From Training Great Principals to Preparing Principals for Practice*

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Abstract

We offer the collaborative inquiry-action cycle as a framework for principals' practice and principal preparation. The cycle is a pragmatic tool that does not prescribe behaviors or contexts. Moreover, the cycle does not represent another programmatic solution or model for leadership. Rather the power of the cycle is that it drives collaboration, inquiry, and action as anchors for improving teaching and learning. The cycle uses these anchors to advance the knowledge, skills, and dispositions of principal candidates so they become inquiry-minded and action-oriented. Finally, this framework can be used by pre-service principal preparation educators to fulfill three important functions: (1) provide a realistic educational experience for future school principals, (2) move away from a strict adherence to standards (what is taught) toward advances in the pedagogical experiences for students (how curriculum is taught), and (3) to meet external accreditation mandates.

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1 Introduction

The existence of the *Great Principal* is little more than a myth (Rallis & Highsmith, 1986). The myth paints a portrait of a principal as operations manager, curricular content expert, pedagogical expert, evaluator,

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friend, and on and on. To thoughtfully, efficiently, and effectively enact these roles together would require a truly great or superhuman principal. This caricature of the school "principal" has become institutionalized through professional norms (e.g., credentials) and the public's definition of a school leader (e.g., everyone has a reference point of their own school principal). As a result, attracting and retaining highly qualified school leaders is problematic. Increased pressures and demands that make the job nearly untenable have fueled the "revolving door" of the principalship. Yet leadership preparation has largely remained the same. While many principal preparations have transitioned from management training toward instructional leadership, what that looks like remains fuzzy. In fact, programs have failed to define the procedural "hows" while the literature (both empirical and conceptual) is wrought with the "whats" and the "whys" of program revisioning. We contend that today's school leaders need a different kind of preparation. They need to become inquiry-minded, action-oriented leaders, and we propose a model for which preparation programs can prepare such leaders.

2 In Search of One Good Principal

The modern demands of the school principal include:

> ... increased job stress, school funding, balancing school management with instructional leadership, new curriculum standards, educating an increasingly diverse student population, shouldering responsibilities that once belonged at home or in the community, and then facing possible termination if their schools don't show instant results (Quinn, 2002, p. 1).

As Fink and Brayman (2006) speculate, principals are frustrated, having been stripped of autonomy, which has produced "an increasingly rapid turnover of school leaders and an insufficient pool of capable, qualified, and prepared replacements" (p. 62-63). Moreover, fewer and fewer prepared persons seek the job. According to the National Association of Secondary School Principals, half of the nation's school districts report a scarcity of administrator applicants (Quinn, 2002). The dearth of principals is particularly endemic in districts perceived to have challenging working conditions, large populations of impoverished or minority students, low per pupil expenditures, and urban settings (Forsyth & Smith, 2002; Mitgang, 2003; Pounder, Galvin, & Sheppard, 2003; Pounder, Reitzug, & Young, 2002). Indeed, evidence suggests that many high poverty districts field six or fewer applicants per principal vacancy (Roza, Celio, Harvey, & Wishon, 2003).

The problem may be the result of the perceived impossibility of meeting the superhuman expectations of the poorly conceived image of the Great Principal as the Lone Ranger and hero. In reality, the principal hardly acts alone. Instead, the principal's actions fit into the larger school and education environment. Understanding where she or he sits in the education community and how her or his actions relate to others may take some of the pressure off fulfilling the Great Principal image. Neither full glory nor blame should fall on his and her shoulders alone. Instead, effective principals are collaborators. Perhaps we have been looking for the Great Principal archetype and ignoring great practices. Effective school leadership may reside not in the preparation of Great Principals, but rather in the transfer of that which produces great practices.

3 In Search of Great Practices

The skills, knowledge, and dispositions needed by the school principal to improve instruction have been extensively explored (Elmore, 2000, 2002, 2003; Hallinger & Heck, 1996; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2005; Marzano, Waters, & McNulty, 2005). Specifically, different types of leadership have an impact on student achievement outcomes (see Leithwood & Mascall, 2008; Marks & Printy, 2003; Robinson, Lloyd, & Rowe, 2008). A meta-analysis of empirical works conducted by the Mid-Continent Research for Education and Learning (McREL) cited the potency of specific behaviors for school leaders that promote "second order" or systemic change including: flexibility, monitors/evaluates, change agent, knowledge of curriculum, instruction, and assessment, intellectual stimulation, ideals/beliefs, and optimizer (Marzano, Waters, & McNulty, 2005).

Such behaviors have been explored in detailed accounts of principals in action. Decades ago, Lightfoot (1983) offered portraits of principals who do not go it alone. In one school, the principal can "track down

resources and broaden horizons" (p. 42) as he builds bridges by networking with community groups and leaders to establish programs that will link students with the working world. Another of Lightfoot's principals fosters participation and collaboration. She paints him "down in the trenches inspiring, cajoling, and encouraging people to 'do their best and give their most' " (p. 68). He also serves as a buffer, protecting his faculty members so that they have the freedom to do their best. In another high school, Lightfoot (1983) illustrates how a town meeting format changes patterns of power and decision-making away from the principal to the entire school community. Other examples reinforce that an effective principal does not work alone. Louis and Miles (1990) talk about a close, cohesive internal network when describing the relationships among staff in those high schools that successfully implement change. In *Horace's* School (Sizer, 1992), teachers themselves lead the press for changes. Goodlad (1984) emphasizes the need for a skilled principal who can secure a working consensus in the search for solutions.

More recently, effective principals have been highlighted by their work leading communities of practice (see Militello, Schweid, & Carey, 2008; Printy, 2008; Supovitz & Christman, 2003), taking charge of initiatives centered on the core of teaching and learning (see Elmore & Burney, 1999; Hightower, 2002), investigating policies such as student retention (see Bryk, 2003), and using data to develop new support mechanisms and to implement new teaching and learning strategies (see Coburn & Talbert, 2006; Militello, Sireci, & Schweid, 2008; Supovitz & Christman, 2003). While such examples provide insights into the practice of meaningful and effective leadership, one is left with an important question: How do preparation programs prepare school leaders to *practice* great practices?

Building the capacity of the teachers in a school—the most direct in-school link to student achievement—should be the laser-like focus of a school leader. The myth of the great principal is due, in part, to the misconception that the principal's actions alone can be manifested in links to student improvements in the classroom. A more modern vision of leadership moves the target from the principals' actions to the work of the collective. Specifically, when the goal of student achievement is viewed through the lens of a collective effort with the prerequisite collective knowledge, skills, and dispositions, then the focus moves away from Great Principal to the development of the school's capacity. Newmann, King, and Young (2000) best summarize the development of a school capacity's into four core components: (1) the development of knowledge, skills, and dispositions of individuals; (2) the existence of a functional problem solving professional learning community; (3) school-wide program coherence, and (4) availability and accessibility of technical resources to support teacher and student work. A meta-analysis of school leadership literature conducted by the Stanford Educational Leadership Institute found that effective principals understand how to support teachers and build capacity for teachers to promote student learning for all students (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Moreover, leadership has been shown to impact the creation and sustainability of professional learning communities (see Printy, 2008; Wahlstrom & Seashore Louis, 2008). In short, the principal can develop school capacity. And, school capacity leads to improved student achievement (see Day, Harris, Hadfield, Tolley, & Beresford, 2000; Leithwood, Jantzi, & Steinbeck, 1999; Sebring & Bryk, 2000)

Such examples provide insights into how high functioning school leaders work. Additionally, the literature provides a glimpse into the impact of the practices of school leaders as builders of capacity. However many of today's educators, faced with acute external pressures, lack the tools necessary to enact the components that build school capacity. Rather than simply asking school principals to lead efforts such as data-based decision-making, instructional leadership, etc. the journey to debunk the myth of the great principal needs a pragmatic, fluid framework that engages school improvement efforts. Principal preparation programs are uniquely positioned and qualified to help future leaders acquire the knowledge, practice the skills, and elicit the behavior of great practices of school leaders to build capacity.

4 From a Saber-Tooth Curriculum to Building Capacity

In 1939, J.A. Peddiwell (a pseudonym used by Harold Benjamin, a preeminent teacher educator) provides a tongue and cheek critique of teacher education preparation programs. Peddiwell delivers a lesson on what he calls the Saber-tooth curriculum. Peddiwell sets his lesson in Paleolithic time describing education that continued to teach scaring tigers away with fire, in spite of the disappearance of tiger and the emergence of

a new predator, the bear, that was not afraid of fire. The curriculum failed to recognize that the world had changed. That is, the content and the pedagogy of the curriculum remained the same despite the changes in the environment. Similarly, today principal programs continue to use outdated modes of preparation.

The once logical model of principal preparation created a unique culture, language, rites of passage, and practices. Over time and with help from professional organizations (e.g., National Association of Secondary School Principals) and laws (e.g., credential requirements) these normative practices became institutionalized (see DiMaggio & Powell, 1991). It has been the institutionalism of the principalship that has led the form and function of our preparation programs. Indeed the preparation programs may have contributed to maintaining the image of the now defunct species the Great Principal. We submit that preparation programs must make a fundamental shift away from the traditional of the charismatic leader to the collective capacity. Principals do not have to be the sole superhero, although they may in fact develop and lead a legion of superheroes. They do, however, need a framework or process to build teams, access their energy, and support action for improvement. We propose such a framework in the collaborative inquiry-action cycle, which also serves as the pedagogical tool for a preparation program. In the words of Peddiwell's antagonist: "We must teach them *how* to think, *not what* to think" (Peddiwell, 1939, p. 90, italics in the original).

5 Principals' Practice: Collaboration, Inquiry, and Action

Principals who use a collaborative inquiry-action cycle demonstrate the antithesis of school leaders who grab for programs, layering on prescribed solutions nearly randomly with little or no evaluation. Inquiry guided principals' act, but they do not rush to implement disjointed and ambiguous programs that may have worked elsewhere. Instead, they turn the spotlight on inquiry into the practices in their own schools. They recognize that schools lie within multiple and varying contexts, so, as the school leader, they bring together stakeholders from the relevant contexts to engage in the cyclical inquiry process. The process leads to choices that respond to the school and its community's unique situation and needs. As a result, the school community becomes genuinely accountable for the school's work. Meeting local, state, and national goals of improved student learning begins with local inquiry and action.

We define inquiry as a planned, purposeful, and systematic process for collecting information, decision-making, and taking action as a means of contributing to improvement of policy, programming, and practice in order to increase the positive outcomes of schooling for all within the school and community (see Weiss, 1998). Inquiry is a natural human process. The cycle formalizes and systematizes this natural process for schools. Schools have relationships, inquiry, and action. However, too often the parts of this triumvirate work in isolation. To bring these disparate elements together we offer the collaborative inquiry-action cycle (Militello, Rallis, & Goldring, 2009). The figure below provides a visual representation of the collaborative inquiry-action cycle that is explored next.

Figure 1: The Collaborative Inquiry-Action Cycle

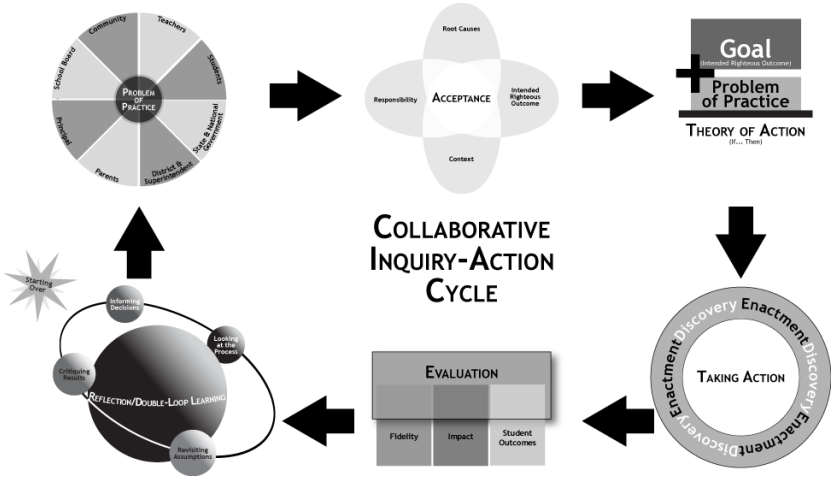

Figure 1

5.1 Problem of Practice

Every school is confronted with what can be defined as problems: some that affect many; ones that touch only a few; ones that appear trivial; some that relate to processes and structures; and others important to outcomes. The cycle however narrows the range of possible problems to focus on issues of student learning. Without such focus, schools can be pulled in diffuse directions and accomplish little. Organizing around student learning allows the school to identify and prioritize those questions that serve the core of every school's mission: instruction for learning. Circling around problem related to the core engages the entire community, allowing all to take responsibility for their choices and move toward acceptance. In the problem of practice portion of the figure above we specify eight potential problem identifiers or sources: parents, teachers, community, school committee, superintendent, state and national governments, and principal.

5.2 Acceptance

The purpose of the dialogue related to this phase of the inquiry-action cycle is to own the problem. That is, participants accept responsibility to take actions that lead to improvements in practice and to reflecting on that action. Accepting a problem of practice entails dialoguing about perceived root causes, contextual considerations, roles and responsibilities of various actors in the school community, as well as intended equitable outcomes. Exploring root causes requires that dialogue goes deeper than superficial or obvious explanations. The dialogue also explores intended and fair outcomes within the local context because each school community operates with a unique set of circumstances and needs. Recognizing the root causes and moral implications of the problem and its potential outcomes as they play out within the local context leads to accepting responsibility for the problem. This dialogue also provides direction for proposed actions.

5.3 Theory of Action

The theory of action states both the desired outcome and the proposed actions aimed at achieving the stated outcomes. Put simply, it states what the community of practice will do to do to get where it wants to go. A theory of action is specific and focused; it presents both the means and the end. The desired outcome or the

ultimate goal is agreed upon prior to the specific means to achieve these ends. The simple causal statement forces dialogue around *leverage points*, that is, key components of the system around which people agree to work to realize large-scale systemic improvement. Key leverage points include: resources; knowledge and skills and expertise; commitment to accountability; capacity-building and professional development; and structure. Leverage points are places to direct action. A theory of action is the right place to start the dialogue about solutions. Rather than confining the community of practice to what they already know or what has been done in the past, a theory of action can be liberating, allowing for multiple interpretations and creative solutions. At the same time, a theory of action provides a concrete roadmap for taking action.

5.4 Taking Action

The next step is to move from theory of action to practice – to action! At this stage of inquiry, teachers interweave their beliefs with behaviors that, in turn, alter their beliefs. Theory-of-action becomes theory-in-use as teachers take actions they believe will lead to the intended outcomes. Then as teachers observe responses to their actions, they discover alternatives and modify actions. Taking action is an on-going interplay of discovery and enactment—a constant search for and application of long and short, known and unknown solutions (see Daft & Weick, 1984; March, 1999).

5.5 Evaluation

Evaluation is the "systematic assessment of the operation and/or outcomes of a program, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of that program or service" (Weiss, 1998, p.4). The cycle fosters evaluation that is intentional and focused on utilization (see Patton, 1990). It asks what evidence can be found to answer questions about fidelity, impact (affect), and student outcomes (effect). Evaluation is holistic, continuous, and transparent. As a result, evaluation becomes a tool of organizational learning and change.

5.6 Reflection/Double-Loop Learning

The process does not end with an evaluative judgment. Instead, any evaluation leads to further actions. All the actors (principal, teachers, participating parents and community members) recognize that any theory of action reflects only their best guess (albeit an informed guess) about cause and effect. On-going reflection is crucial to improvement: Is the evidence of the action's impact and effect acceptable, relevant, and informative? Are we satisfied with the results? If yes, what do we want to strengthen? If not, what do we want to change? Why?

Thus, reflection is more than just thinking about something: it requires experimentation, observations, and critique. The learning lies in the interaction of concrete experience, critique of that experience, and revised actions. At its best, reflection loops back to revisit the original definition of the problem of practice, questioning its validity as a frame for action. This meta-reflection can lead to thinking in new ways. Double-loop learning (see Argyris & Schon, 1974) occurs when the community of practice reconceptualizes the problem – altering the underlying assumptions and values that drove the original theory of action and, therefore, generating new approaches to solving the problem. Only when people engage in such a process can they understand the importance of knowing what to add *and* what to get rid of. The process starts over, but participants are not doing the same thing. They have learned, altered their assumptions, and changed behaviors. The end of the cycle merely marks the beginning. That is to say, new problems of practice are constantly identified, defined, accepted, and the cycle goes on-and-on.

6 Putting ther Cycle into Preparation Programs

How do our preparation programs prepare real, not mythical principals who can deal with the complex and ever changing day-to-day challenges of improving teaching and learning? Our collaborative inquiry-action cycle offers a way of thinking and doing that is flexible while holding the focus on the outcomes of

student achievement steady. In the preparation of school principals we are constantly asked to reconstruct or revision knowledge, skills, and dispositions for future school leaders. The inquiry-action cycle provides principal preparation a framework with tools for knowledge attainment as well as practical experience. The cycle allows the focus of preparation to include more than just the school principal and move toward a more collective body of school educators.

Today, while principals are pressed to make immediate student achievement outcome advances, they would be well served by including others in their efforts, that is, by collaborating. True collaboration is rooted in relationships, inquiry, and in action. Allowing for collaboration with inquiry and action will solicit the sharing of ideas and practices, what Schon (1983) has called exchanges *in* action, not exchanges *of* action. If we want great practices in our schools, we must teach our future leaders the importance of relationships, collaboration, inquiry, and action. The content and pedagogical experiences of preparation programs must match the responsibilities and challenges of the jobs they are about to take. Preparation programs that use a collaborative-inquiry cycle can help future leaders break through and begin "*Learning what they live and living what they learn*!" (Peddiwell, 1939, p. 73, italics in the original).

In each step of the cycle preparation programs can check for the acquisition of knowledge, practice of skills, and the development of dispositions. Additionally, the existing broad base of conceptual and empirical literature further elucidates each step of the cycle. As a result, the cycle should drive not only classroom experience, but field experiences as well. The cycle becomes both the craftsmanship (what to do) and the artisanship (how to do it) for school leaders. The cycle can be used to map a program curriculum, not by classes, but by learning experiences embedded in the collaborative inquiry-action cycle. The table below highlights how activities or artifacts in the cycle can be mapped onto the existing practices (e.g., current projects and classes) and accreditation (e.g., state standards for pre-service principals and certification agencies such as NCATE). As a result, what is taught, how it is taught, and the level of learning (knowledge, skills, and dispositions) can each be addressed simultaneously. Completing the table illustrates how programs can use the collaborative inquiry-action cycle to meet the institutional demands associated with accreditation. This exercise further targets the development of skills that will be required in principals' jobs.

Collaborative Inquiry-Action Cycle Mapping

Collaborative Inquiry-Action Cycle	Learning Experiences	Knowledge	Skills	Dispositions	Accreditation
Problem of Practice					
Acceptance					
Theory of Action					
Taking Action					
Evaluation					
Reflection					

Table 1

Such programs ensure the institutions can deliver strong academic and field-based experiences while meeting the realistic needs of future school leaders. At the same time these programs can meet accreditation standards. In summary, a curriculum based on the collaborative inquiry-action cycle can cope with the disappearance of the Saber-tooth Tiger and the arrival of the bear—along with the unknown forces that we know will come.

7 References

Argyris, C., & Schon, D. (1974). Theory in practice: Increasing professional effectiveness. San Francisco: Jossey-Bass.

Bryk, A. (2003). No Child Left Behind Chicago-style. In P. E. Peterson & M. West (Eds.), No Child Left Behind? The politics and practice of school accountability (pp. 242-262): Brookings Institution Press. Coburn, C., & Talbert, J. (2006). Conceptions of evidence use in school districts: Mapping the terrain. American Journal of Education, 112(4), 469-495.

Coburn, C., & Talbert, J. (2006). Conceptions of evidence use in school districts: Mapping the terrain. American Journal of Education, 112(4), 469-495.

Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretive systems. The Academy of Management Review, 9(2), 284-295.

Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). School leadership study: Developing successful principals. Stanford, CA: Stanford Educational Leadership Institute.

Day, C., Harris, A., Hadfield, M., Tolley, H., & Beresford, J. (2000). Leading schools in times of change. Buckingham: Open University Press.

DiMaggio, P. J., & Powell, W. W. (1991). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. In W. W. Powell & P. J. DiMaggio (Eds.), The new institutionalism in organizational analysis (pp. 63-82). Chicago, IL: University of Chicago Press.

Elmore, R. (2000). Building a new structure for school leadership. Washington, D.C.: Albert Shanker Institute.

Elmore, R. (2002). Bridging the gap between standards and achievement: The imperative for professional development in education. Washington, DC: Albert Shanker Institute.

Elmore, R. (2003). Accountability and capacity. In M. Carnoy, R. Elmore & L. S. Siskin (Eds.), The new accountability: High schools and high-stakes testing (pp. 195-209). New York, NY: RoutledgeFalmer.

Elmore, R., & Burney, D. (1999). Investing in teacher learning: Staff development and instructional improvement. In L. Darling-Hammond & G. Sykes (Eds.), Teaching as the learning profession (pp. 263-291). San Francisco: Jossey-Bass.

Fink, D., & Brayman, C. (2006). School leadership succession and the challenges of change. Educational Administration Quarterly, 42(1), 62-89.

Forsyth, P. B., & Smith, T. O. (2002). Patterns of principal retention: What the Missouri case tells us. Paper presented at the American Educational Research Association, New Orleans, LA.

Goodlad, J. (1984). A place called school: Prospects for the future. New York: McGraw-Hill.

Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. Education Administration Quarterly, 32(1), 5-44.

Hightower, A. (2002). San Diego's big boom: Systemic instructional change in the central office and schools. In A. Hightower, M. S. Knapp, J. A. Marsh & M. W. McLaughlin (Eds.), School districts and instructional renewal (pp. 76-93). New York, NY: Teachers College Press.

Leithwood, K., Jantzi, D., & Steinbeck, R. (1999). Changing leadership for changing times. Buckingham: Open University Press.

Leithwood, K., & Mascall, B. (2008). Collective leadership effects on student achievement. Educational Administration Quarterly, 44(4), 529-561.

Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2005). How leadership influences student learning. New York: The Wallace Foundation.

Lightfoot, S. L. (1983). The good high school. New York: Basic.

Louis, K. B., & Miles, M. B. (1990). Improving the urban high school: What works and why. New York: Teachers College Press.

March, J. G. (1999). Exploration and exploitation in organizational learning. In J. G. March (Ed.), The pursuit of organizational intelligence (pp. 114-136). Malden, MA: Blackwell.

Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformations and instructional leadership. Educational Administration Quarterly, 39(3), 370-397.

Marzano, R. J., Waters, T., & McNulty, B. (2005). School leadership that works: From research to results. Alexandria, VA: Association for Supervision and Curriculum Development.

Militello, M., Rallis, S. F., & Goldring, E. B. (2009). Leading with inquiry and action: How principals improve teaching and learning. Thousand Oaks, CA: Corwin Press.

Militello, M., Schweid, J., & Carey, J. C. (2008). Si se puedes! How educators engage in open, collaborative systems of practice to affect college placement rates of low-income students. Paper presented at the American Educational Research Association, New York City, NY.

Militello, M., Sireci, S., & Schweid, J. (2008, April). Intent, purpose, and fit: An examination of formative assessment systems in school districts. Paper presented at the American Educational Research Association, New York City, NY.

Mitgang, L. D. (2003). Beyond the pipeline: Getting the principals we need, where they are needed most. New York: The Wallace Foundation.

Newmann, F., King, B., & Young, P. (2000). Professional development that addresses school capacity: Lessons from urban elementary schools. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.

Peddiwell, J. A. (1939). The Saber-Tooth Curriculum. New York: McGraw-Hill.

Pounder, D., Galvin, P., & Sheppard, P. (2003). An analysis of the United States educational administration shortage. Australian Journal of Education, 47(2), 133-145.

Pounder, D., Reitzug, U., & Young, M. (2002). Preparing school leaders for school improvement, social justice, and community. In J. Murphy (Ed.), The educational leadership challenge: Redefining leadership for the 21st century (pp. 261-288). Chicago: University of Chicago Press.

Printy, S. M. (2008). Leadership for teacher learning: A community of practice perspective Educational Administration Quarterly, 44(2), 187-226.

Quinn, T. (2002). Succession planning: Start today. Retrieved February 12, 2007, from http://www.nassp.org

Rallis, S., & Highsmith, M. (1986). The myth of the "Great Principal": Questions of school management and instructional leadership. Phi Delta Kappan, 68(4), 300-304.

Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the different effects of leadership types. Educational Administration Quarterly, 44(5), 635-674.

Roza, M., Celio, M., Harvey, J., & Wishon, S. (2003). A matter of definition: Is there truly a shortage of school principals? Washington, DC: Center on Reinventing Public Education, Daniel J. Evans School of Public Affairs.

Schon, D. (1983). The reflective practitioner. New York: Basic Books.

Sebring, P., & Bryk, A. (2000). School leadership and the bottom line in Chicago. Phi Delta Kappan, 81(6), 440-443.

Sizer, T. (1992). Horaces school: Redesigning the American high school. New York: Houghton Mifflin.

Supovitz, J. A., & Christman, J. B. (2003). Developing communities of instructional practice: Lessons from Cincinnati and Philadelphia (No. RB-39). Philadelphia, PA: Consortium for Policy Research in Education (CPRE).

Wahlstrom, K., & Seashore Louis, K. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shard responsibility. Educational Administration Quarterly, 44(4), 458-495.

Weiss, C. (1998). Evaluation (2nd ed.). Upper Saddle River, NJ: Prentice Hall.