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Systematic Review of Key Leader Practices Found to Influence Student Achievement: A Unified Framework

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The field of educational leadership has accrued a body of research that explains how leaders influence student achievement through the enactment of various practices. Yet, differences exist in the substance of the frameworks that assert the areas to which leaders should attend. The specific purposes of this article are to identify and synthesize the empirical research on how leadership influences student achievement and to provide evidence on how school leaders should direct their efforts. During the literature review, we consulted experts for recommendations and searched peer-reviewed journals from 2000 to 2014. The literature review yielded 56 empirical research studies of relevance to the topic and 3 frameworks consisting of clustered practices. We then grouped the 28 practices according to systematic criteria and found 5 overarching domains. In doing so, this study unifies existing frameworks through developing a cohesive set of practices to inform the work of researchers and practitioners.

KEYWORDS: effective, leadership, practice, framework

The importance of school leaders and their daily practices in creating generative learning environments for teachers and students is receiving increased attention from policymakers and a host of entities committed to improvement of pk–12 education. Although the instructional role of teachers continues to be viewed as the primary determinant of student achievement, we now have substantial evidence that the leader’s role in school effectiveness is pivotal in terms of enabling teachers to improve student achievement (Hallinger & Heck, 1998; Mulford et al., 2009; Supovitz, Sirinides, & May, 2009). Almost four decades of work allow researchers to assert the importance of leadership in a well-substantiated manner, and how it relates to student achievement, the current objective of educational policy (Nichols, Glass, & Berliner, 2012).

A number of robust frameworks identify the specific practices of school leaders that contribute to school effectiveness. Some frameworks, such as the national ISLLC Standards, reflect a blend of both the empirical evidence on school leadership and “craft knowledge” (Murphy, 2005, p. 170). Another prominent and well-referenced framework from Marzano, Waters, and McNulty (2005) asserted a set of leader practices derived from a meta-analysis. This analysis, however, draws heavily from dissertation findings (55 of the 70 studies included) that are non-peer reviewed works. Still other frameworks, such as Public Impact’s (2008) model for turnaround leaders, identifies competencies from a blending of literature from other fields that support transformational change in organizations, only some of which are peer reviewed. In addition, competencies introduce a broader set of personal characteristics than intended for this analysis. McClelland (1998) defined competencies as the patterns of thinking, feeling, acting, or speaking that causes a person to be successful in a job or role. Since competencies reflect largely internal cognitive and psychological behaviors shown to be difficult to alter (Leithwood, 2012), this type of work is important but less likely to be useful in identifying the actions and “bundles of activities” (Leithwood, 2012, p. 5) in which principals should engage each day to influence positive student outcomes, particularly learning.

Although the aforementioned standards and frameworks have substantial policy influence on preparation program designs, program accreditation, licensure, professional development, and evaluation, they actually reflect multiple perspectives on (a) what constitutes good practice as a leader and (b) what types of studies and sources should be included in framework development. We see these sources of discrepancy as a rationale for a structured review of the literature with clearly articulated transparent parameters for inclusion.

Purpose

We seek to approach the current study systematically, and acknowledge the importance of a scientific approach (Hallinger, 2014). As such, the distinct purpose of this article is to identify and synthesize the peer-reviewed, empirical research on how leader practices influence student achievement, which, in turn, provides evidence on how school leaders should direct their efforts. We deliberately chose the term *practice* to describe “the bundles of activities” (Leithwood, 2012, p. 5) that comprise effective leadership. An important connotation and implication of practice is that it can be considered the integration of a discrete set of actions (Leithwood, 2012) that can be improved with effort and commitment. Within the body of identified literature, multiple scholars assert various sets of effective leader practices in the form of frameworks (Leithwood, 2012; Murphy, Elliot, Goldring, & Porter, 2006; Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006).

Differences persist in the substance and organization of the practices depending on the parameters of the foundational research for each. We recognize that the act of leadership is not static and that it responds to various environments, which may, along with the method by which the practices were analyzed, explain the current variation in frameworks. Given that differences exist, and because we acknowledge the value in multiple frameworks, we assume a critical perspective of the current state of effective leader practice. Accordingly, we see an opportunity to

capture and unify empirically asserted effective leader practices in a way that accurately reflects what we know about effective school leadership—that is, leadership that enhances student achievement and other desirable outcomes.

The supporting research for these practices has coalesced around developing conceptions of school leadership and the central role of the principal. Instructional leadership was viewed as foundational to the work of principals during the 1980s. Research began to accrue around this basic construct such that Hallinger and Heck (1998) concluded, based on a review of the literature spanning the years of 1980 to 1995, that “the general pattern of results drawn from this review supports the belief that principals exercise a measurable, though indirect effect on school effectiveness and student achievement” (p. 186). This conclusion has stood the test of time but questions have arisen regarding the narrow focus on the school leader and what practices constitute instructional leadership (Leithwood, 2012).

In the ensuing decades, these questions widened the aperture used to study the dynamics of school leadership and the respective roles of different stakeholders within the school context began to widen from principals to teachers and parents. Today, scholars increasingly highlight this act of distributing leadership as an important component of effective leadership practice (Spillane, 2006).

Our broad summary traces the evolving and additive nature of the process for identification of leadership practices that influence student achievement. Below, we explore in more detail the historical context of educational leadership. We note that rarely does a new finding in effective leader practice replace another, but instead the body of research tends to be additive in nature. Because leadership is second only to teacher quality in predicting student achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004), it seems important to track the various facets of effective leadership as they emerge from empirical work, and simultaneously refine our field’s model and conceptions of the enactment of high-quality leadership in schools.

Definitions

Before proceeding, it is helpful to clarify the meaning of two terms, leaders and leadership, that are often used interchangeably much to the confounding of the meaning and understanding of both. We subscribe to the definition of leadership offered by Leithwood (2012) as “the exercise of influence on organizational members and diverse stakeholders toward the identification and achievement of the organization’s vision and goals” (p. 3). Leadership is “exercised through relationships between and among individuals” (Leithwood, 2012, p. 3) who include administrators, teachers, parents, and community partners. Leadership can be enacted by a host of individuals and is not necessarily the province of a school principal who has formal authority.

Leaders are those who influence and mobilize others in the pursuit of a goal. In the case of schools, the most salient goal in our current policy context is student achievement (Nichols et al., 2012). What are the leader practices or “bundles of activities exercised by a person or group of persons” (Leithwood, 2012, p. 5) that influence student achievement? These practices are expected of school principals but are often distributed across many individuals who are informal leaders within the context of schools, or the communities in which they are located. In the

subsequent discussion of leadership frameworks, we discuss practices that can be and are enacted by a range of individuals who influence others in pursuit of a goal. We refer to the actions or practices of leaders as dimensions and the clusters or groupings of dimensions as domains.

Historical Context

The centrality of the principal's role in *effective schools* is often traced to the work of Ron Edmonds and others (Brookover et al., 1982; Edmonds, 1979; Frederickson & Edmonds, 1979). By the mid-1980s, "instructional leadership became the new educational standard for principals" (Hallinger, 1992, p. 37). Although the emphasis was clearly on the technical core of schools, that is teaching and learning, the activities of instructional leadership often were vested in the principal. Early work by Hallinger (1984) delineated principal behaviors that constituted instructional leadership such as framing school goals, supervising and evaluating instruction, coordinating the curriculum, and monitoring student progress. Reflective of the times, there was a hierarchical and supervisory tone to these practices in most cases, although Glickman (1989, p. 6) argued for the conception of principals as the "leader of instructional leaders" who worked closely with teachers and other key players in the school context.

Broader views of instructional leadership also included managerial behaviors (Donmoyer & Wagstaff, 1990; Murphy & Hallinger, 1988). Recent quantitative studies indicate that an organizational focus rather than a strict instructional approach provides a strong influence on student achievement (Francera & Bliss, 2011; Grissom & Loeb, 2011). Grissom and Loeb (2011) found that the organizational function of school leaders consistently predicted student achievement growth. These authors reported that a standard deviation increase in organizational management used by the principal is associated with a 0.12-point increase, or 10% of a standard deviation, in student achievement. In this study, the authors identified and defined a latent construct from exploratory factor analysis as "organizational management" (Grissom & Loeb, 2011, p. 1,106) that includes measures of school safety, managing the budget, and dealing with staff concerns.

The active collaboration of principals with teachers around curriculum, instruction and assessment has been termed "shared instructional leadership" (Marks & Printy, 2003, p. 370). Shared instructional leadership differs from its predecessor, instructional leadership, in that the leader adopts an interactive and collaborative role when addressing the instructional program (Marks & Printy, 2003; Printy, Marks, & Bowers, 2010). Instructional leadership, marked by the reservation of decision making and other power structures for the principal role, came to be regarded as outdated once schools moved away from strict bureaucratic organizational models and school districts increasingly began to adopt local control policies. Shared instructional leadership calls for the leader to act as less of an inspector of teacher practice and more of a facilitator of continual teacher growth. In this model, teachers and principals work together to investigate best practices, engage in action research to improve practices, and, the principal eschews directives or criticism to establish a community of learners (Marks & Printy, 2003).

During the next decade, an alternative conception of principals as transformational leaders began to take hold. This model of leadership was derived from the

work of Burns (1978) and focused on developing the capacity of the organization through a commitment to collective goals and the larger good (Bass & Avolio, 1993; Leithwood, 1994). Instead of an exclusive focus on the instructional core of schools, transformational leadership in education encourages school leaders to create a school culture that inspires and motivates educators to collaboratively improve organizational performance (Hallinger, 1992). Principals and other leaders thus become change agents. Leithwood and his colleagues described three major characteristics of transformational leadership: mission centered, performance centered, and culture centered (Leithwood, 1994; Leithwood & Jantzi, 1990; Leithwood, Jantzi, & Steinbach, 1999).

Transformational leadership binds the leader and teachers in a continual pursuit of higher purposes so that their combined efforts move the organization toward improvement (Avey, Avolio, & Luthans, 2011; Avolio & Gardner, 2005; Leithwood, 2012). Often this transformative approach begins with purposeful inspiration that melds together the goals of the overall organization and the individual such that attaining an organizational goal cannot always be clearly separated from attaining an individual's goal. During the process of attaining organizational improvement, the relationship between the leader and teacher improves through the development of a common vision and shared meanings, which provide mutual commitment to sustained forward momentum. Accordingly, teachers involved in this transformational relationship begin to transcend their own self-interests and instead adopt an interest in seeing the greater organization succeed. Leaders utilizing the transformational approach call on at least one of the following strategies: idealized influence, inspirational motivation, intellectual stimulation, or individualized consideration (Fu, Tsui, Lui, & Li, 2010). Transformational leaders find ways to activate follower motivation by reflecting the individual's interests (and need for efficacy) in some aspect of the larger organization. By focusing on fostering collaboration and continual inquiry, transformational leaders seek to shape a positive organizational culture and cultivate the type of collective efficacy referenced by Francera and Bliss (2011).

Ushering in the 21st century, Marks and Printy (2003), in an empirical study of instructional and transformational leadership, found that effective principals worked "simultaneously at transformational and instructional tasks" (p. 377). They proposed the idea of integrated leadership that blended transformational leadership and its reform orientation with shared instructional leadership and its collaborative work around curriculum, instruction, and assessment. Schools with integrated leadership had higher pedagogical quality and were higher achieving by roughly 0.6 standard deviations in both regards. As noted by the authors, "When the principal elicits high levels of commitment and professionalism from teachers and works interactively with teachers in shared instructional leadership capacity, schools have the benefit of integrated leadership; they are organizations that learn and perform at high levels" (Marks & Printy, 2003, p. 393).

The construct of integrated leadership which combines shared instructional leadership and transformational leadership provides a rich theoretical base for the rationale of a focus on both results and individualized concern (Waters, Marzano, & McNulty, 2005). Each alone is insufficient, but when enacted in tandem, student achievement is increased. Integrated leadership acknowledges that a solid,

results-focused management approach must be in place before, or at least simultaneously to, expecting teachers to engage in transcendental and transformational work. Much like Maslow's (1943) hierarchy of needs in which individuals require that basic needs be met, such as food and shelter, before they can move toward interdependency and self-actualization, organizations must first prioritize the basics of instructional leadership. Shared instructional leadership calls for the leader to approach these fundamental tasks with a collaborative and inclusive spirit to the extent possible, and distribute responsibility and decision making while also eliciting input. When teachers perceive a principal's instructional leadership to be acceptable, and sense that their input is valued, they then may become more accepting of the invitation to innovate and transcend.

More recently, research findings from a broad-based undertaking in the Chicago Public Schools by the Consortium on Chicago School Research (Sebring et al., 2006) have further defined the necessary conditions for school improvement and student achievement. Through a large scale effort to collect data from teachers and students on conditions in schools which were linked to measures of reading and math achievement, researchers were able to link five essential supports to increased student achievement: leadership (defined broadly), parent-community ties, professional capacity, student-centered learning climate, and ambitious instruction. This framework expands the circle of relevant conditions for student achievement to include more active roles for all educators in a school as well as families and community partners.

The ambitious purpose for this article is to examine the commonalities and differences of existing, empirically based frameworks of activities that increase student achievement and propose a unified model of school leader practices that (a) reflects the thinking of eminent scholars, (b) is supported by rigorous empirical research, and (c) conveys the evolving breadth and depth of practices that contribute to improved student achievement.

Method

Hallinger's (2014) conceptual framework for conducting systematic literature reviews was used as a guide for our work. Based on his "methodological review of reviews of research" (Hallinger, 2014, p. 541), he recommended the thorough consideration of the five questions listed in Table 1. By achieving clarity in response to these questions, we were able to communicate more transparently about key criteria for quality scholarship in writing a literature review. The most relevant criteria advanced by Hallinger (2014) for this review include statement of purpose, conceptual framework, sources and search procedures, data analysis, presentation of findings, limitations, and implications.

As an initial step in conducting the literature review, we consulted experts in school leadership for recommendations regarding seminal frameworks that identified effective leader practices with strong empirical support. We then searched prominent journals pertaining to school leadership and Google scholar during the years 2000 to 2014. Search terms included "school leadership," "effective," "framework," "practices," "and "behaviors," as well as their combinations. Using these search parameters, the inquiry yielded four distinct leadership frameworks. Of those frameworks, two were from reviews of the literature (Leithwood, 2012;

TABLE 1

Guiding questions for scientific reviews of research and how they are addressed in the current study

Hallinger's questions	How questions are addressed in the review
What are the central topics of interest, guiding questions, and goals?	What are the findings from the field regarding effective leader practices and how can these findings be synthesized to represent what we know in aggregate? We emphasize that the review is limited to practices, which are different than qualities, characteristics, or competencies in that with effort, practices can be improved. This distinction seems important in that preparation programs, professional development, and policy about these practices should be geared toward the malleable aspects of learning to lead schools.
What conceptual perspective guides the review's selection, evaluation, and interpretation of the studies?	The distinct purposes of this review are to identify and synthesize the empirical research on how leadership influences student achievement, which in turn, provides evidence on how school leaders should direct their efforts. These efforts, or practices, differ from qualities or characteristics in that with effort, they can be improved.
What are the sources and types of data employed in the review?	We review the 56 empirical, peer-reviewed studies and the three major frameworks that link leadership to student achievement.
What is the nature of the data evaluation and analysis employed in the review?	Criteria for inclusion are the following: empirical and peer reviewed studies published between 2000 and 2014 that show the relationship between leader practices and student achievement. Through analysis and synthesis, we consider how to wholly unite findings from the entire field.
What are the major results of the review?	The unified framework for effective leader practices organized in five domains that encompass 28 specific leadership practices.

Note. Information adapted from Hallinger (2014).

Murphy et al., 2006), one was from a meta-analysis (Robinson, Lloyd, & Rowe, 2008), and one was from a longitudinal design analyzing survey and student achievement data (Sebring et al., 2006).

We refer to the actions or practices as dimensions and the clusters or groupings of dimensions as domains. The Robinson et al. (2008) framework uses meta-analysis and calculates effect sizes for constructs generally used by other authors as domains rather than dimensions or practices. The calculation of effect sizes is useful, but by nature of the analytic approach, it does not include qualitative studies in its review. Because Robinson et al. did not assert dimensions explicitly and

did not provide details of practice beyond the organizing domain, we note the distinction and consider the implications for the review. We include findings from this study in the general review of the supporting empirical evidence for leader practices; however, because it cannot contribute to the synthesis and development of the more specific practices or dimensions, we set it aside and call on it in the construction of the domains. The three remaining frameworks are the products of ongoing research by groups of scholars and offer both domains and dimensions of practice.

Existing Frameworks

Based on the described search approach, we identified three noteworthy frameworks. Leithwood (2012) reviewed the research to capture his definition of effective leader behaviors in the Ontario Leadership Framework (OLF). The framework rests on a review of 47 empirical works, 36 of which were published since 2007. Murphy et al. (2006) also reviewed the research to identify practices associated with effective leaders in the Learning-Centered Leadership Framework (LCL). Their review included 157 works, some of which were empirical and some theoretical. The earliest of these works was published in 1971 and the latest was published in 2006. The OLF and LCL together almost seamlessly span reviews of the literature during 41 years. Sebring et al. (2006) identified effective leader behaviors in the Essential Supports Framework, which they derived from analysis of longitudinal survey and student achievement data. The outcome of their study was informed by 119 studies published between 1982 and 2005.

Ontario Leadership Framework

In the most recently developed of the frameworks, Leithwood (2012) conceived of leadership in schools through a review of the literature that focuses on practices or activities that enhance student achievement. The framework comprises five domains: (a) setting directions, (b) building relationships and developing people, (c) developing the organization to support desired practices, (d) improving the instructional program, and (e) securing accountability. There are 21 dimensions that bring specificity to these five overarching domains as shown in Table 2.

Learning-Centered Leadership Framework

Murphy et al. (2006) developed the LCL framework (see Table 3) as part of the larger Vanderbilt Assessment of Leadership in Education project to design a 360° assessment tool for school leaders. Like the OLF, it also emerged from a review of studies that examine the influence of leadership on student achievement. It is the oldest of the three frameworks and comprises 8 major domains and 31 dimensions.

The Essential Supports Framework

Through analyzing longitudinal survey and student achievement data in Chicago Public Schools, Sebring et al. (2006) set forth the Essential Supports framework with 5 domains and 16 dimensions (see Table 4). This framework is

TABLE 2*Domains and dimensions in the Ontario Leadership Framework*

Setting directions

- Building a shared vision
- Identifying specific, shared short-term goals
- Creating high-performance expectations
- Communicating the vision and goals

Building relationships and developing people

- Providing and demonstrating individual consideration for staff members
- Stimulating growth in the professional capacities of staff
- Modeling the school's values and practices
- Building trusting relationships with and among staff, students, and parents
- Establishing productive relationships with teacher federation representatives

Developing the organization to support desired practices

- Building collaborative cultures and distributing leadership
- Structuring the organization to facilitate collaboration
- Building productive relationships with families and communities
- Connecting the school to its wider environment
- Maintaining a safe and healthy school environment
- Allocating resources in support of the school's vision and goals

Improving the instructional program

- Staffing the instructional program
- Providing instructional support (supervising and evaluating teaching; coordinating curriculum)
- Monitoring student learning and school improvement practice
- Buffering staff from distractions to their work

Securing accountability

- Building staff members' sense of internal accountability (promoting collective responsibility)
 - Meeting the demands for external accountability
-

Note. Information adapted from Leithwood (2012).

the only empirically derived framework and is described by the authors as a “theory of practice” because it was intended to provide “clinical guidance to practitioners” (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, p. 44). The sample for this ongoing research is composed of public schools in Chicago and as a consequence, the findings may generalize more to urban schools.

Review and Analysis of Literature

We reviewed studies cited as support for practices in the three major frameworks, and we cross-referenced studies to confirm empirical backing for each of the frameworks. These processes yielded a final list of 56 research studies. Given the relatively low number of studies meeting the established, aforementioned criteria and the circumstance of the various methods (literature review and analysis

TABLE 3*Domains and dimensions in the Learning-Centered Leadership framework*

Vision for learning	Communities of learning
Articulating vision	Professional development
Implementing vision	Communities of professional practice
Developing vision	Community-anchored schools
Stewarding vision	Resource acquisition and use
Instructional program	Acquiring resources
Knowledge and involvement	Allocating resources
Hiring and allocating staff	Using resources
Supporting staff	Organizational culture
Instructional time	Production emphasis
Curricular program	Accountability
Knowledge and involvement	Learning environment
Expectations, standards	Personalized environment
Opportunity to learn	Continuous improvement
Curriculum alignment	Social advocacy
Assessment program	Stakeholder engagement
Knowledge and involvement	Diversity
Assessment procedures	Environmental context
Monitoring instruction and curriculum	Ethics
Communication and use of data	

Note. Information adapted from Murphy, Elliot, Goldring, and Porter (2006).

of different data) used to capture effective leader practice by each framework, it follows that some variation in asserted domains as well as more specific dimensions/practices exists. We compare the existing domain labels here to complement Tables 2 to 4 that list the dimensions or practices. Table 5 provides an overview of how the domains created by the respective scholars align in multiple areas and differ in some. The comparison of these frameworks at the domain level is overly simplistic and masks the overlap of dimensions that may fall into multiple domains. The noted similarities and differences are discussed in the results section.

Research Questions

In light of this variation at both the domain and dimension levels, a review of the relevant research and how it contributes to a more holistic schema for leader practices appears warranted. If each of the dimensions asserted within the three different frameworks have empirical support, yet differences exist as to the substance of the asserted dimensions among frameworks, a resulting assumption is that none of the frameworks wholly encompass all of the empirically derived practices of effective leaders. Each framework, possibly because of the aforementioned variation in sample and analytic approach, captures some of the effective leader practices. A logical progression from this observation would be to attempt

TABLE 4*Domains and dimensions in the Essential Supports framework*

Leadership
Inclusive leadership focused on instruction
Faculty/parent/community influence
Strategic orientation
Parent–community ties
Teachers learn about student culture and local community
Staff engages parents and community in strengthening student learning
Professional capacity
Quality of human resources
Values and beliefs about teacher responsibility for change
Quality of professional development
Professional community
Student-centered learning environment
Safety and order
Press toward academic achievement coupled with personal concerns for students
Ambitious instruction
Curricular alignment
Intellectual challenge

Note. Information adapted from Sebring, Allensworth, Bryk, Easton, and Luppescu (2006).**TABLE 5***Domains in three prominent frameworks*

Framework	Domains
Essential Supports (ES)	Leadership for change Ambitious instruction Student-centered learning environment Professional capacity Parent/community ties
Learning-Centered Leadership (LCL)	Vision for learning Instructional program; Curricular program; Assessment program Communities of learning Resource acquisition and use; Organizational culture
Ontario Leadership Framework (OLF)	Social advocacy Setting directions Managing the instructional program Developing people Redesigning the organization

Note. Information adapted from Leithwood (2012), Murphy et al. (2006), and Sebring et al. (2006).

to unify the findings in the field through analysis and synthesis, and consider if and how these practices can be gathered, combined, and organized to include the thoughtful construction of domains, as well as the careful combining of similar dimensions to wholly reflect the research of all scholars. Because of the gap we delineate, our research questions are, what are the findings from the field regarding effective leader practices and how can these findings be synthesized to represent what we know in aggregate?

When the practices asserted by all three of the frameworks are combined, 28 practices emerge. The synthesis involves the matching of practices that differ in semantics. No practice was eliminated (see Tables 2–4). For example, one framework uses “leading instruction” to describe a practice whereas another calls the same practice “facilitating instruction.” Including both of these as separate practices would be duplicative, so the practice included here is “developing and monitoring instructional program.” Another example of synthesis occurred within the domain of establishing and conveying the mission and vision. The OLF named a related practice, “building a shared vision.” The LCL expressed the same sort of practice as three separate practices: “developing vision,” “stewarding vision,” and “articulating vision.” To balance the need for parsimony with accuracy, we develop the name for the practice of mission and vision building as “creating, articulating, and stewarding the mission and vision.” This synthesis through rephrasing and combining captures the intent of multiple authors based on the descriptions of the practices. Tables 2 to 4 list the domains and dimensions asserted by respective authors in their original language for verification of the process used.

We then group the 28 practices asserted by empirical work into 5 overarching, larger domains. The standards for the clustering and assignment of practices, and therefore the inductive labeling of the domains, are determined by considering the following criteria: (a) the practices are present in all three frameworks (which may be seen as an indicator of robustness); (b) the practices can be considered to influence student achievement indirectly through leveraging organizational contexts, purportedly under the discretion of formal school leaders as this is reflective of the theoretical and empirical models accepted in school leadership (Leithwood & Sun, 2012; Marks & Printy, 2003); and (c) the practices can be considered to influence student achievement indirectly through a leadership focus on those routines and responsibilities normally associated with the act of teaching (Hallinger & Heck, 1996, 1998), as it is effective teaching that remains the most important school based factor for student achievement.

Results

In an effort to maximally organize and unite the practices, five essential broad areas, or domains, of effective leader practices emerge as a result of the review and are indicated in Table 6: (a) establishing and conveying the vision, (b) facilitating a high-quality learning experience for students, (c) building professional capacity, (d) creating a supportive organization for learning, and (e) connecting with external partners. As shown in Table 5 by the variation in broad domains utilized by researchers, there is not full consensus on how to organize the practices into a conceptual framework. The broader domains largely demonstrate

TABLE 6*Unified model of effective leader practices*

Domains and dimensions	Essential Supports Framework	Learning-Centered Framework	Ontario Leadership Framework
Establishing and conveying the vision			
Creating, articulating, and stewarding shared mission and vision	✓	✓	✓
Implementing vision by setting goals and performance expectations		✓	✓
Modeling aspirational and ethical practices		✓	✓
Communicating broadly the state of the vision			✓
Promoting use of data for continual improvement		✓	
Tending to external accountability		✓	✓
Facilitating a high-quality learning experience for students			
Maintaining safety and orderliness	✓		
Personalizing the environment to reflect students' backgrounds	✓	✓	✓
Developing and monitoring curricular program	✓	✓	
Developing and monitoring instructional program	✓	✓	✓
Developing and monitoring assessment program		✓	
Building professional capacity			
Selecting for the right fit	✓	✓	✓
Providing individualized consideration		✓	✓
Building trusting relationships	✓		✓
Providing opportunities to learn for whole faculty, including leader(s)	✓	✓	✓
Supporting, buffering, and recognizing staff		✓	✓
Engendering responsibility for promoting learning	✓	✓	✓

(continued)

TABLE 6 (CONTINUED)

Domains and dimensions	Essential Supports Framework	Learning-Centered Framework	Ontario Leadership Framework
Creating communities of practice	✓	✓	
Creating a supportive organization for learning			
Acquiring and allocating resources strategically for mission and vision	✓	✓	✓
Considering context to maximize organizational functioning	✓	✓	✓
Building collaborative processes for decision making	✓		✓
Sharing and distributing leadership	✓		✓
Tending to and building on diversity	✓	✓	
Maintaining ambitious and high expectations and standards	✓	✓	✓
Strengthening and optimizing school culture	✓	✓	✓
Connecting with external partners			
Building productive relationships with families and external partners in the community		✓	✓
Engaging families and community in collaborative processes to strengthen student learning	✓	✓	✓
Anchoring schools in the community	✓	✓	✓

Note. Information adapted from Leithwood (2012), Murphy et al. (2006), and Sebring et al. (2006).

incongruency. For example, not all frameworks assert a domain relating to managing the organization, or student centeredness. Some frameworks consider an action as a dimension/practice whereas others label it as a broader domain. For example, the Essential Supports framework has a domain addressing parents and community, but the LCL and the OLF consider these practices within other, broader domains. When analyzed at the more specific dimension level, similarities emerge.

In Table 6, we list the 28 specific practices organized by the newly blended domain labels and their inclusion in each of the three frameworks to derive

a frequency tally for each practice. Some practices receive support from one framework and others receive support from all three frameworks, and this description provides a method to reveal the level of prominence, which characterizes each practice. Of these 28 dimensions, all three frameworks explicitly identify 12 practices in common. Another 12 practices receive support from two sets of authors. Four practices or dimensions are identified in only one framework.

The discussion that follows will reference both domains (when organized as such by authors) and dimensions from the source material on each framework, but comparisons and contrasts are noted at the dimension level, as indicated in Table 6. Because our analysis entailed reviewing original empirical work from which framework dimensions were derived, we reference primary sources in our discussion of the following results.

Establishing and Conveying the Vision

The practices within this first domain share a focus on the establishment of a purpose and a complementary set of supporting practices to facilitate attaining that purpose. According to a meta-analysis of 22 published, peer-reviewed studies conducted between 1978 and 2006 that examine the connection between leadership and student achievement, establishing goals and setting expectations has an effect size of 0.42 standard deviations (Robinson et al., 2008), a moderate effect in terms of education research. The magnitude of this effect size is in keeping with a body of social science research that explains the importance of goals for individuals and organizations (Harris & Lambert, 2003; Latham & Locke, 2006; Silins & Mulford, 2002). Goals provide a sense of clarity and common purpose in a dynamic environment that might otherwise be overwhelming (Latham & Locke, 2006). Table 7 lists the six practices within the domain of establishing and conveying the mission and vision.

Creating, Articulating, and Stewarding Shared Mission and Vision

Although setting the direction may seem like a simple task, it is the method by which the direction is decided and the subsequent activities that may be just as important as the substance of the direction itself. Leaders must regard the internal organization, and the external community, and approach these stakeholders as valuable contributors (Fu et al., 2010). As such, effective principals seek input once they define an outline for the vision (Sebring et al., 2006). Leading, after all, is the act of exercising positive influence toward the attainment of beneficial goals (Robinson et al., 2008). Exercising of influence, not just the act of deciding, is essential and challenging when motivating individuals within organizations to pursue a direction.

It is not enough for leaders to decide the goals for the school in isolation. If those goals are not embraced and reflective of what teachers and parents perceive as appropriate, and personally compelling (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), then the leader must either readjust the focus of the vision or work to reframe what stakeholders see as the solution. The practice here is more about *how* to set direction for a school in a way that encourages teachers to both initially support the vision and continue to see it through for the long term. Leithwood (2012) noted in the Ontario Leadership Framework that significant

TABLE 7*Domains and dimensions pertaining to vision: Unified model, OLF, LCL, and ES*

Unified model:			
Establishing and conveying the mission and vision	OLF: Setting directions	LCL: Vision for learning	ES: Leadership
Creating, articulating, and stewarding shared mission and vision	Building a shared vision	Developing vision; stewarding vision; articulating vision	
Implementing the vision by setting goals and performance expectations	Identifying specific, shared short-term goals	Implementing vision; expectations, standards ^a	
Modeling aspirational and ethical practices ^a	Modeling the school's values and practices ^a	Ethics ^a (and, specifically discussed within multiple dimensions ^a)	
Communicating broadly the state of the vision	Communicating the vision and goals		Inclusive leadership focused on instruction
Promoting use of data for continual improvement		Communication and use of data ^a	
Tending to accountability	Meeting the demands for external accountability; establishing productive relationships with teacher federation representatives	Environmental context	Strategic orientation

Note. OLF = Ontario Leadership Framework; LCL = Learning-Centered Leadership; ES = Essential Supports.

^aDenotes author assigned the dimension to a substantively different domain in their framework.

time can be productively spent in this practice. The extent to which the vision is simultaneously reflective of both individual and group goals has implications for how well the ideas will be accepted and the likelihood of the vision being attained. In short, leaders should find ways for teachers to see the vision as personally compelling and engaging, and at the same time, connecting the vision to the broader organizational needs.

As such, principals create a general plan for the school, and then invite teachers, parents, and other stakeholders to participate in the further formation of the

vision and mission (Sebring et al., 2006). Involving teachers as active participants in the school improvement process leads to a strengthened design as well as increased support and buy-in of the resulting plan (Sebring et al., 2006). The direction setting process includes leaders developing, articulating, implementing, and stewarding the vision for learning by utilizing processes that prioritize collaboration while requiring stakeholders to use data that illuminates the direction for the organization. Leaders should also tend to individuals regarded as outliers and find ways to engage them productively (Ryan, 2006).

Implementing the Vision by Setting Goals and Performance Expectations

To accompany the act of deciding on the vision, leaders also engage in other practices that sustain the pursuit of the goal. Bringing the vision to life through discernment of goals and objectives creates shared meaning (Leithwood, 2012). Deciding on specific, short-term, easily understood, and facilely measured goals translate aspirations into reality. One of the most important parts of this practice is clearly communicating these shared goals, to the point that references to them are heard in conversations around the building on a regular basis (Leithwood, 2012). Although creating shared meaning may at times seem like an exercise in logistics, it is also a time to define how individuals contribute to the vision attainment, be it through contribution of actions or ideas. Creating shared meaning will call for initial conversation to unearth the details that need attention, and then also continued dialogue to be sure that everyone is on board to the extent possible.

Modeling Aspirational and Ethical Practices

Modeling, a critical practice that addresses the conveyance portion of this domain's title, calls for leading by example. Modeling demonstrates for teachers what it is that they are expected to be doing. It may be tempting to rely on verbal, or written communication, to encourage the attainment of goals and vision. But it is more effective if leaders deliberately embed the changes in their own practice. They communicate at once the importance of the change and allow teachers to see and experience the change in action (Avolio & Gardner, 2005; Hallinger, 2003; Waters et al., 2005). Effective leaders understand that modeling desired behavior encourages individual and organizational improvement (Jacobson, Brooks, Giles, Johnson, & Ylimaki, 2007).

Leaders are in some ways on display. By virtue of their formal roles, others notice what they do and how they do it. Effective leaders accept this heightened level of the organization's awareness and capitalize on it by displaying behaviors that reflect what it is they are asking teachers to do. When teachers experience the power of espoused goals, and objectives aligned with the vision, and see that the leader is not only espousing change but is also changing their practice, leading by example becomes a powerful tool (Leithwood & Montgomery, 1982). Two frameworks assert this practice.

Communicating Broadly the State of the Vision

During the entire direction setting process, leaders tend to regular, two-way communication with stakeholders that includes both the sending and receiving of progress updates and changes (Supovitz et al., 2009). Such communication may

diffuse the dysfunction associated with information being irregularly shared. And, ideally, every teacher would participate in defining the vision and the goals for the school; however, that may not be feasible. To address this challenge, leaders should strive to continually communicate different aspects of the vision (Leithwood, 2012). For example, once the vision has been decided, that information, and the implications must be shared on a widespread basis, with special care afforded in including those who were not directly involved with the decision-making process. Then, status updates should occur regularly to keep people apprised and to maintain the vision at the forefront of everyone's mind. Also, leaders continually reiterate, in both large and small group settings, the importance of the vision. Enlisting the support of others who are making good progress on goals helps to spread the word and add credibility to the vision (Leithwood, 2012).

Promoting Use of Data for Continual Improvement

Effective leaders use multiple forms of student data to inform the improvement efforts in the various realms of a school (Leithwood & Montgomery, 1982; Murphy et al., 2006). These realms include the school's mission and vision, the curricular and instructional programs, and even teacher evaluation. Leaders encourage and expect teachers to examine data in multiple job embedded contexts to include departmental meetings, subject- and grade-level teams, and individual exchanges (Murphy et al., 2006).

Tending to External Accountability

Given the critical nature of the accountability environment, effective school leaders translate the external expectations and pressures teachers may sense into coherent and contextually relevant goals for improvement (Murphy et al., 2006). This process leads to internalization of goals, which may help meet the external goals (Robinson, Hohepa, & Lloyd, 2009). Leaders also use care to consider how teacher may perceive these pressures, and find ways to keep motivation levels high and cynicism levels limited (Leithwood, Steinbach, & Jantzi, 2002).

Building Professional Capacity

Once leaders embrace and demonstrate what they personally can do to promote the vision, and consider how to engage teachers, their attention turns to developing others, and themselves. Table 8 conveys this second domain and its seven dimensions. An important aspect of this domain is that the leader learns alongside his or her faculty about instructional improvements and methods set forth by the development activities (Robinson et al., 2008). This sort of side by side learning is threefold in its benefits as it not only strengthens the leader's knowledge in curriculum, instruction and assessment (Murphy et al., 2006), a dimension shown to improve student achievement, but it also serves to strengthen teacher perceptions of the leader's credibility and legitimacy as an instructional leader, and it better equips the principal to be a source of knowledge and assistance. Teachers who perceive their leaders as skilled and well versed in effective teaching practices are more likely to seek assistance and intervention (Friedkin & Slater, 1994). The modeling inherent in these activities

TABLE 8

Domains and dimensions pertaining to building professional capacity: Unified model, OLF, LCL, and ES

Unified model: Building professional capacity	OLF: Building relationships and developing people	LCL: Communities of learning	ES: professional capacity
Selecting the right fit	Staffing the instructional program	Hiring and allocating staff ^a	Quality of human resources
Providing individualized consideration	Providing and demonstrating individual consideration for staff members		
Building trusting relationships	Building trusting relationships with and among staff, students, and parents		Relational trust ^a
Providing opportunities to learn for whole faculty to include leader(s)	Stimulating growth in the professional capacities of staff	Professional development	Quality of professional development
Supporting, buffering, and recognizing staff	Buffering staff from distractions to their work ^a	Supporting staff ^a	
Creating communities of practice	Structuring the organization to facilitate collaboration	Communities of professional practice; Learning environment ^a	Professional community
Engendering responsibility for promoting learning	Providing instructional support (supervising and evaluating teaching) ^a	Accountability ^a	Values and beliefs about teacher responsibility for change

Note. OLF = Ontario Leadership Framework; LCL = Learning-Centered Leadership; ES = Essential Supports.

^aDenotes author assigned the dimension to a substantively different domain in their framework.

may also communicate the importance of learning and intellectual stimulation for all, regardless of role and position.

This domain, encompassing teacher learning, rests on a vast empirical base from which multiple bodies of literature confirm the importance of teacher quality (Carlisle, Kelcey, Berebitsky, & Phelps, 2011; Hamre & Pianta, 2005; Measures of Effective Teaching Project, 2010; Palardy & Rumberger, 2008; Stronge, Ward, Tucker, & Hindman, 2007; Wright, Horn, & Sanders, 1997). Although pinpointing effective professional development practices continues to elude researchers in many ways (Newman et al., 2012; Rice, 2009; Wayne, Yoon, Zhu, Cronen, &

Garet, 2008), we do know that the quality of teachers matters most for student achievement. And although we may need to proactively address the recruitment facet of teacher quality, the reality is that the vast majority of the teacher workforce will be in place for years to come. Addressing the quality of in-service teachers is limited to strengthening their effectiveness through professional development and evaluation, as these comprise the known avenues to improve the quality and effectiveness of existing teachers. If school leaders hope to impact student achievement, then teacher quality, and by extension, teacher development, plays a critical role (Odden, 2011).

Selecting Faculty and Staff for the Right Fit

The human resource management function calls for the principal to proactively address teacher effectiveness by recruiting and choosing strong and capable practitioners who match the composition of a given faculty. Selection is often more effective with the input of existing faculty who can identify individuals who will best fit a grade-level team or complement the members of an existing department. This function also allows the leader to reactively remove those who do not respond to professional development or otherwise detract from student achievement. Whether enacted proactively or reactively, leaders must guard their faculty composition as it is the single largest resource for maximizing student achievement. As such, effective leaders not only grow and develop teachers, but also counsel poor teachers to leave the profession (Grissom & Loeb, 2011).

Providing Individualized Consideration

Teachers need and crave learning opportunities (Higgins-D'Alessandro, 2002). Developing human capital in schools must be approached on both an individual and collective level (Leithwood, 2012). For example, leaders who mentor, or arrange mentoring relationships for faculty, provide an individualized development experience for both the mentor and the mentee. This type of learning allows for the unique strengths and limitations of an individual teacher to be addressed. Leaders must also find ways to combine each individual's needs into an all-encompassing faculty-wide development program (Hallinger, 2003). Leaders who approach change by harnessing existing strengths among teachers see that a collaborative, team-based approach may yield better results than unorchestrated, scatter-shot individual efforts. Leaders understand that followers benefit from stimulating work and learning (Murphy et al., 2006; Sanzo, Sherman, & Clayton, 2010). Therefore, leaders seek to design such experiences for their teachers so that by meeting the needs of their faculty, they exert an indirect influence over student learning.

Building Trusting Relationships

To enhance the development of community, leaders genuinely care for teachers and their lives outside of the school (Murphy et al., 2006). When teachers perceive that leaders treat them as individuals, the foundations for trust take root, as do the pillars that define community—shared direction, cooperative work, and mutual accountability—all of which link to improved outcomes for students (Menges, Walter, Vogel, & Bruch, 2011). In these communities, leaders address conflict in ways that result in organizational improvement rather than dysfunction. Such

practices include conflict resolution, problem framing and solving, and consensus building (Murphy et al., 2006).

Trust influences the degree to which teachers display a willingness to improve and change (Louis, 2007). In one study, Wahlstrom and Louis (2008) analyzed 4,165 teacher surveys using stepwise regression to examine the relationship between effective teacher behaviors and the teachers' trust in their principal. These authors found that almost 10% of the variance in teachers' effective instructional behaviors is explained by trust. In another study, Tschannen-Moran (2009) explained how trust influences teacher professionalism. Using survey data from 80 middle schools and 2,355 teachers and regression analyses, they found that 57% of the variance in teacher professionalism is explained through four trust variables.

Providing Opportunities to Learn

Leaders also carefully consider and develop teachers as groups, and their efforts must also include developing needed skills and knowledge in larger groups or even on a faculty-wide basis (Leithwood, 2012). There will be some knowledge and skills in which all teachers need to gain proficiency. Synthesizing, identifying, and then defining whole-group development opportunities is a key practice of leaders. One example might be literacy training for the entire faculty in an elementary school.

Supporting, Buffering, and Recognizing Individuals

As discussed within the tending to external accountability dimension, teachers are often faced with competing expectations. Effective leaders intervene to protect their faculty's time and energies from distractions that detract from mission, vision, and goal attainment. This type of support usually occurs in the form of leaders preserving both instructional time and teacher work time. Francera and Bliss (2011) found that of the 10 leadership practices they measured, protecting teachers' time was the only one with significant effects on student achievement and teacher collective efficacy. Leaders recognize and celebrate high-quality teaching as measured by improved student performance, and link it to incentives and rewards (Leithwood, 2012; Murphy et al., 2006).

Creating Communities of Practice

Learning is a social endeavor and needs to be nurtured and supported (Bryk & Schneider, 2002). Leaders purposefully develop communities of practice to foster adult learning in the building (Murphy et al., 2006; Robinson et al., 2008). One concrete step that leaders can take is structuring the schedule such that job embedded learning occurs on a regular basis (Murphy et al., 2006). Other mechanisms that promote classroom and school-wide improvement include creating opportunities for professional dialogue and examination of student work (Murphy et al., 2006).

Engendering Responsibility for Learning

To accompany the practices of advancing and developing teachers, establishing expectations is an important preliminary step. Discerning baseline data for each teacher in terms of goals for specific departments, grade levels, and other

subunits within the school helps with alignment of effort at other levels (Jacobson, Brooks, Giles, Johnson, & Ylimaki, 2007; Leithwood, 2012). With a clear understanding about both the starting point and the end point, defining intermediary goals sensitive to baseline data and aligned with the vision becomes possible. Leaders should assume a positive mindset for growth, invite teachers to use innovation in meeting the goals, encourage teachers to have high self-expectations, and promote an environment in which teachers assume responsibility for meeting expectations.

Creating a Supportive Organization for Learning

People want to succeed professionally, and schools offer ample opportunity for teachers to derive both individual and collective efficacy. Before most people can function at their best, some other affective conditions must be met (Grayson & Alvarz, 2008; Singh & Billingsley, 1998). Just as we know teachers must build relationships with their students before, or at least simultaneous to, teaching them (Brown, Jones, LaRusso, & Aber, 2010), similar emotional needs exist for adults (Grayson & Alvarz, 2008). Leaders who strive to model this relationship building with their faculties may not only see enhanced performance, but may also perpetuate what it is they hope to see in classroom interactions between teachers and students (Ostroff, Kinicki, & Tamkins, 2003). Although the substance of demonstrating concern for the well-being of their faculty looks different than in a classroom, it is when people sense that they are recognized and supported as valuable individuals by leaders that they may become committed to organizational objectives.

Effective leaders are at once task and relationship oriented (Robinson et al., 2008). Although some studies conceive of leadership practices as dichotomous, either task oriented or relationship oriented, Robinson and colleagues propose that leadership has a dual focus. Ideally leader practices simultaneously encompass both orientations, as it is progress in both realms that positively influence student achievement. The two realms, according to Robinson et al. (2008), are not mutually exclusive but rather mutually beneficial, as accomplishing work strengthens relationships, and the quality of accomplishments is improved when relationships exist.

This domain builds on instructional, transformational, and integrated approaches to leadership by identifying practices leaders employ to concurrently demonstrate a concern for teachers and a press for results that ultimately yields benefit for both individuals and the organization. This is accomplished by finding ways to involve teachers in the broader definition of organizational culture and decision making, and by establishing trusting relationships with all constituencies. Furthermore, mutual benefit is accomplished by helping teachers self-actualize through providing stimulating learning and growth experiences (Maslow, 1943). Leaders who positively influence student achievement think carefully about how to construct a school environment that both demonstrates a concern for the people in the organization and enables these same adults to achieve personal and organizational goals. The seven practices in this domain, as listed in Table 9, focus on the organizational supports that ultimately undergird an effective instructional program.

TABLE 9

Domains and dimensions pertaining to creating a supportive organization for learning: Unified model, OLF, LCL, and ES

Unified model: Creating a supportive organization for learning	OLF: (a) Building relationships and developing people, (b) Developing the organization to support desired practices	LCL: Organizational culture	ES: n/a
Acquiring and allocating materials and resources for mission and vision	Allocating resources in support of the school's vision and goals ^a ; Staffing the instructional program ^a	Acquiring resources ^a ; Allocating resources ^a ; Using resources ^a	Strategic orientation ^a
Considering context to maximize organizational functioning	Providing support and demonstrating consideration for individual staff members ^a	Environmental context ^a	Contextual resources
Building collaborative processes for decision making	Building collaborative cultures and distributing leadership		Faculty/parent/community influence ^a
Sharing and distributing leadership	Building collaborative cultures and distributing leadership		Inclusive leadership focused on instruction ^a
Tending to and building on diversity	Building productive relationships with families and communities ^a	Diversity ^a	Teachers learn about student culture and local community ^a
Strengthening and optimizing school culture	Building collaborative cultures and distributing leadership		
Maintaining ambitious and high expectations and standards	Creating high-performance expectations ^a	Continuous improvement ^a	Values and beliefs about teacher responsibility

Note. OLF = Ontario Leadership Framework; LCL = Learning-Centered Leadership; ES = Essential Supports.

^aDenotes author assigned the dimension to a substantively different domain in their framework.

Acquiring and Allocating Resources Strategically for Mission and Vision

Robinson et al. (2008) found that resourcing strategically has an effect size of 0.31 standard deviations, and addresses the practice necessary for leaders to align resources with optimal program delivery. Teacher selection and staff assignment

generally constitute a majority of the budget, so effective leaders astutely facilitate the human resource management function such that it supports, by way of hiring in particular, the vision and mission of a school (Leithwood, 2012; Murphy et al., 2006; Robinson et al., 2008; Sebring et al., 2006). Principals carefully allocate the remaining budget to professional development, necessary supports for students, and other expenses needed to support the vision.

Considering Context to Maximize Organizational Functioning

Leaders who promote improved student achievement adapt to context in order to maximize the strengths of the school and its community (Leithwood, 2012; Marks & Printy, 2003; Murphy et al., 2006; Sebring et al., 2006). Leaders approach their organizations from a strengths-based perspective in that they see the best in people and situations, and also allow for development and growth in themselves and their constituents (Tschannen-Moran & Tschannen-Moran, 2011). Although leaders also maintain high expectations of teachers and students, they do so in ways that employ flexibility and astute discretion, while avoiding a rigid response (Daly, 2009; Leithwood, 2012; Marks & Printy, 2003; Murphy et al., 2006; Sebring et al., 2006).

Building Collaborative Processes for Decision Making

Effective leaders understand that fostering ways for all stakeholders to see themselves reflected in the decision making process improves the probability that those needed to enact the resulting decision will actually participate. They also understand that the resulting decision will ultimately be enhanced in terms of quality and benefit to students when multiple perspectives work together (Leithwood & Mascall, 2008; Supovitz et al., 2009). This distributed approach, marked not only by intentional sharing but also by capacity building of those who may have previously remained in a follower or stakeholder role, exerts a positive influence on student achievement (Heck & Hallinger, 2009). Specifically, one longitudinal study utilizing multilevel change analysis shows that when leaders distribute decision making, the overall academic capacity of a school improves, as do students' math scores (Heck & Hallinger, 2009).

Sharing and Distributing Leadership

Effective leaders recognize that the bureaucratic and hierarchical organization of schools is not the best way to promote student achievement (Murphy et al., 2006; Tschannen-Moran, 2009). Instead, these leaders distribute and share leadership and decision making rather than centralize these functions, develop a sense of community rather than individuals, encourage collaborative work efforts rather than isolate practitioners, and base authority on expertise rather than role or position (Murphy et al., 2006; Tschannen-Moran, 2009). Reconceptualizing leadership in this way results in reculturing and formation of a base for community within a school (Devos, Tuytens, & Hulpia, 2014; Hulpia, Devos, & Hilde, 2011; Hulpia, Devos, & Van Keer, 2009; Murphy et al., 2006).

Distributing leadership provides a way for leaders simultaneously to meet these ends of personal and organizational concern. Through collaboratively making decisions, leaders adjust school conditions to enable teacher commitment to

the organization (Fu et al., 2010) as well as enhance performance of the teachers. Studies also suggest that distributing leadership allows for leadership to manifest in others besides the formal leader (Elmore, 2000; Pounder, Ogawa, & Adams, 1995; Spillane, 2006). This finding is in keeping with research outside of the education realm that indicates that overall organizational health and performance improve when leaders share authority and responsibility (Murphy et al., 2006).

Tending to and Building on Diversity

Effective leaders view diversity, in terms of people and ideas, as a benefit. “Effective leaders demonstrate an understanding of and commitment to the benefits diversity offers the school” (Murphy et al., 2006, p. 30). To demonstrate their commitment to divergent and varying cultures, views, and people, leaders work from an inclusive mindset (Sebring et al., 2006). Through careful communication with diverse groups of stakeholders (with diverse backgrounds and diverse perspectives), effective leaders allow for two-way communication, the enhancement of the mission and vision, and collaborative decision making (Murphy et al., 2006).

Strengthening and Optimizing School Culture

Strengthening school culture requires leaders to shape the norms and values of the school such that they support positive and professional learning communities. Marked by the presence of authentic professional learning communities, openness, transparency, efficacy, trust, conflict resolution, and other such structures and characteristics, these descriptors of the school-life in many ways meet the affective needs of teachers and help to maintain their commitment to the school organization (Hulpia, Devos, & Rosseel, 2009).

Maintaining Ambitious and High-Performance Expectations and Standards

Leaders who influence student achievement positively insist on and expect high performance (Leithwood, 2012; Marks & Printy, 2003; Murphy et al., 2006; Sebring et al., 2006; Timperley, 2011), and make those performance expectations public and transparent. Once leaders bring the school to agreement about goals and objectives, they then design formative and summative assessments aligned with the desired outcomes that hold stakeholders accountable and measure progress in ways that advance the desired outcomes (Jacobson et al., 2007; Leithwood, 2012). These types of positive supports, coupled with accountability, help teachers move toward accomplishing goals. Through monitoring and providing regular formative feedback to teachers, teachers sense that they are both supported and expected to accomplish. Monitoring performance without clear expectations or support detracts from teachers’ motivation and is interpreted as demoralizing (Leithwood, 2012), so it important to approach performance monitoring in a balanced way. An effective leader not only also calls attention to what needs improvement, but also positively reinforces what is being done correctly.

Facilitating a High-Quality Learning Experience for Students

The work that leaders do is multifaceted, but maintaining expertise, understanding, and a firm grasp of curriculum, instruction, and assessment means that principals

truly understand life in the classroom and the challenges inherent in their chosen profession. Systems often pull leaders in many directions, but the research asserts that leaders who never lose site of the technical core of schools and also devote considerable effort to organizational issues will serve their schools well. Teachers may open themselves to accepting leadership and influence from those they perceive to be at once credible in terms of curriculum, instruction, and assessment and also empathic and supportive of their realities. As discussed earlier, instructional leadership must accompany organizational management in a mutually supportive manner (Grissom & Loeb, 2011; Leithwood, 2012; Robinson et al., 2008).

Planning, coordinating, and evaluating teaching and the curriculum together provide a moderate effect size of 0.42 (Robinson et al., 2008). This domain calls for leaders to be actively and directly involved in matters related to instruction and curriculum (Hallinger & Heck 1996, 1998; Leithwood, 2012; Murphy et al., 2006; Robinson et al., 2008). Active involvement requires that leaders not only participate in discussions but also have influence on the vertical and horizontal alignment of curriculum (Robinson et al., 2008). Included here are regular classroom observations and timely provision of feedback to teachers along with clear expectations of specific teacher practices (Murphy et al., 2006; Robinson et al., 2008). Table 10 enumerates the five practices comprising this domain focused on meeting students' needs through strong instructional leadership.

Maintaining Safety and Orderliness

Effective leaders protect the learning environment by instilling safety and order, and balancing a press for student achievement with a concern for individual student realities (Devine & Cohen, 2007). Robinson et al. (2008) found this leader practice yielded an effect size of 0.27, which although not as large as other effect sizes noted above, still suggests some impact. It follows that teacher and student development will be stunted when these two groups are subjected to an insecure environment. Without safety and order, "educational goals become lofty rhetoric" (Sebring et al., 2006, p. 13), after all, a sense of safety and security is fundamental (Maslow, 1943). Effective leaders address this concern by insisting agreed on codes of conduct and enforcing a fair and consistent set of expectations (Robinson et al., 2008; Sebring et al., 2006). In this way, leaders set the tone for how members of the community will interact with each other (Miller, Luppescu, Gladden, & Easton, 1999). As a corollary to psychological and physical safety, effective leaders focus on maintaining an attractive campus that is fully functioning (Leithwood, 2012; Murphy et al., 2006).

Personalizing the Environment to Reflect Students' Backgrounds

Schools that identify and then incorporate and reflect students' backgrounds in the construction of the instructional program and learning environment see a positive influence on student achievement (Leithwood, 2012; Murphy et al., 2006; Sebring, et al., 2006). Effective leaders assist teachers in identifying the diverse types of social and intellectual capital students bring with them to school (Leithwood, 2005, 2012; Sebring et al., 2006), and leverage these assets in their interaction with students. In practice, personalizing the environment looks like mentoring and advising structures for students, creating ways for students to

TABLE 10

Domains and dimensions pertaining to the teaching and learning environment: Unified model, OLF, LCL, and ES

Unified model: Facilitating a high-quality learning experience for students	OLF: Improving the instructional program	LCL: Instructional program; curricular program; assessment program	ES: Student-centered learning environment; ambitious instruction
Maintaining safety and orderliness	Maintaining and safe and healthy school environment ^a	Learning environment ^a	Safety and order
Personalizing the environment to reflect students' backgrounds		Personalized environment ^a	Teachers learn about student culture and local community ^a
Developing and monitoring curricular program	Providing instructional support (supervising and evaluating teaching; coordinating curriculum)	Knowledge and involvement; opportunity to learn; curriculum alignment	Curricular alignment
Developing and monitoring instructional program	Monitoring student learning and school improvement practice	Knowledge and involvement; Instructional time	Intellectual challenge ^a
Developing and monitoring assessment program	Monitoring student learning and school improvement practice	Knowledge and involvement/assessment procedures/expectations, standards ^a ; monitoring instruction and curriculum ^a	Intellectual challenge; press toward academic achievement coupled with personal concern for students ^a

Note. OLF = Ontario Leadership Framework; LCL = Learning-Centered Leadership; ES = Essential Supports.

^aDenotes author assigned the dimension to a substantively different domain in their framework.

exercise leadership and personal responsibility, and designing learning experiences that are personally and individually engaging for students (Murphy et al., 2006).

Developing and Monitoring the Curricular Program

Effective leaders focus efforts on the curricular program by requiring rigor and high expectations of all students (Hallinger & Heck, 1996, 1998; Leithwood, 2012; Murphy et al., 2006; Robinson et al., 2008). These leaders insist that each

individual student has the opportunity to learn. Leaders monitor and evaluate continuously the alignment of curriculum, instruction and assessment (Leithwood, 2012; Murphy et al., 2006; Robinson et al., 2008). Special programs, such as exceptional education and second language education, are required to align with and meet the same standards. Principals coordinate vertical (within subject) and horizontal (across subject) alignment through the allocation of time and the development of the master schedule to support such endeavors, a prime example being the protection of common planning time for teachers (Murphy et al., 2006).

Developing and Monitoring the Instructional Program

Effective leaders emphasize the instructional program through equipping themselves with a deep knowledge of pedagogy and devoting a large portion of the time to the advancing teaching (Hallinger & Heck, 1996, 1998; Leithwood, 2012; Murphy et al., 2006; Robinson et al., 2008). Instructional time is protected by such practices as prohibiting the scheduling of noninstructional school events during the instructional day, encouraging student and teacher attendance, and limiting the time individuals are pulled from their classrooms.

Developing and Monitoring the Assessment Program

Leaders regard assessment as pivotal to the measurement of student progress as well as the development of data from which to make programmatic adjustments (Murphy et al., 2006). Assessment is multifaceted (to include teacher designed, school designed, and standardized) and both formative and summative in nature (Murphy et al., 2006). Leaders facilitate this data collection and subsequent analysis in ways that permit disaggregation on indicators important to the school's improvement effort and goals (Murphy et al., 2006). The data derived from the assessment efforts inform individual student progress, teacher and departmental effectiveness, and overall school performance (Murphy et al., 2006; Robinson et al., 2008), informing the iterative process of vision and mission building. For the latter, leaders may then adeptly wield this information to objectively define future improvement efforts, faculty professional development, and individual teacher learning.

Connecting With External Partners

Effective leaders make connections with the community to promote broad participation from parents, families and other external stakeholders who can contribute to a positive learning experience for students (Salfi, 2011; Sheppard & Dibbon, 2011). Effective leaders acknowledge that external partners, particularly in urban schools, are untapped resources. Leaders who find ways to optimize the contributions of parents, families and community partners see increased student achievement (Sebring et al., 2006). Table 11 captures this fifth and final domain, which includes three key dimensions: building productive relationships with families and community, engaging families and community in collaborative processes to strengthen student learning, and anchoring schools in the community.

Building Productive Relationships With Families and Communities

The importance of including parents in the educational process of their children becomes clear when we consider the critical contributions of home and

TABLE 11

Domains and dimensions pertaining to connecting to the community: Unified model, OLF, LCL, and ES

Unified model: Connecting with external partners	OLF: Developing the organization to support desired practices	LCL: Social advocacy	ES: Parent–community ties; contextual resources
Building productive relationships with families and community	Building productive relationships with families and communities	Stakeholder engagement	
Engaging families and community in collaborative processes to strengthen student learning	Building productive relationships with families and communities ^a	Community-anchored schools ^a	Staff engages parents and community in strengthening student learning
Anchoring schools in the community	Connecting the school to its wider environment ^a	Community-anchored schools ^a Environmental context	Resources of community

Note. OLF = Ontario Leadership Framework; LCL = Learning-Centered Leadership; ES = Essential Supports.

^aDenotes author assigned the dimension to a substantively different domain in their framework.

family (Leithwood, 2012; Leithwood et al., 2002). Leaders can engage parents through designing welcoming and inclusive environments, developing multiple ways (traditional and nontraditional) for parents to be involved, and fostering teacher understanding and commitment of the importance of parent and community participation (Leithwood, 2012). Leaders must facilitate the faculty’s understanding of their students’ cultural backgrounds, build trusting relationships with parents, and draw on and include existing community resources that parents respect (Sebring et al., 2006).

To further build a relationship, schools can develop ways to integrate parents in schools on a regular basis. Back to school night should serve as the starting point for continual involvement throughout the year rather than the single time some parents have reason to be in their child’s school. In this way, schools and families partner to support children. In a follow-up study in the Chicago Public Schools, Bryk et al. (2010) found a 0.137 effect size for parent involvement in the school. Leaders recognize that (a) students need continual positive influence, (b) schools and families share students, and (c) families entrust their children to schools. As such, the extent to which partnership and joint approaches can be utilized to the ultimate benefit of the student can be in many ways orchestrated by the school leader (Murphy et al., 2006; Sebring et al., 2006).

Engaging Families and Community in Collaborative Processes

In their work with Chicago Public Schools, Sebring et al. (2006) found that leaders who involved parents/family members in the decision making processes regarding school policy, budgetary issues, and the school improvement plan generally had higher functioning schools. Finding ways for parents and the community to perceive a sense of influence in their schools surfaces as a critical component in this domain.

Anchoring Schools in the Community

Because of their unique position in the school and community, leaders can serve as connectors for families of their students. As teachers and leaders become aware of family and student needs, they seek to connect them to helpful community agencies (Leithwood, 2012; Leithwood et al., 2002). Leaders also participate in networks with other school leaders in the broader community to share and discuss ways to meld home, community, and school efforts (Leithwood, 2012; Leithwood et al., 2002).

Discussion

Our work provides a unified framework that represents both broadly and specifically what is known about effective leader practices. It unifies the discrepant elements of prior frameworks authored by three sets of highly respected scholars. We organize our framework by composing five broad domains that are informed by the literature. We also assemble and then categorize all known specific practices as substantiated by over 100 studies that link leadership to student achievement. In terms of the utility, and necessity, of a unified model, we identify several important contributions this framework makes. First, it reflects and unifies the strong research base regarding leadership practice, both in terms of studies and frameworks, and does so through a systematic review of the research. Second, by way of its construction, it acknowledges the direct effect leaders have on teachers and the school environment, and the indirect effect leaders have on students. Third, it presents the work of effective leaders as being geared toward enhancing the most important school-based factor in student achievement, teaching. We discuss the importance of these points in the following section.

First, we see this work as aligned with what Hallinger (2014) sets forth as standards for systematic review. These standards, phrased as questions, intend to generate conceptual frameworks rooted in scientific reporting. The guiding questions are as follows: (a) What are the central topics of interest, guiding questions, and goals? (b) What conceptual perspective guides the review's selection, evaluation, and interpretation of the studies? (c) What are the sources and types of data employed in the review? (d) What is the nature of the data evaluation and analysis employed in the review? and (e) What are the major results of the review? We note that our work addresses each of these questions as evidenced by, respectively (a) focusing on effective leader practice, (b) reviewing the evolution of the literature and how perspectives have changed in the past decades, (c) identifying data sources, (d) critiquing methodologies within the corpus of work, and (e) presenting a transparently derived framework rooted in the results of our analysis and synthesis.

As for the substance of the resulting framework, we assert that the work of effective leaders encompasses multiple realms as reflected in the dimensions of the unified framework. Leaders exercise influence through shaping the organizational context and conditions that teachers and other stakeholders experience and perceive (Francera & Bliss, 2011; Grissom & Loeb, 2011). Although principals in particular are charged with leading a specific type of organization with unique dimensions (the school), a knowledge base of effective instructional practices is not enough (Francera & Bliss, 2011; Grissom & Loeb, 2011; Robinson et al., 2008). School leaders, more broadly defined, need expertise in multiple domains, including curriculum and instruction, but also organizational management. It is dexterity in this latter capacity that unleashes the potential of other teachers and stakeholders through the removal of barriers and creation and refinement of conditions that influence school culture (Grissom & Loeb, 2011; Robinson et al., 2008).

In addition to this notion of organizational leadership, we know that by drawing on their knowledge and understanding of fundamental theories of human motivation, effective leaders intellectually stimulate their faculties and broader stakeholder entities. In fact, one recent study utilizing path analysis (Leithwood, Patten, & Jantzi, 2010) suggests that affective factors such as the emotions teachers experience and their internal states exert more influence over student outcomes than other factors, yet the majority of school leaders' time continues to be devoted to the more technical issues of instruction. Given the comparison between what we know leaders should be doing, and what we know leaders are actually doing, we see this disconnect as grounds for interested parties to reconsider their efforts. We discuss this further in our implications.

Second, leaders support teachers in the complex work of shaping young minds. The work of teachers is certainly dynamic, and leadership is needed to create supportive conditions for teacher effectiveness. These conditions call for leaders to carefully direct their attention and actions in ways that enhance teacher effectiveness, and relieve teachers of unexpected and unnecessary challenges that might undermine their engagement with students (Latham & Locke, 2006). Teaching can be energizing yet tiresome, invigorating yet tedious, and high stakes yet unchartered. Teachers experience these tensions on a daily basis but effective school leaders can mitigate them. They are responsible for supporting teachers in the quest to educate all children from all types of backgrounds, with various learning styles, and with other assorted, and very real, strengths and limitations. Given this reality, leaders, and those interested in leader preparation, practice and policy should consider what can be done to best equip leaders to meet this daunting challenge.

Finally, we present a unified framework that rests on the assumption that the efforts of leaders and teachers are intertwined in the pursuit of increased student achievement. For example, the construct of teacher effectiveness and the implications of quality teaching have become well-substantiated in education (Carlisle et al., 2011; Hamre & Pianta, 2005; Measures of Effective Teaching Project, 2010; Palardy & Rumberger, 2008; Stronge et al., 2007; Wright et al., 1997). As such, its ubiquitous prominence in educational policy and research begs the question, "Now that we know teachers are critical, how do we support their effectiveness?" The quest to improve teacher effectiveness, particularly the effectiveness of

current, in-service teachers, may need to be reframed to accommodate what we know about school leadership, especially because school leaders, particularly principals, hold the formal authority, responsibility, and discretion for creating the very conditions and supports that promote student achievement. Such a reframing envelops the ideas of competitive recruitment and high-quality preparation practices, and acknowledges the importance of stimulating professional development, as these all fall under the purview of formal leaders.

These processes are essential to supporting effective teaching. But their existence is not enough. The development of effective teaching, or teaching that elevates levels of student achievement, needs to include a focus on leadership practices that create dynamic and innovative learning environments for adults and children alike. Although the primary work of leaders is to enhance student outcomes, they accomplish this work mainly through interacting with teachers and other adults in the community. If we wish to answer the question about how to improve the effectiveness of teachers, and we know that leaders influence student learning through teachers, then part of the solution lies in identifying and applying effective leader practices (Urick & Bowers, 2014).

Limitations

The nature of a framework created through synthesis calls for researchers to make decisions about language and the meaning intended by original authors. We employed careful and sensitive review of the works, but we recognize it as possible that bias exists in the form of our interpretation of language used in the major frameworks. We also acknowledge possible biases regarding what to include in dimensions and how to organize the domains. We attempted to address this by wholly synthesizing rather than omitting any practice, dimension, or domain. As for sequence, the actual arrangement of the domains could suggest order of importance to the reader. For example, we chose to place the domain about students before those about teachers. Other researchers may interpret that tending to teachers before students is in keeping with the indirect effect of leaders on students, thus placing the student domain later better reflects the body of work.

Implications and Conclusion

We see our framework as having implications for practitioners (including principals and district level staff), policy audiences, and researchers. In terms of practitioners, we see the level of specificity, in the form of discrete, research-based practices, as a considerable contribution. When district development programs or university preparation programs communicate that a practitioner should be an organizational leader, the message falls short of providing the specifics necessary for implementation. This lack of specificity could be due to a number of reasons, including that multiple versions of effective practices permeate the field. Assisting the research community in reaching consensus and clarity about what we know regarding leader practices that support student achievement might help those who depend on such research for the preparation of school leaders. Course design, including curriculum, instruction, and formative and summative assessment, in preparation programs is an example of a process that stands to be strengthened by these findings. Furthermore, practitioners need knowledge about specific,

high-yield practices that can guide their daily professional lives. Also implicated is professional development of the practicing school leader. This framework can serve as a tool for self-assessment. And understanding the practices and habits of effective school leaders enables those in positions of influence, both in the preservice and in-service roles, to begin with the end in mind. When we identify and unify these practices, we gain insight into what it is that we seek to develop in aspiring leaders as well as current practitioners.

A unified framework of effective leader practices is useful to a second audience, policy makers, because it enables the field to better prepare school leaders through the development of curriculum, instruction, and assessment at the preparation program level that fosters these particular habits. This effort to pinpoint effective leader practices is ongoing in our field, and this unified framework may serve to assist parties involved in the articulation of standards for both policy purposes and preparation programs, such as the Interstate School Leaders Licensure Consortium and the Educational Leadership Constituent Council. Also, school leader performance evaluation may be improved by increased understanding of specific practices that enable student achievement. As Grissom and Loeb (2011) noted, significant work remains in the realm of evaluation tool development, and this work depends largely on the identification of specific behaviors. Currently, most performance evaluation of administrators relies on tools that are typically unaligned with empirically driven criteria, perhaps in part because a comprehensive identification and synthesis of all known practices has not been undertaken in recent years.

A third and final benefit of developing a unified framework is its research potential. With a more comprehensive, robust framework of effective leader practices, researchers have an analytical tool for further examination of the elements, and combinations of elements, that contribute to more vibrant school environments, greater student engagement, and improved student learning. By blending together the cumulative knowledge about leader practices, we are able to build a stronger understanding of what leaders do, how to support their ongoing development and how to assess it more validly.

Although high-quality teachers remain our best resource for promoting student learning, it is talented leaders who will take student success to scale. Our knowledge about what effective school leaders do to support teacher effectiveness and promote student achievement in the past 10 years has grown substantially. This unified framework is an effort to synthesize what we know about leader practices and provide a schema for future research. Organizing what we know about leadership is one way to become more deliberate and strategic in our efforts to improve the conditions for student achievement.

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