and specifically principal effectiveness, studies has increased dramatically over the past 20 years and has provided considerable insight into school leadership.

In reviewing available research studies (mainly meta-analyses on principal effectiveness), a framework for understanding principal effectiveness emerges that includes direct and indirect effects of principal practices. The “ripple effect” (see Figure 2) reflects the broad impact and context-dependent nature of principals’ practice. This framework may be helpful when designing principal evaluation, professional development, and other support systems.

Figure 2. The Ripple Effect: Framework for Principal Impact



Source. Halliger & Heck, 1998; Leithwood et al., 2004; Stronge, Richard, & Catano, 2008; Waters, Marzano, & McNulty, 2003

Principal Practice

At the center of the ripple effect is principals’ practice, which includes principal knowledge, dispositions, and actions. Research suggests that principal practice influences the successful implementation of programs that can influence school performance and student learning. For example, when researchers examined the effectiveness of data-use initiatives, they found that student learning gains occurred as a result of such initiatives only when the principal in charge held the belief that improvement was possible (Wahlstrom, Seashore-Louis, Leithwood, & Anderson, 2010). This research suggests that principals influence the success of programs that have been shown to be effective in other schools.

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Multiple research teams have independently examined the evidence base relating practice to school and student improvement. While each research team drew different conclusions, some common practices across studies indicate that the following principal practices are associated with student achievement and high-performing schools:

- Creating and sustaining an ambitious, commonly accepted vision and mission for organizational performance
- Engaging deeply with teachers and data on issues of student performance and instructional services quality
- Efficiently managing resources, such as human capital, time, and funding
- Creating physically, emotionally, and cognitively safe learning environments for students and staff
- Developing strong and respectful relationships with parents, communities, and businesses to mutually support children’s education
- Acting in a professional and ethical manner (CCSSO, 2008; Marzano, Waters, & McNulty, 2005; Stronge, Richard, & Catano, 2008).

Although not commonly included in research reviews, Murphy, Elliott, Goldring, and Porter (2006) claim that the “touchstones” for principals are consistently focusing on learning, teaching, curriculum, and evaluation and ensuring that others in the organization do so as well.

While principal effectiveness research is far from definitive (Kearney, 2010), these findings form a reasonable basis for principal evaluation and professional development designs.¹

The Direct Influence of Principals

By virtue of their position, principals’ practice can directly influence school conditions, teacher quality and placement, and instructional quality. This section briefly describes available research on the direct effect principals have in these areas.

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School Conditions

School conditions include school safety, availability of resources and services, financial management, staff attitudes, direction, and staff cohesion/trust. School conditions also include the working conditions of teachers, such as the strength of professional communities, availability of adequate instructional time, and other professional supports. In summarizing the

¹ While these studies point to the practices of effective principals, less empirical work has occurred to describe how principals do their work and how leadership tasks are distributed so that strong leadership is maintained in schools (Halverson & Clifford, forthcoming; Spillane & Diamond, 2007; Spillane, Halverson, & Diamond, 2004). Understanding how principals conduct their work and how leadership is distributed in schools can provide better insight into the daily work of effective principals and better descriptions of principal practice. Such descriptions are important for the development of evaluation instruments and processes.

research on this topic from 1980–1995, Hallinger & Heck (1998) find that foremost among the ways principals foster school improvement is by shaping school goals, school improvement directions, school improvement systems, school policies and practices, and school culture. Principals are often also responsible for allocating financial and human resources toward goals, which can influence the type of teaching and learning that occur in a school.

Principals also influence school conditions by interacting with community members and advocating for quality educational programming. Such community relationships help to build support among parents, teachers, students, and other groups for support of teaching and school improvement (Waters et al., 2003).

Research also suggests that principals influence *teacher working conditions*. Positive teacher working conditions include fostering a collegial, trusting, team-based, and supportive school culture; promoting ethical behavior; encouraging data use; and creating strong lines of communication. Ladd (2009) finds an association between positive teacher working conditions and student achievement. Similarly, Wahlstrom et al. (2010) find a correlation between schools with high levels of student achievement and high ratings by teachers of “instructional climate.” Instructional climate refers to “steps that principals take to set a tone or culture in the building that supports continual professional learning” (p. 13). They find that principals that value and successfully apply research-based strategies are more likely to receive high ratings on instructional climate.

Some available research suggests that principals influence teacher working conditions by developing teachers as leaders outside their classroom walls. Effective principals strengthen the professional community, build better working relationships, and keep their staff engaged in continual learning (Wahlstrom et al., 2010; The Wallace Foundation, 2011). Principals also can affect teacher working conditions by targeting resources toward instruction, creating time for instructional and teacher reflection, and engaging teachers in high-quality professional development (Ladd, 2009).

While principals influence school conditions, it is important to note that principals’ work also is influenced by school conditions. New principals inherit organizational histories and traditions that they must work through and within in order to bring about meaningful change, and fluctuations in organizational conditions can affect principals’ leadership styles or the discretion principals have to bring about change (Lambert et al., 2002). Principals in “turnaround schools,” for example, likely need to act quickly and convincingly to improve conditions and achievement (Herman et al., 2008). Other school contexts may support and inhibit different types of leadership practices.

Teacher Quality

First and foremost, principals have a strong and immediate influence on teacher quality, including teacher distribution between and across schools. Leithwood et al. (2004) find substantial evidence that effective principals are successful in recruiting, retaining, and cultivating effective teachers. This makes principals' influence more powerful.

Several studies also suggest that principals influence instructional quality and staff stability. The Retaining Teacher Talent study conducted by researchers at Public Agenda and American Institutes for Research found that teachers viewed principal quality as a strong factor affecting their career decisions. Although survey research has its limits, it is of note that, of those teachers questioned who did not intend to stay in the profession for the long term, 38 percent said that working with a principal who really helped them improve their effectiveness would *definitely* change their mind (an additional 29 percent said it *might* change their mind) (Public Agenda, 2009). Milanowski, Longwell-Grice, Saffold, Jones, Schomisch, and Odden (2009) found that principal quality was the most important factor in making schools attractive or unattractive to prospective teachers. Likewise, 38 percent of teachers surveyed by Luekens, Lyter, Fox, and Chandler (2004) who moved to a new school did so because of inadequate support from administrators. Ingersoll and Smith (2003) similarly found that 26 percent of teachers surveyed who had left the profession cited poor principal support as a primary reason for their decision. So, among those who leave the profession, leave their school, or *intend* to leave the profession or their school, inadequate leadership is often a leading source of their dissatisfaction.

Principals also influence the distribution of effective teachers across and within schools. One outcome of the No Child Left Behind Act of 2001 was greater documentation of the extent to which poor and minority students are systematically taught by less highly qualified and less experienced teachers (Behrstock & Clifford, 2010; Imazeki & Goe, 2009). In one state, about half of teachers surveyed said that there are certain schools or districts in which they would not apply or would not accept a job offer (DeAngelis, Peddle, Trott, & Bergeron, 2002). But in most cases, working under the supervision of an inspiring and highly competent principal is exactly what makes the difference in teachers' openness, even eagerness, to working in challenging school environments (The Wallace Foundation, 2011).

In addition to the direct effects of principals on teachers and school improvement priorities that are described above, a large number of studies have noted an indirect link between principal quality and student performance (Kearney, 2010).

In addition to drawing in teachers to high-need schools through their leadership (Rice, 2010), principals also often are responsible for assigning teachers to classes within the school and in this capacity have the authority to ensure that students at risk of failure are provided teachers with the experience and expertise needed to set them on the right course. In this way, principals influence the distribution of teachers within their schools.

The Indirect Influence of Principals

In addition to the direct influences of principals on teachers and school improvement priorities that are described above, a large number of studies have noted an indirect link between principal quality and student performance (Kearney, 2010). By “indirect,” we mean that principals work through other means to achieve gains.

Instructional Quality

Effective principals meaningfully shape teachers’ instruction by providing relevant resources and supports that increase learning and by signaling the types of instruction that are acceptable and optimal in the school (Spillane et al., 2004). Principals can signal which types of instruction are accepted in schools directly by providing feedback to teachers or indirectly by selecting programs, curriculum, and other instructional resources that are coherent with good instructional practices (Smith, Lee, & Newmann, 2001). They also allocate financial, material, and human resources that are necessary to make good teaching possible.

One specific way in which effective principals significantly enhance teachers’ learning is through job-embedded professional development. Job-embedded professional development refers to “teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers’ content-specific instructional practices with the intent of improving student learning” (p. 2). Principals support this type of teacher learning by:

- Emphasizing its importance
- Developing a culture among faculty that values ongoing learning
- Encouraging faculty members to facilitate such learning
- Providing common structured time for such learning
- Equipping teachers with student data to inform their learning (Croft, Cogshall, Dolan, Powers, & Killion, 2010).

These practices directly improve teachers’ instruction and are found by researchers to have significant indirect influences on how well students perform (Wahlstrom et al., 2010).

A principal’s care and concern for students can influence teaching and learning in ways that are not always obvious. For example, by simply maintaining a commitment to serve in their principalship role, school leaders also indirectly influence their school and students. Research by Wahlstrom et al. (2010) finds that rapid principal turnover negatively impacts a school’s culture and morale, which, in turn, hampers student achievement. Similarly, White and Bowers (2011) find that principals’ experience at their current school is one of just two factors (the other being the principal’s academic qualifications) that is significantly associated with student achievement.

Therefore, although principals often have good reason to want to leave their positions, those who possess the resilience and professionalism to stick out the challenge should be recognized for the contribution these qualities make to their students.

However, it is of note that the indirect impact of principals on student achievement in large part stems from the direct influence principals have on teachers and other instructional resources, as described above. Therefore, omitting from an evaluation the assessment of the principal as a human capital manager that secures a top-rate teaching force for the school is problematic, given research on principals' practice.

Student Achievement

Research that estimates principals' influence on student achievement may be informative to discussions about the weight or percentage of a principal's evaluation allocated to student growth. What we know, from large-scale analyses of available studies, is that principals have a direct and indirect influence on schools and the people who work and learn within them. The connection between educational leadership and student achievement has been more challenging, however, due to the measurement of "leadership" and available methodologies for determining indirect effects (Witziers, Bosker, & Kruger, 2003). A few studies, mainly meta-analyses, have examined the relationship between student achievement and leadership, however.

A meta-analysis of 70 rigorously conducted research studies on principals' work (Waters et al., 2003) indicates that leadership accounts for 0.25 of the variation in student achievement. Interpreted differently, if two schools had similar student and teacher populations and their principals scored similarly on the 21 responsibilities of effective school leadership that the authors developed, but then one principal raises his or her exhibition of the leadership responsibilities by 1 standard deviation, the likely outcome would be an increase in that school's student achievement levels of 10 percentile points. Likewise, as mentioned above, Leithwood et al. (2004) conclude that principals account for the approximately one-quarter of the total school-level variation in student achievement.

Conclusions and Looking Ahead

In any field, leadership is a driving force behind organizational success (Murphy et al., 2006). But compared to the education field, other industries go to great lengths in prioritizing finding, developing, supporting, and retaining their leaders. In a joint study by IBM Corporation and the Human Capital Institute of 11 key industries' human capital management practices, the education field was found to be the least likely to strategically and purposively work to secure outstanding talent (Ringo, Schweyer, DeMarco, Jones, & Lesser, 2008). Indeed, the literature suggests that the shortage of people willing to serve as principals remains a topic of concern to many (Pijanowski, Hewitt, & Brady, 2009). Principals are particularly in short supply for the schools that need strong leadership the most (Horng, Kalogrides, & Loeb, 2009; Papa, Lankford, & Wyckoff, 2002; Rice, 2010).

Fortunately, the mounting research evidence pointing to the need for effective principals, coupled with federal and state prioritization of both teacher and principal quality, creates a window of opportunity for influencing decision makers at the local, state, and national levels to strategically attract more high-quality principals. Although it is important to note that research finds, overall, that principals influence student achievement, more useful for those aiming to identify principals' or principal candidates' strengths and weaknesses is an understanding of the way in which principals influence student achievement.

Although more research on principal effectiveness is needed, available research provides a framework for understanding principal effectiveness that includes principals' practice, direct effects on schools and teachers, and indirect effects on instruction and learning. A research-based framework, such as this one, can provide researchers and policymakers a basis for designing better evaluations and professional supports for school principals and, possibly, aspiring principals. By creating a stronger pipeline of principals and greater supports to prevent premature principal attrition, the field can begin to truly advance (Institute for Educational Leadership, 2000).

According to The Wallace Foundation (2011), when it comes to achieving schoolwide improvements in learning, investing in effective principals is a cost-effective solution. Making smart investments in the cadre of leaders shaping our schools will require the collective effort of many individuals working on the ground and in policy circles. Armed with research and data, this mission will be set up for success.

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