

Leadership for learning: a research-based model and taxonomy of behaviors¹

Joseph Murphy*, Stephen N. Elliott, Ellen Goldring and
Andrew C. Porter
Vanderbilt University, USA

In this article, the authors examine the components of leadership for learning employing research on highly productive schools and school districts and high-performing principals and superintendents, using a three-dimensional model of productivity. The knowledge base of leadership for learning is captured under eight major dimensions: vision for learning, instructional program, curricular program, assessment program, communities of learning, resource acquisition and use, organizational culture, and advocacy.

Introduction

Over the last half century a great deal has been written about the importance of leadership, in general and in relation to organizational performance in particular. Academics, practitioners and reviewers from every field of study have concluded that leadership is a central variable in the equation that defines organizational success. Looking specifically at education, we have parallel evidence that leadership is a central ingredient – and often the keystone element – in school and district success as defined in terms of student achievement (Murphy & Hallinger, 1988; Leithwood *et al.*, 2004; Marzano *et al.*, 2005).

An assortment of researchers over the last three decades has helped us see that not all leadership is equal, that a particular type of leadership is especially visible in high performing schools and school districts. This type of leadership can best be labeled ‘leadership for learning’, ‘instructionally focused leadership’ or ‘leadership for school improvement.’ The touchstones for this type of leadership include the ability of leaders (a) to stay consistently focused on the right stuff – the core technology of schooling, or learning, teaching, curriculum and assessment and (b) to make all the other dimensions of schooling (e.g. administration, organization, finance) work in the service of a more robust core technology and improved student learning.

*Corresponding author. Peabody College at Vanderbilt University, Box 514, 230 Appleton Place, Nashville, TN 37203-5721, USA. Email: Joseph.f.murphy@Vanderbilt.edu

In this article, we examine the components of leadership for learning employing research on highly productive schools and school districts and high-performing principals and superintendents, employing the three-dimensional model of productivity described in the treatment of our model below. We capture the knowledge base of leadership for learning under eight major dimensions: vision for learning, instructional program, curricular program, assessment program, communities of learning, resource acquisition and use, organizational culture, and advocacy. We begin, however, with a model that situates leadership for learning.

Leadership model

The larger framework that informs our research is operationalized as a model of educational leadership (see Figure 1 and also Bossert *et al.*, 1982; Pitner, 1988; Leithwood *et al.*, 2004). We begin at the left-hand side of the model where we observe that the leadership behaviors are heavily shaped by four major conditions: (a) the previous experiences of a leader (e.g. experience as a curriculum coordinator in a district office will probably lead to the use of behaviors different from those featured by a leader who has had considerable experience as an assistant principal for discipline); (b) the knowledge base the leader amasses over time; (c) the types of personal characteristics a leader brings to the job (e.g. achievement need, energy

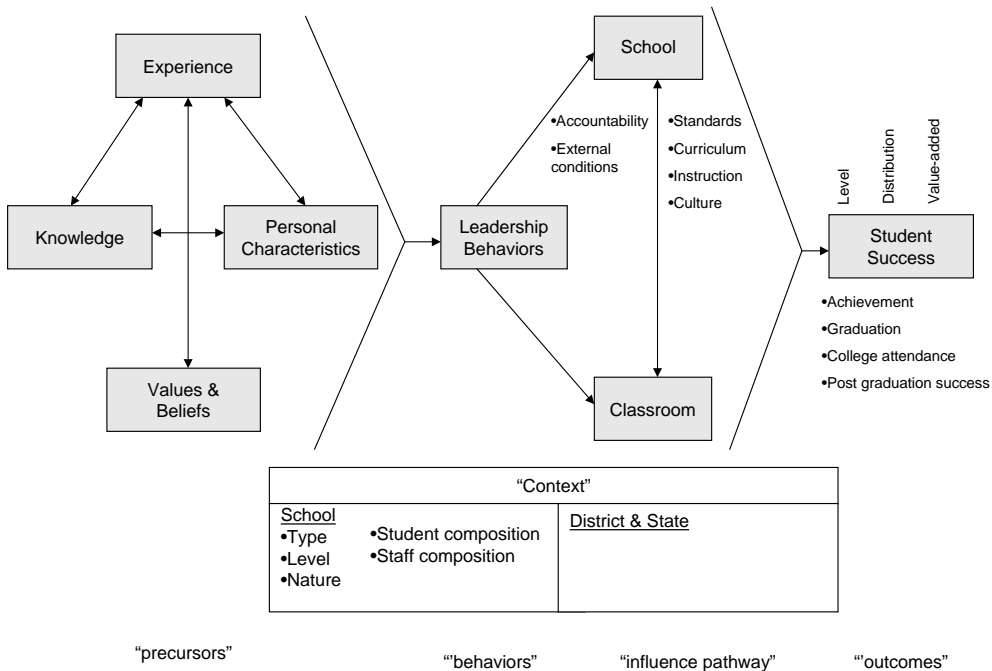


Figure 1. Learning Centered Leadership Framework

level); and (d) the set of values and beliefs that help define a leader (e.g. beliefs regarding the appropriate role for subordinates in decision processes). Consistent with the best literature in this area (see Hallinger & Heck, 1996; Heck & Hallinger, 1999; Leithwood *et al.*, 2003), we see that the impact of leadership behaviors in terms of valued outcomes is indirect. That is, it is mediated by school operations and classroom activities. Or more to the point, leaders influence the factors that, in turn, influence the outcomes (e.g. student graduation).

We conceptualize leader behaviors as impacting on factors both at the school level (e.g. the structure and agenda of a leadership team) and the classroom level (e.g. grouping practices). We underscore the variables that are highlighted in the literature review below. We also describe the impact of leader behaviors in terms of a number of valued outcomes at three periods of time: indicators of in-school achievement (e.g. grades on common final exams), measures of performance at exit from school (e.g. graduation), and more distal indices of accomplishment (e.g. college graduation). The model also posits that outcomes be viewed using ‘a tripartite perspective – high overall levels of student achievement (quality), growth or gain (value added), and consistency of achievement across all subpopulations of the student body (equality)’ (Murphy *et al.*, 1986, p. 154). Finally, the model acknowledges that context plays a significant role in the exercise of leadership for school improvement.

Unpacking leadership for school improvement

As noted in the introduction, we believe the research evidence suggests there are eight major dimensions of behavior that characterize leadership for learning. Each of these dimensions is further defined by a number of functions. Table 1 provides an overview of these dimensions and their related functions. Each of these dimensions is discussed next.

Vision for learning

Leaders in high-performing schools devote considerable energy to ‘the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community’ (Council of Chief State School Officers, 1996, p. 10; see also Murphy & Hallinger, 1985; Wilson & Corcoran, 1988). On the development end of the continuum, leaders ensure that the vision and mission of the school are crafted with and among stakeholders (Brookover *et al.*, 1979). They also ensure that a variety of sources of data that illuminate student learning are used in the forging of vision and goals (Leithwood & Montgomery, 1982). In particular, they make certain that (a) assessment data related to student learning, (b) demographic data pertaining to students and the community, and (c) information on patterns of opportunity to learn are featured in the development process (Wimpelberg, 1986).

Effective leaders facilitate the creation of a school vision that reflects high and appropriate standards of learning, a belief in the educability of all students, and high

Table 1. Knowledge base for the assessment system

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1. Vision for Learning
 - A. Developing vision
 - Articulating vision
 - Implementing vision
 - Stewarding vision
 2. Instructional Program
 - A. Knowledge and involvement
 - B. Hiring and allocating staff
 - C. Supporting staff
 - D. Instructional time
 3. Curricular Program
 - A. Knowledge and involvement
 - B. Expectations, standards
 - C. Opportunity to learn
 - C. Curriculum alignment
 4. Assessment Program
 - A. Knowledge and involvement
 - B. Assessment procedures
 - C. Monitoring instruction and curriculum
 - D. Communication and use of data
 5. Communities of Learning
 - A. Professional development
 - B. Communities of professional practice
 - C. Community anchored schools
 6. Resource Acquisition and Use
 - A. Acquiring resources
 - B. Allocating resources
 - C. Using resources
 7. Organizational Culture
 - A. Production emphasis
 - B. Learning environment
 - C. Personalized environment
 - D. Continuous improvement
 8. Social Advocacy
 - A. Stakeholder engagement
 - A. Diversity
 - B. Environmental context
 - C. Ethics
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levels of personal and organizational performance (Anderson, 1985; Harnisch, 1987; Newmann, 1997). They emphasize ambitious goals, ones that call for improvement over the status quo (Leithwood & Montgomery, 1982; Rutherford, 1985). In particular, leadership for school improvement means making certain that goals are focused on students, feature student learning and achievement, and are clearly defined (Rutherford, 1985; Wimpelberg, 1986; Harnisch, 1987). Instructionally anchored leaders ensure that responsibility for achieving targets is made explicit and

that timelines for achieving objectives are specified. In short, they make sure that the school vision is translated into specific and measurable end results (Brookover *et al.*, 1979; Venezky & Winfield, 1979; Carter & Maestas, 1982). They also ensure that the resources needed to meet goals are clearly identified – and made available to the school community.

Effective principals and other school-based leaders articulate the vision through personal modeling and by communicating with others in and around the organization (Goldman *et al.*, 1991; Leithwood, 1992). On the first front, they are adept at making the school vision central to their own daily work (Leithwood *et al.*, 1991). They demonstrate through their actions the organization's commitment to the values and beliefs at the heart of the mission as well as to the specific activities needed to reach goals (Dwyer, 1986; Leithwood & Montgomery, 1982). On the second issue, communication, school improvement-oriented leaders work ceaselessly to promote the school's mission and agenda to staff, students, parents and members of the extended school community (e.g. business and religious leaders, district office staff) (Edmonds & Frederiksen, 1978; McEvoy, 1987). Indeed, effective leaders are masters in keeping vision, mission and goals in the forefront of everyone's attention and at the center of everyone's work (Rutherford, 1985; Taylor, 1986; Marzano *et al.*, 2005). To accomplish this, they engage a wide array of formal and informal avenues of exchange and employ a variety of techniques (e.g. symbols, ceremonies) (Brookover *et al.*, 1979; Venezky & Winfield, 1979).

Master leaders are especially well versed at translating vision into operation (Wilson & Corcoran, 1988; Gilchrist, 1989; Bryk, 1994) and at stewarding the school's vision. They are careful monitors, (a) ensuring a continuous examination of assumptions, beliefs and values, (b) assessing implementation of goals, and (c) evaluating the impact of school objectives on organizational performance and student learning (Louis & Miles, 1990). One way these leaders shepherd goals is through the actions they take to recognize, celebrate and reward the contributions of community members to the development, the implementation and, most importantly, the realization of school goals (Rutter *et al.*, 1979; Wynne, 1980). At the same time, they do not overlook shortcomings and failures. Certainly a critical dimension of operationalizing and stewarding is seeing to it that school vision and school goals shape routine school activities and anchor organizational systems and structures (Dwyer, 1986). On a personal front, operationalizing and shepherding occurs when leaders act as keepers and promoters of the vision; maintain enthusiasm and a sense of optimism, especially in periods of waning energy; and inspire others to break through barriers to make the school vision a reality (Christensen, 1992).

Instructional program

Leaders in highly productive schools have a strong orientation to and affinity for the core technology of their business – learning and teaching. In the area of pedagogy, they are knowledgeable about and deeply involved in the instructional program of the

school and are heavily invested in instruction, spending considerable time on the teaching function (High & Achilles, 1986; Wellisch *et al.*, 1978; Marzano *et al.*, 2005). They model the importance of teaching by being directly involved in the design and implementation of the instructional program (Weber, 1971; Austin, 1978; Wellisch *et al.*, 1978). They pay attention to teaching, visiting classrooms and working with groups of teachers on instructional issues, in both formal and informal settings (Clark *et al.*, 1980; High & Achilles, 1986).

Leaders in schools where all youngsters reach ambitious learning targets realize that teachers are the keystone of quality education. Therefore, they devote considerable time and undertake much careful planning to guarantee that the school is populated with excellent teachers, and with colleagues whose values and instructional frameworks are consistent with the mission and the culture of the school (Teddlie & Stringfield, 1985a, 1985b). Instructionally centered leaders are also diligent in assigning teachers to various responsibilities. They allocate teachers based on educational criteria, especially student needs, rather than on less appropriate foundations such as staff seniority and school politics (Brookover *et al.*, 1979; Rutter *et al.*, 1979; Eubanks & Levine, 1983).

As we see again and again throughout this review, instructionally grounded leaders devote abundant time to supporting colleagues in their efforts to strengthen teaching and learning in and across classrooms (Leithwood & Jantzi, 1990; Conley, 1991). Foremost, they are aggressive in identifying and removing barriers that prevent colleagues from doing their work well. They provide intellectual stimulation and make certain that teachers have a high-quality stream of job-embedded opportunities to expand, enhance and refine their repertoires of instructional skills (Wilson & Corcoran, 1988; Cawelti, 1997; Newmann, 1997). They also make sure that the materials that teachers require to perform their jobs are on hand in sufficient quantity and in a timely fashion. Consistent with the involvement and investment theme, effective leaders demonstrate personal interest in staff and make themselves available to them (Marzano *et al.*, 2005).

We know from the literature that feedback on performance is essential to the learning process, and leaders in high-performing schools are diligent about providing this information to colleagues on a consistent basis and in a timely manner (Clark *et al.*, 1980; Wellisch *et al.*, 1978). In supplying performance feedback, learning-centered leaders (a) rely on personal knowledge developed through numerous classroom observations, both informal and formal, and (b) employ a variety of supervisory and evaluation strategies (New York State, 1974). They make student learning the calculus of the exchange process (Leithwood & Montgomery, 1982). Effective leaders are especially expert in opening up a wide assortment of improvement opportunities for teachers. And they are relentless in counseling poor teachers to leave the classroom (Russell *et al.*, 1985; Rutherford, 1985; Teddlie & Stringfield, 1985a). In a related vein, improvement-focused leaders aggressively monitor the instructional program in its entirety, assuring alignment between learning standards and objectives and classroom instruction (Eubanks & Levine, 1983).

Academic learning time is the caldron in which student achievement materializes (Denham & Lieberman, 1980; Fisher & Berliner, 1983; Seifert & Beck, 1984), and effective leaders work tirelessly with staff to ensure that this precious resource is maximized (Roueche *et al.*, 1986). They begin by making sure that the great bulk of time is devoted to instructional activities, and that non-instructional time is kept to a minimum. They also see to it that the majority of instructional time is dedicated to core academic subjects (Edmonds & Frederiksen, 1978; Schneider, 1985). Within this learning space, they work with teachers to accentuate the use of instructional strategies that maximize student engagement at high levels of success. On a parallel track, improvement-focused leaders undertake an array of activities that protect valuable instructional time from interruptions, including: (a) assigning academic subjects time slots that are least likely to be disturbed by school events; (b) protecting teachers from distractions from the school office; (c) developing, implementing and monitoring procedures to reduce student tardiness and absenteeism; and (d) ensuring that teachers are punctual (Austin, 1978; Rutter *et al.*, 1979; Stallings & Mohlman, 1981). They also foster more productive use of time by coordinating time usage among teachers and across classes (e.g. all language arts instruction unfolding during the first two hours of the day) (Fisher & Adler, 1999; Hallinger & Murphy, 1985).

Finally, leaders in high-performing schools are expert in providing recognition and rewards for quality teaching and demonstrated student learning (Rutter *et al.*, 1979; Wynne, 1980). They systematically celebrate the instructional accomplishments of the school and recognize and reward individual achievements (Russell *et al.*, 1985). They employ both public avenues of acknowledgement and private praise and encouragement to colleagues. They link recognition and incentives and rewards (Rutter *et al.*, 1979; Wynne, 1980).

Curricular program

School improvement-centered leaders are also knowledgeable about and deeply involved in the school's curricular program (Carter & Maestas, 1982; Russell *et al.*, 1985; Marzano *et al.*, 2005). They work with colleagues to ensure that the school is defined by a rigorous curricular program in general and that each student's program in particular is of high quality (Ogden & Germinario, 1995; Newmann, 1997). On the first issue, they establish high standards and expectations in the various curricular domains consistent with blueprints crafted by professional associations and learned societies (Rutter *et al.*, 1979; Teddlie & Stringfield, 1985b). On the second topic, they ensure that opportunity to learn is maximized for each youngster (Boyer, 1983; Murphy & Hallinger, 1985). These leaders are also diligent in monitoring and evaluating the effectiveness of the school's curricular program (Wilson & Corcoran, 1988).

In the array of factors that define high-performing schools, curriculum alignment enjoys a position of prominence, and effective leaders are especially attentive to

creating a 'tightly coupled curriculum' (Murphy *et al.*, 1985, p. 367) throughout the school (Wellisch *et al.*, 1978). This means that they ensure that objectives (standards), instruction, curriculum materials and assessments are all carefully coordinated (Levine, 1982; Levine & Stark, 1982). It also means that all special programs (e.g. bilingual education) are brought into the gravitational field of the regular program (Eubanks & Levine, 1983). Finally, it means that there is a high degree of coordination (a) across subjects within grades, (b) across grade levels and phases of schooling (e.g. from the elementary to the middle school), and (c) among teachers within and across departments and grade levels (Cohen & Miller, 1980; Fisher & Adler, 1999; Venezky & Winfield, 1979).

Assessment program

As we saw with the instructional and curricular programs, school improvement-focused leaders are knowledgeable about assessment practices and personally involved with colleagues in crafting, implementing and monitoring assessment systems at the classroom and school levels (Weber, 1971; Clark & McCarthy, 1983; Marzano *et al.*, 2005). They provide the resources – time, funding and materials – to bring well-developed assessment systems to life. Through personal modeling, they promote a serious attitude towards data-based decision-making among their colleagues (Brookover *et al.*, 1979).

Assessment systems in schools with effective leaders are characterized by a variety of distinguishing elements. First, they are comprehensive. They address classroom- and school-based activity. They feature the use of a wide variety of monitoring and data-collection strategies, both formal and informal. That is, they ensure that student learning is measured using an assortment of techniques. For example, comprehensive designs often include teacher record-keeping systems, end-of-level or end-of-unit reports, student work products, criterion-referenced tests and standardized measures of student performance. They also highlight information gleaned from direct observations in classrooms. Second, they disaggregate information on the important conditions and outcomes of schooling (e.g. program placement of students, test results) by relevant biosocial characteristics of students (e.g. gender, race, class). Third, they are constructed in ways that foster the triangulation of data from multiple sources in arriving at judgments concerning the effectiveness of curricular and instructional programs and organizational operations. Finally, as alluded to above, these systems highlight tight alignment between classroom-based and school-based methods of assessing student learning. And, we close here where we began, in schools with effective assessment programs, the fingerprints of school leaders are distinctly visible.

Lastly, the literature informs us that effective leaders are master craftspersons in the communication and use of the data that form the lifeblood of the assessment system (Eubanks & Levine, 1983). On the issue of use, improvement-grounded leaders ensure that assessment data are at the heart of (a) mission development,

(b) instructional planning, (c) the evaluation of the curricular program, (d) the identification of and the design of services for special needs students, (e) monitoring progress on school goals and improvement efforts, and (f) the evaluation of school staff (Edmonds & Frederiksen, 1978; Leithwood & Montgomery, 1982; Russell *et al.*, 1985). On the communication front, instructionally based leaders provide teachers and parents with assessment results on a regular basis (Venezky & Winfield, 1979; Levine & Stark, 1982). They also unpack the meaning of results with staff – as a body of the whole, in appropriate groups and individually (Levine & Stark, 1982; Russell *et al.*, 1985). They make certain that information on student progress is regularly reported to students and parents in an accessible form, at multiple times, across an array of forums and in multiple formats (Wynne, 1980; Leithwood & Montgomery, 1982; Eubanks & Levine, 1983).

Communities of learning

Effective school leaders are especially skillful in creating learning organizations and fostering the development of communities of learning. They are vigorous promoters of professional development, they nurture the growth of communities of professional practice, and they shape school organizations to adhere to the principles of community.

In the area of staff development, improvement-focused leaders thoughtfully attend to their own growth, modeling a lifelong commitment to learning for their colleagues. Unlike many peers, these women and men focus their learning on issues of school improvement. And they assume an active role in planning and evaluating specific staff learning activities and the overall professional development system of the school (Berman & McLaughlin, 1978; Clark *et al.*, 1980). Attending to professional development is a significant piece of their work portfolios.

In working with colleagues, instructionally centered leaders establish an expectation that the continual expansion of one's knowledge and skills focused on helping students succeed is the norm at the school. These leaders also demonstrate a dedication and a willingness to assist teachers in strengthening their instructional skills (see Rosenholtz, 1985, for a review). They furnish needed resources to teachers (Guzzetti & Martin, 1986; McEvoy, 1987; Marzano *et al.*, 2005), including support to help teachers gain new knowledge (e.g. they fund workshops, hire coaches, facilitate intra- and inter-school visitations) and they provide the materials teachers require to implement new skills in the classroom (Berman & McLaughlin, 1978; Blumberg & Greenfield, 1980; Hord & Huling-Austin, 1986). These leaders are committed to ensuring that their colleagues have both direct and indirect, both formal and informal, guidance as they work to integrate skills learned during professional development into their portfolios of instructional behaviors (Berman & McLaughlin, 1978). They are well versed in providing regular 'incidental interventions' – casual conversations and suggestions of ideas – that assist teachers in their efforts to improve instruction (Little, 1982; Phi Delta Kappa, 1983; Hord &

Huling-Austin, 1986). And, as we outline below, they create systems and procedures that nurture this type of informal learning throughout the school, mechanisms that promote the exchange of professional dialogue about strengthening instruction and improving the school (Venezky & Winfield, 1979).

Improvement-centered leaders forge a structure for professional development from the principles of learning theory and models of best practice. They make certain that a robust system for developing staff expertise is in place and that each staff member has the learning experiences necessary to grow his or her instructional skills. They ensure that development opportunities and experiences flow from data on student achievement, link carefully with district and school goals, are integrated into the culture of the school and focus on student learning (Venezky & Winfield, 1979; Clark *et al.*, 1980). These leaders also make sure that learning activities are scaffolded on the principles of adult learning and the best professional development standards.

Leaders of schools on the crest of the improvement curve actively promote the formation of a learning organization, the development of staff cohesion and support and the growth of communities of professional practice (Little, 1982; Berman, 1984; Newmann, 1997; Murphy, 2005a). At the broadest level, these leaders endeavor to create a culture of collaboration and the systems, operations and policies that provide the infrastructure for that collegial culture (Sizer, 1984; Rutherford, 1985). At this level, they also are active in building shared beliefs concerning the importance of community. They nurture collaborative processes (e.g. shared decision-making), forge schedules (e.g. common planning time) and create organizational structures (e.g. team leadership) that permit and encourage shared mission and direction, collaborative work, and mutual accountability for school goals and student learning (Lezotte *et al.*, 1980; Little, 1982; Rutherford, 1985). These leaders are particularly attentive to ensuring that there are a variety of mechanisms for teachers to communicate and work among themselves (Leithwood, 1992; Vandenberghe, 1992). And, to be sure, these women and men are active participants in the various school learning communities, often serving key linking and pollinating roles in the process (Prestine, 1991a, 1991b). They understand, and help others understand, that communities of professional practice offer the most appropriate vessels for professional learning and the forging of new instructional skills. Finally, they take advantage of the fact that they are in a unique position to garner and allocate resources to bring communities of professional practice to life (Little, 1982; Rutter *et al.*, 1979).

School organizations in the twentieth century featured the principles of hierarchy, e.g. line authority, impersonality, the separation of management from labor, the specialization and division of work, and so forth. Over the years, we have learned that more effective schools underscore the principles of community, e.g. authority based on expertise, personalization, shared leadership, overlapping work, and so forth (Rutter *et al.*, 1979; Bryk & Driscoll, 1988; Lee *et al.*, 1995). And, there is considerable evidence that leadership is the key factor in rebuilding and reculturing schools in the form of communities (Beck & Murphy, 1996; Copland, 2003; Smylie, 1996).

Through their actions, leaders both communicate the importance of community in a school and reveal the meaning of this core idea to students, staff and parents (see Murphy *et al.*, 2001 for a review). At the broadest and most comprehensive level, they accomplish this by demonstrating an ethic of care throughout the school (Bryk & Driscoll, 1988; Miron, 1996). More concretely, they treat all individuals with fairness, dignity and respect. In the process of doing all this, these leaders form the glue that holds the community together, i.e. trust, and build the foundations that support the three key pillars of community – shared direction, cooperative work and mutual accountability (Louis & Miles, 1990; Smylie, 1992).

Improvement-oriented leaders are master craftspersons in the formation and use of group processes, both in their own work and in the school community writ large. These leaders model effective skills in the areas of (a) problem framing and problem solving, (b) decision-making, (c) conflict resolution, (d) group processes and consensus building, and (e) communication. They also see to it that these important processes permeate the organization (Squires, 1980; Prestine, 1991a, 1991b; Marzano *et al.*, 2005).

Leaders in high-performing schools also often promote a shared or team approach to leading the organization (Goldman *et al.*, 1991; Clift *et al.*, 1992). The DNA of this more distributed conception of management – of pushing leadership outward to students, parents and especially staff, and helping others assume the mantle of leadership – is the privileging of expertise, rather than role, in managing the school (Beck & Murphy, 1996). Effective leaders are adept in meeting this challenge. They involve others in the crafting and implementation of important decisions (Marzano *et al.*, 2005). They empower others and provide faculty with voice – both formal and informal – in running the school, not simply their own classrooms (Prestine, 1991a, 1991b). They delegate often and effectively and frequently form leadership teams to assist in shaping the vision and in managing the operations of the school, especially in and around the core technology (Leithwood & Jantzi, 1990; Glickman *et al.*, 1992; Christensen, 1992).

Resource allocation and use

As we have already begun to see in our discussions of each of the dimensions of leadership to this point, improvement-oriented leaders are adept at garnering and employing resources in the service of meeting school goals. For example, under ‘instructional program’, we reported that leaders in high-performing schools are very attentive to the most critical resource in their care: teachers. We saw how these leaders are almost religious about hiring quality teachers and then zealous in assigning teachers to the best advantage of students, as defined by their academic success. Under ‘communities of learning’, we noted that effective leaders actively garner resources to allow teachers to continuously strengthen their instructional skills. Equally important, we observed that these precious resources were thoughtfully linked to school goals and student needs. And in unpacking ‘curricular

programs' and 'assessment programs', we observed that effective leaders are expert in targeting resources to create systems, operations and structures that ensure maximum student opportunity to learn.

Here we reinforce those findings, confirming that high-performing school leaders have a gift for acquiring, allocating and using resources to strengthen student learning. Indeed, researchers in the areas of school improvement and instructional leadership consistently report that high-performing school leaders are more successful than their peers in locating and securing additional resources for their schools (Clark *et al.*, 1980; Wilson & Rossman, 1986). In particular, these women and men use the formal and informal channels at their disposal to influence district-level decision-making to better the competitive position of their schools in the distribution of resources (Crowson & Morris, 1984; Kroeze, 1984; Farrar, 1987). They also show adeptness in attracting additional funds and materials from the larger school community (Wilson & Rossman, 1986). Evidence is also emerging that effective leaders are more skillful than their peers in building up the stock of social capital at the school level (Wilson & Corcoran, 1988; Knapp *et al.*, 2003).

On the allocation and use issues, two critical dynamics are in play in high-performing schools. First, leaders here assiduously link resource deployment and use to the mission and goals of the school (Clark *et al.*, 1980; Rutherford, 1985). All requests and all commitments are not equal in effective schools. Financial, human and material resources are all directed in the service of improved student learning (Beck & Murphy, 1996). Second, effective leaders are masters at taking the dimensions of work that have historically occupied center stage in school administration – management, politics, organization, finance – and ensuring that they are no longer ends in themselves but assume importance to the extent that they strengthen the quality of the instructional and curricular program and enhance student learning (Louis & Miles, 1990; Beck & Murphy, 1996).

Organizational culture

The reader will observe that patterns in the tapestry of organizational culture are clearly visible in the material examined to this point. For example, the research on communities of learning illuminates a number of themes that help define organizational culture (e.g. shared work). Additional patterns will emerge in the concluding section of our review on social advocacy (e.g. respect for diversity). Here, we augment our understanding of culture by introducing four new themes: production emphasis, continuous improvement, safe and orderly learning environment, and personalized community.

Effective organizations in all sectors, including education, are marked by a strong 'production emphasis' (Bossert *et al.*, 1982, p. 37). And consistent with the core theme of our review, improvement-focused leadership is a key factor in explaining the presence of this organizational orientation toward outcomes (Edmonds, 1979). On the front end of this condition, leaders in high-performing schools work ceaselessly to

create an environment of high performance expectations for self, staff and students (Edmonds, 1979; Wilson & Corcoran, 1988; Lee *et al.*, 1995). On a personal front, they 'portray a positive attitude about the ability of staff to accomplish substantial things and inspire teachers to accomplish things that might seem beyond their grasp' (Waters & Grubb, n.d., p. 10). They model risk taking in the service of attaining important goals (Prestine, 1991a, 1991b). They regularly communicate a concern for and interest in staff performance and student achievement (Edmonds, 1979). They establish clearly defined, school-wide academic standards to bring high expectations to life (Rutter *et al.*, 1979). They carefully ensure that these high expectations are translated into school policies (e.g. all students must take Algebra I by the end of the ninth grade, work below the grade of 'C' must be redone) and behavioral expectations (e.g. homework in this school is completed on time). These leaders make certain that expectations are decoupled from beliefs about biosocial characteristics of students (e.g. the belief that second-language learners require remedial work in all subject areas) (Edmonds, 1979).

On the backside of production emphasis, effective leaders 'monitor the effectiveness of school practices and their impact on student learning' (Marzano *et al.*, 2005, p. 43) and maintain school accountability. They hold everyone – students, teachers, parents and school administrators – responsible for achieving school goals and reaching targets in the area of student performance, providing special weight to the contributions of teachers and other professional staff at the school. While these leaders acknowledge the value of hard work, they clearly couple success to performance.

Instructionally grounded leaders are the catalysts in school-based efforts at continuous improvement. They understand and communicate that complacency is the enemy of improvement, that the status quo is more tightly linked to decline than to growth. These leaders confront stagnation. They ensure that the school systematically reviews and adopts more productive strategies to accomplish important goals (Marzano *et al.*, 2005). They take risks and encourage others to do so in the quest for better education (Prestine, 1991a, 1991b). They act entrepreneurially to support school improvement efforts. They encourage initiative and proactiveness. They make sure that the assessment program we described earlier is a driver in the work of continuous school improvement.

From the earliest studies of effective schools, we have known that schools in which all youngsters reach ambitious targets of performance are defined by safe and orderly learning environments (Rutter *et al.*, 1979; Carter & Maestas, 1982). In terms of the physical facilities, this means that the school plant, equipment and support systems operate safely, efficiently and effectively. It also means that a safe, clean and aesthetically pleasing school environment is created and maintained. Finally, it means that problems with facilities are identified, addressed and resolved in a timely manner (Clark *et al.*, 1980; Wynne, 1980; Lasley & Wayson, 1982).

As with many of the areas we explore in this review, leaders have a dual role in the domain of learning environment. On the one hand, they demonstrate what is valued through their own behaviors. Thus, effective leaders model appropriate behavior by

personally enforcing discipline with students and by confronting problems quickly and forcefully (Lasley & Wayson, 1982). On the other hand, these leaders are responsible for the creation and operation of systems and structures and the performance of colleagues (Marzano *et al.*, 2005). In this area, they ensure that operations, rules and procedures to maintain discipline and order in the school community are developed and monitored on regular basis. Specifically, they make certain that classroom and school rules and consequences are clearly defined, communicated and understood by students, teachers and parents. In the process, they work to secure widespread acceptance and support for the school code of conduct. Effective school leaders are masterful at involving members of the school community in the development of the school's discipline processes. They work hard to ensure that school rules are fairly and consistently enforced across the school community. They provide assistance to individual teachers and support for the management system itself. Perhaps most critically, they demand collective accountability for student behavior (Wilson & Corcoran, 1988; Lee & Smith, 1996; Marks & Louis, 1997).

There is a fair amount of research which shows that impersonality reigns in many schools in America, especially secondary schools (Sizer, 1984; Powell *et al.*, 1985). That is, students are neither well known nor particularly well cared for. Since, as we have seen, schools have been constructed using institutional and hierarchical blueprints, both of which feature impersonality, this condition should come as a surprise to no one. Yet the fact that it can be explained is not much consolation to the youngsters in these schools (see Murphy *et al.*, 2001). On the other side of the ledger, we know that in schools where academic and social learning thrive, high 'academic press' (Murphy *et al.*, 1982, p. 22) is almost always coupled with high personalization (Nauman, 1985; Lee *et al.*, 1995). At the broadest level, this indicates that each student is well known and cared for, and that each youngster feels valued and important at school (Nauman, 1985; Romo & Falbo, 1996).

Effective leaders address personalization by forging structures and mechanisms for students to form ties to the school and to appropriate adult role models (e.g. the use of teacher advisors and the structures to support the advisory process), by creating multiple opportunities for meaningful student engagement (Rutter *et al.*, 1979; Wynne, 1980; Carter & Maestas, 1982). They work to link students and teachers in a variety of school-level activities. Leadership for school improvement means nurturing personalization (a) by creating opportunities for students to exercise responsibility and to practice leadership behaviors, i.e. to assume important roles in the school community, (b) by offering chances for students to develop the skills needed to assume leadership roles, and (c) by crafting programs that acknowledge and reward participation. Effective leaders also understand the significance of symbols (Wynne, 1980). They are expert at fostering the widespread use of school symbols that distinguish the school from the larger community and that clearly characterize students as members of the school (Clark *et al.*, 1980; Wynne, 1980).

Recognition and rewards also fill a central cell in the personalization design in high-performing schools (Rutter *et al.*, 1979; McCormack-Larkin & Kritek, 1982).

In these communities, an abundance of classroom-based and school-wide recognition systems and mechanisms are in play, systems that are carefully designed to be reinforcing (Lasley & Wayson, 1982). Rewards are distributed frequently and they reach a high percentage of students (Wynne, 1980). They are seen as meaningful and important throughout the school community, especially to students. They are often public in nature (Rutter *et al.*, 1979). They highlight the accomplishments of individuals and groups. And while they unquestionably privilege academic accomplishments, rewards are provided for success in a wide array of areas. We close our narrative here with an important reminder: Leadership is the central ingredient in ensuring that these frameworks of meaningful student engagement and widespread rewards and recognition become defining elements of school culture (Wynne, 1980; Russell *et al.*, 1985).

Advocacy

One of the central dynamics of leadership in schools where students flourish is defined in terms of moral agency and advocacy for youngsters and their families (see Murphy, 1992; Sergiovanni, 1992; Fullan, 2003). Indeed, this critical dimension of leadership has been ribboned through our review to this point. In this section, it receives the full weight of our attention. We unravel the concepts of agency and advocacy into four overlapping domains – environmental context, diversity, ethics, and stakeholder engagement – and describe the leadership for school improvement in each functional area.

Working from a research base that overlaps quite extensively with the one we examine in this review (see Murphy, 2005b), the framers of the ISLLC *Standards for School Leaders* concluded that one of the defining characteristics of improvement-oriented leaders is that they ‘understand, respond to, and influence the larger political, social, economic, legal, and cultural context of schooling to promote the success of all students’ (CCSSO, 1996, p. 25). That is, they actively manipulate the environment in the service of better education for youngsters and their families. The central issue here is understanding contextual trends and influences and their potential impacts on the school and the larger community, particularly how these environments support or hinder learning in classrooms. In their advocacy role, effective leaders proactively respond to external policy initiatives (e.g. speak at public forums, address civic organizations) to ensure that public policy advantages the children and youngsters in their schools – and their families.

Leaders in high-performing schools also ‘recognize and utilize the cultural, ethnic, racial, and economic diversity of the school community to meet the needs of all learners and to maximize the performance of students’ (Wallace Foundation, 2004, p. 8). In short, effective leaders demonstrate an understanding of and a commitment to the benefits that diversity offers to the school. They translate this knowledge and commitment into work that creates educational experiences that honor diversity (e.g. the use of culturally rich educational materials) while strengthening instruction and

improving student achievement (Roueche *et al.*, 1986). As we see below, these leaders are also adept at building and using channels of communication that promote ongoing dialogue with diverse groups of stakeholders (Russell *et al.*, 1985).

According to the literature (most noticeably the ISLLC *Standards*) effective leaders 'act with integrity, fairness, and in an ethical manner' (CCSSO, 1996, p. 18). On one front, the authors of the *Standards* note that this means that leaders fulfill legal and contractual obligations and apply laws and district and school policies and procedures fairly, wisely and considerately. It means that they guarantee the privacy rights of students and recognize and respect the legitimate authority of others. At a deeper level, it means leaders treat others fairly, equitably, and with dignity and respect – and they establish the expectation that others in the school community act in a similar manner.

On a personal basis, effective leaders are more cognizant than their peers of their own values and beliefs and they shape their behavior in accord with personal and professional codes of ethics. They are more reflective and self-critical regarding their own practice and its impact on others in the extended school community. They know the difference between using office and position for one's own gain and for the benefit of the school community and they honor the latter. These leaders serve as role models in terms of accepting responsibility for what happens to children and families in their school community.

Finally, the research on high-performing schools and improvement-oriented leaders reveals that effective leaders are attuned to and expert at linking the school to parents and others in the extended school community (Corcoran & Wilson, 1985; Russell *et al.*, 1985). Much more so than peers, these leaders weigh connections in terms of their value in enhancing the academic and social learning of students (Armor *et al.*, 1976). That is, they engage families and other community members in the service of school goals, the learning agenda and student performance (Beck & Murphy, 1996). Inside the school, these women and men model community collaboration for staff, establish norms regarding the importance of parent connections, and provide opportunities for staff to develop the collaborative skills needed to work effectively with parents. They also ensure that information on family and community concerns, expectations and interests inform school decisions (Rowe, 1995; Taylor *et al.*, 1999).

Leadership for school improvement means working from a comprehensive design in respect of school–community relations that is anchored by the school's academic mission. The plan is systematic, not simply a collection of ad hoc and unrelated activities. In the wider community, effective leaders develop relationships with influential actors in the religious, business and political sectors. They are actively involved in the school community and communicate frequently with stakeholders therein. They employ multiple channels and a variety of forums to operationalize these connections. Their objectives are to inform, promote, learn and link – to ensure that the school and the community serve one another as resources. On the extended community front, effective leaders are also especially attentive to building bridges with (a) other youth and family service agencies that can promote better lives

for youngsters and their families and (b) the media that can help promote the image of the school.

For improvement-centered leaders, connections with parents occupy a strategic position in the algorithm of stakeholder engagement. Leaders communicate with families regularly and through a variety of channels. They create programs and strategies that bring parents from the periphery to the inner circle of school operations. In particular, they foster the development of parent education programs, including activities that (a) encourage and help parents learn about the instructional and curricular program at the school, (b) assist parents in working more productively with their children at home on the goals of the school, and (c) assist parents in extending their own parenting skills.

Conclusion

We conclude our narrative where we began, by reminding the reader of our central premise – that leaders have a good deal to say about how well schools work for America’s youth and their families. We also reintroduce our assertion that not all leadership is equal. Specifically, learning-centered leadership merits the high ground in the work to create schools in which all youngsters reach ambitious targets of performance.

Note

1. This paper was developed to provide the architecture for the Vanderbilt Assessment of Leadership in Education (VAL-Ed) project – an initiative to develop a national evaluation for school principals and school leadership teams. The project is being funded by a generous grant from the Wallace Foundation. This support is gratefully acknowledged by the authors.

Notes on contributors

Joseph Murphy is Associate Dean and Professor of Education at Peabody College of Education of Vanderbilt University. He is a past Vice President of AERA. He was the founding Chair of the Interstate School Leaders Licensure Consortium (ISLLC) and directed the development of the *ISLLC Standards for School Leaders*. His work is in the area of school improvement, with special emphasis on leadership and policy.

Stephen N. Elliott, Ph.D. is a Professor of Special Education and the Dunn Family Chair of Educational and Psychological Assessment in Peabody College at Vanderbilt University. He directs the Center for Assessment and Intervention Research and also heads up a new Interdisciplinary Graduate Program in Educational Psychology: Learning and Measurement at Vanderbilt.

Ellen Goldring (Ph.D. University of Chicago) is Professor of Education Policy and Leadership at Peabody College, Vanderbilt University. Dr Goldring’s research focuses on improving schools with particular attention to

educational leadership, governance, and access and equity in schools of choice. She has served as the editor of *Educational Evaluation and Policy Analysis* and is the author of hundreds of articles, book chapters and two books: *Principals of Dynamic Schools* and *School Choice in Urban America: Magnet Schools and the Pursuit of Equity*.

Andrew C. Porter is the Patricia and Rodes Hart Professor of Educational Leadership and Policy and director of the Learning Sciences Institute at Vanderbilt University. He is an elected member and vice president of the National Academy of Education, member of the National Assessment Governing Board, Lifetime National Associate of the National Academies, and post-President of the American Educational Research Association.

References

- Anderson, C. S. (1985) The investigation of school climate, in: G. R. Austin & H. Garber (Eds) *Research on exemplary schools* (Orlando, FL, Academic Press).
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., et al. (1976, August) *Analysis of the school preferred reading program in selected Los Angeles minority schools*. Report No. R-2007-LAUSD (Santa Monica, CA, Rand).
- Austin, G. (1978, February) *Process evaluation: a comprehensive study of outlines* (Baltimore, Maryland State Department of Education and Center for Research and Development, University of Maryland).
- Beck, L. G. & Murphy, J. (1996) *The four imperatives of a successful school* (Thousand Oaks, CA, Corwin Press).
- Berman, P. (1984, January) *Improving school improvement: a policy evaluation of the California school improvement process* (Berkeley, CA, Berman, Weiler Associates).
- Berman, P. & McLaughlin, M. W. (1978) *Federal programs supporting educational change*, vol. VIII: *Implementation and sustaining innovations* (Santa Monica, CA, Rand Corporation).
- Blumberg, A. & Greenfield, W. (1980) *The effective principal: perspectives on school leadership* (Boston, Allyn & Bacon).
- Bossert, S. T., Dwyer, D. C., Rowan, B. & Lee, G. V. (1982, Summer) The instructional management role of the principal, *Educational Administration Quarterly*, 18(3), 34–64.
- Boyer, E. L. (1983) *High school: a report on secondary education in America* (New York, Harper & Row).
- Brookover, W., Beady, C., Flood, P., Schweitzer, J. & Wisenbaker, J. (1979) *School social systems and student achievement: Schools can make a difference* (New York, Praeger).
- Bryk, A. S. (1994) *More good news that school organization matters. Issues in restructuring schools*. Issue Report No. 7 (Madison, University of Wisconsin-Madison, School of Education, Center on Organization and Restructuring of Schools) (ERIC Document Reproduction Service No. ED 376 565).
- Bryk, A. S. & Driscoll, M. E. (1988) *The high school as community: contextual influences and consequences for students and teachers* (Madison, University of Wisconsin-Madison, National Center on Effective Secondary Schools).
- Carter, T. P. & Maestas, L. C. (1982) *Bilingual education that works: effective schools for Spanish speaking children*. Report submitted to the California State Department of Education.
- Cawelti, G. (1997) *Effects of high school restructuring: ten schools at work* (Arlington, VA, Educational Research Service).

- Christensen, G. (1992, April) The changing role of the administrator in an accelerated school, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Clark, D. L., Lotto, L. S. & McCarthy, M. M. (1980) *Why do some urban schools succeed* (Bloomington, IN, Phi Delta Kappa).
- Clark, T. A. & McCarthy, D. P. (1983, April) School improvement in New York City: the evolution of a project, *Educational Researcher*, 12(4), 17–24.
- Clift, R., Johnson, M., Holland, P. & Veal, M. L. (1992) Developing the potential for collaborative school leadership, *American Educational Research Journal*, 29(4), 887–908.
- Cohen, E. G. & Miller, R. H. (1980, October) Coordination and control of instruction in schools, *Pacific Sociological Review*, 23(4), 446–473.
- Conley, D. T. (1991) Lessons from laboratories in school restructuring and site-based decision making, *Oregon School Study Council Bulletin*, 34(7), 1–61.
- Copland, M. A. (2003) Building the capacity to lead: promoting and sustaining change in an inquiry-based model of school reform, in: J. Murphy & A. Datnow (Eds) *Leadership for school reform: lessons from comprehensive school reform designs* (Thousand Oaks, CA, Corwin Press).
- Corcoran, T. B. & Wilson, B. L. (1985) *The secondary school recognition program: a first report on 202 high schools* (Philadelphia, Research for Better Schools).
- Council of Chief State School Officers (CCSSO) (1996) *Interstate school leaders licensure consortium: standards for school leaders* (Washington, DC, Author).
- Crowson, R. L. & Morris, V. C. (1984, April) Administrative control in large-city school systems: An investigation in Chicago, paper presented at the annual meeting of the *American Educational Research Association*, New Orleans.
- Denham, C. & Lieberman, A. (Eds) (1980) *Time to learn* (Washington, DC: National Institute of Education, US Government Printing Office).
- Dwyer, D. C. (1986, Fall) Understanding the principal's contribution to instruction, *Peabody Journal of Education*, 63(1), 3–18.
- Edmonds, R. R. (1979, October) Effective schools for the urban poor, *Educational Leadership*, 37(1), 15–24.
- Edmonds, R. & Frederiksen, J. R. (1978) *Search for effective schools: the identification and analysis of city schools that are instructionally effective for poor children* (Cambridge, MA, Center for Urban Studies, Harvard University).
- Eubanks, E. E. & Levine, D. U. (1983, June) A first look at effective schools projects in New York City and Milwaukee, *Phi Delta Kappan*, 64(10), 697–702.
- Farrar, E. (1987, April) The role of leadership at the school and district level, paper presented at the annual meeting of the *American Educational Research Association*, Washington, DC.
- Fisher, C. & Adler, M. A. (1999, December) *Early reading programs in high-poverty schools: Emerald Elementary beats the odds* (Ann Arbor, University of Michigan, Center for the Improvement of Early Reading Achievement).
- Fisher, C. W. & Berliner, D. C. (Eds.) (1983) *Perspectives on instructional time* (New York, Longman).
- Fullan, M. G. (2003) *The moral imperative of school leadership* (Thousand Oaks, CA, Corwin Press).
- Gilchrist, R. S. (1989) *Effective schools: three case studies of excellence* (Bloomington, IN, National Educational Service).
- Glickman, C. D., Allen, L. & Lunsford, B. (1992, April) Facilitation of internal change: the league of professional schools, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Goldman, P., Dunlap, D. M. & Conley, D. T. (1991, April) Administrative facilitation and site-based school reform projects, paper presented at the annual meeting of the *American Educational Research Association*, Chicago.

- Guzzetti, B. & Martin M. (1986, April) A comparative analysis of elementary and secondary principals' instructional leadership behavior, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Hallinger, P. & Murphy, J. (1985) Assessing the instructional management behaviour of principals, *Elementary School Journal*, 86(2), 217–247.
- Hallinger, P. & Heck, R. (1996) Reassessing the principal's role in school effectiveness: a review of empirical research, 1980–1985, *Educational Administration Quarterly*, 32(1), 5–44.
- Harnisch, D. L. (1987, March/April) Characteristics associated with effective public high schools, *Journal of Educational Research*, 80(4), 233–241.
- Heck, R. H. & Hallinger, P. (1999) Next generation methods in the study of leadership and school improvement, in: J. Murphy & K. S. Louis (Eds) *Handbook of research on educational administration* (2nd edn) (San Francisco, Jossey-Bass).
- High, R. M. & Achilles, C. M. (1986, April) Principal influence in instructionally effective schools, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Hord, S. M. & Huling-Austin, L. (1986, September) Effective curriculum implementation: some promising new insights, *Elementary School Journal*, 87(1), 97–115.
- Knapp, M. S., Copland, M. A. & Talbert, J. F. (2003, February) *Leading for learning: reflective tools for school and district leaders* (Seattle, Center for the Study of Teaching and Policy, University of Washington).
- Kroeze, D. J. (1984) Effective principals as instructional leaders: new directions for research, *Administrator's Notebook*, 30(9), 1–4.
- Lasley, T. J. & Wayson, W. W. (1982, December) Characteristics of schools with good discipline, *Educational Leadership*, 40(3), 28–31.
- Lee, V. E. & Smith, J. B. (1996, February) Collective responsibility for learning and its effects on gains in achievement for early secondary school students, *American Journal of Education*, 104(2), 103–147.
- Lee, V. E., Smith, J. B. & Croninger, R. G. (1995) *Another look at high school restructuring: more evidence that it improves student achievement and more insights into why* (Madison, WI, Center on Organization and Restructuring of Schools).
- Leithwood, K. A. (1992) The move toward transformational leadership, *Educational Leadership*, 49(5), 8–12.
- Leithwood, K. & Jantzi, D. (1990) Transformational leadership: how principals can help reform school cultures, paper presented at the annual meeting of the *Canadian Association for Curriculum Studies*, Victoria, BC.
- Leithwood, K. A. & Montgomery, D. J. (1982, April) Patterns of growth in principal effectiveness, paper presented at the annual meeting of the *American Educational Research Association*, New Orleans.
- Leithwood, K., Jantzi, D. & Dart B. (1991, February) How the school improvement strategies of transformational leaders foster teacher development, paper presented at the annual conference of the *Department of Educational Administration and Centre for Educational Leadership, Ontario Institute for Studies in Education*, Toronto, Ont., Canada.
- Leithwood, K., Louis, K. S., Anderson, S. & Wahlstrom, K. (2004) *How leadership influences student learning* (paper commissioned by the Wallace Foundation) (Minneapolis, University of Minnesota).
- Leithwood, K., Riedlinger, B., Bauer, S. & Jantzi, D. (2003) Leadership program effects on student learning: the case of the Greater New Orleans School Leadership Center, *Journal of School Leadership*, 13(6), 707–738.
- Levine, D. U. (1982, April) Successful approaches for improving academic achievement in inner-city elementary schools, *Phi Delta Kappan*, 63(8), 523–526.
- Levine, D. U. & Stark, J. (1982, December) Instructional and organizational arrangements that improve achievement in inner-city schools, *Educational Leadership*, 40(3), 41–46.

- Lezotte, L., Hathaway, D. V., Miller, S. K., Passalacqua, J. & Brookover, W. B. (1980) *School learning climate and student achievement: a social system approach to increased student learning* (Tallahassee, Site Specific Technical Assistance Center, Florida State University Foundation).
- Little, J. W. (1982, Fall) Norm of collegiality and experimentation: work place conditions of school success, *American Educational Research Journal*, 19(3), 325–340.
- Louis, K. S. & Miles, M. B. (1990) *Improving the urban high school: what works and why* (New York, Teachers College Press).
- Marks, H. M. & Louis, K. S. (1997, Fall) Does teacher empowerment affect the classroom: the implications of teacher empowerment for instructional practice and student achievement performance, *Educational Evaluation and Policy Analysis*, 19(3), 245–275.
- Marzano, R. J., Waters, T. & McNulty, B. A. (2005) *School leadership that works: from research to results* (Alexandria, VA, Association for Supervision and Curriculum Development).
- McCormack-Larkin, M. & Kritek, W. J. (1982, December) Milwaukee's project RISE, *Educational Leadership*, 40(3), 16–21.
- McEvoy, B. (1987, February) Everyday acts: how principals influence development of their staffs, *Educational Leadership*, 44(5), 73–77.
- Miron, L. F. (1996) *The social construction of urban schooling: situating the crisis* (Cresskill, NJ, Hampton).
- Murphy J. (1992) *The landscape of leadership preparation: reframing the education of school administrators* (Newbury, CA, Corwin).
- Murphy, J. (2005a) *Connecting teacher leadership and school improvement* (Thousand Oaks, CA, Corwin Press).
- Murphy, J. (2005b, February) Unpacking the foundations of the ISLLC Standards and addressing concerns in the academic community, *Educational Administration Quarterly*, 41(1), 154–191.
- Murphy, J. & Hallinger, P. (1985, January) Effective high schools: what are the common characteristics, *NAESP Bulletin*, 69(477), 18–22.
- Murphy, J. & Hallinger, P. (1988, February) The characteristics of instructionally effective school districts, *Journal of Educational Research*, 81(3), 176–181.
- Murphy, J., Beck, L., Crawford, M., Hodges, A. & McGaughy, C. L. (2001) *The productive high school: creating personalized academic communities* (Thousand Oaks, CA, Corwin Press).
- Murphy, J., Hallinger, P. & Peterson, K. D. (1986) Administrative control of principals in effective school districts: the supervision and evaluation functions, *Urban Review*, 18(3), 149–175.
- Murphy, J., Weil, M., Hallinger, P. & Mittman, A. (1982) Academic press: translating high expectations into school policies and classroom practices, *Educational Leadership*, 40(3), 22–26.
- Murphy, J., Weil, M., Hallinger, P. & Mitman, A. (1985, Spring) School effectiveness: a conceptual framework, *Educational Forum*, 49(3), 361–374.
- Nauman, C. (1985) Teacher culture in successful programs for marginal students, paper presented at the annual meeting of the *American Educational Research Association*, Chicago.
- New York State, Office of Educational Performance Review (1974, March) *School traits influencing reading achievement: a case study of two inner-city schools* (Albany, NY, Author).
- Newmann, F. M. (1997) How secondary schools contribute to academic success, in: K. Borman & B. Schneider (Eds) *Youth experiences and development: social influences and educational challenges* (Berkeley, CA, McCutchan).
- Ogden, E. H. & Germinario, V. (1995) *The nation's best schools: blueprints for excellence* (Lancaster, PA, Technomic).
- Phi Delta Kappa (1983, March) Inservice education, *Practical Applications of Research*, 5(3), 1–4.
- Pitner, N. J. (1998) The study of administrator effects and effectiveness, in: N. J. Boyan (Ed) *Handbook of Research on Educational Administration* (New York, Longman), 99–122.
- Powell, A. G., Farrar, E. & Cohen, D. K. (1985) *The shopping mall high school: winners and losers in the educational marketplace* (Boston, Houghton Mifflin).

- Prestine, N. A. (1991a, April) Completing the essential schools metaphor: principal as enabler, paper presented at the annual meeting of the *American Educational Research Association*, Chicago.
- Prestine, N. A. (1991b, October) Shared decision making in restructuring essential schools: the role of the principal, paper presented at the annual conference of the *University Council for Educational Administration*, Baltimore.
- Romo, H. D. & Falbo, T. (1996) *Latino high school graduation: defying the odds* (Austin, University of Texas Press).
- Rosenholtz, S. J. (1985, May) Effective schools: interpreting the evidence, *American Journal of Education*, 93(2), 352–389.
- Roueche, J. E. & Baker, G. A., III, with Mullin, P. L. & Boy, N. H. O. (1986) *Profiling excellence in America's schools* (Arlington, VA, American Association of School Administrators).
- Rowe, K. J. (1995) Factors affecting students' progress in reading: key findings from a longitudinal study, *Literacy, Teaching and Learning*, 1(2), 57–110.
- Russell, J. S., Mazzarella, J. A., White, T. & Maurer, S. (1985, June) *Linking the behaviors and activities of secondary school principals to school effectiveness: a focus on effective and ineffective behaviors* (Eugene, Center for Educational Policy and Management, University of Oregon).
- Rutherford, W. L. (1985, September) School principals as effective leaders, *Phi Delta Kappan*, 67(1), 31–34.
- Rutter, M., Maughan, B., Mortimore, P. & Ouston, J. (1979) *Fifteen thousand hours: secondary schools and their effects on children* (Cambridge, MA, Harvard University Press).
- Schneider, B. (1985, July/August) Further evidence of school effects, *Journal Educational Research*, 78(6), 351–356.
- Seifert, E. H. & Beck, J. J. (1984, September/October) Relationships between task time and learning gains in secondary schools, *Journal of Educational Research*, 78(1), 5–10.
- Sergiovanni, T. J. (1992) *Moral leadership: getting to the heart of school improvement* (San Francisco, Jossey-Bass).
- Sizer, T. R. (1984) *Horace's compromise: the dilemma of the American high school* (Boston, Houghton Mifflin).
- Smylie, M. A. (1996) Research on teacher leadership: assessing the state of the art, in: B. J. Biddle, T. I. Good & I. F. Goodson (Eds) *International handbook of teachers and teaching* (Dordrecht and Boston, Kluwer).
- Smylie, M. A. & Brownlee-Conyers, J. (1992) Teacher leaders and their principals: exploring the development of new working relationships, *Educational Administration Quarterly*, 28(2), 150–184.
- Squires, D. A. (1980, October) *Characteristics of effective schools: the importance of school processes* (Philadelphia: Research for Better Schools) (ERIC Document Reproduction Service No. ED 197 486).
- Stallings, J. A. & Mohlman, G. G. (1981, September) *School policy, leadership style, teacher change, and student behavior in eight schools: Final report* (Mountain View, CA, Stallings Teaching and Learning Institute).
- Taylor, B. M., Pearson, P. D., Clark, K. F. & Walpole, S. (1999, September) *Beating the odds in teaching all children to read* (Ann Arbor, University of Michigan, Center for the Improvement of Early Reading Achievement).
- Taylor, B. O. (1986, April) Metasensemaking: how the effective elementary principal accomplishes school improvement, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Teddlie, C. & Stringfield, S. (1985a, April) Louisiana school effectiveness study: phase two policy recommendations, paper presented at the annual meeting of the *American Educational Research Association*, Chicago.

- Teddle, C. & Stringfield, S. (1985b, April) Six different kinds of effective and ineffective schools, paper presented at the annual meeting of the *American Educational Research Association*, Chicago.
- Vandenbergh, R. (1992) The changing role of principals in primary and secondary schools in Belgium, *Journal of Educational Administration*, 30(3), 20–34.
- Venezky, R. & Winfield, L. (1979) *Schools that succeed beyond expectations in teaching reading* (Technical Report No. 1) (Newark, University of Delaware).
- Wallace Foundation (2004) *Leadership effectiveness knowledge foundation committee report* (draft). Unpublished document (New York, Author).
- Waters, T. & Grubbs, S. (n.d.) *The leadership we need: using research to strengthen standards for administration preparation and licensure programs* (draft) (Denver, McREL).
- Weber, G. (1971) *Inner city children can be taught to read: four successful schools* (Occasional Paper No. 18) (Washington, DC, Council for Basic Education).
- Wellisch, J. B., MacQueen, A. H., Carriere, R. A. & Duck, G. A. (1978, July) School management and organization in successful schools, *Sociology of Education*, 51, 211–226.
- Wilson, B. L. & Corcoran, T. B. (1988) *Successful secondary schools: visions of excellence in American public education* (New York, Falmer Press).
- Wilson, B. L. & Rossman, G. B. (1986, June) Collaborative links with the community: lessons from exemplary secondary schools, *Phi Delta Kappan*, 67(10), 708–711.
- Wimpelberg, R. K. (1986, April) Bureaucratic and cultural images in the management of more and less effective schools, paper presented at the annual meeting of the *American Educational Research Association*, San Francisco.
- Wynne, E. (1980) *Looking at schools: good, bad and indifferent* (Lexington, MA, D. C. Heath).