

Foregrounding Fieldwork in Leadership Preparation: The Transformative Capacity of Authentic Inquiry

Educational Administration Quarterly
47(1) 217–257

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DOI: 10.1177/0011000010378614
<http://eaq.sagepub.com>



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Abstract

This study follows leadership candidates through the first phase of a comprehensive effort to reform master's-level principal preparation at a large, urban California university. The reforms placed an 18-month field experience at the center of candidates' preparation. Researchers sought to capture the changes over time in candidates' beliefs about school leadership, commitment to the work of school leadership, knowledge of leadership practices that support improved teaching and learning, and capacity to apply those practices. The results reveal marked changes in the majority of candidates' understandings of school leadership. They came to see the work as complex, with all aspects interrelated. They developed deeper recognition of the leader's role in fostering trust and relationships, encouraging collaboration, and building leadership capacity within schools. They conceptualized data

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as powerful evidence to stimulate urgency for change, and they articulated greater confidence as leaders and change agents. Finally, candidates demonstrated increased understanding of, and ability to enact, specific leadership practices aimed at improving learning results for students in their schools.

Keywords

leadership preparation, fieldwork, inquiry, transformative learning

Solving the current problems of school improvement demands that school leaders have the capacity to initiate, lead, and sustain fundamental change, especially as it promotes quality teaching and high levels of student success (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005; Orr, 2006; Waters & Grubb, 2004). To adequately develop educational leaders with the requisite skills to accomplish this challenging work, many university preparation programs are adopting promising new approaches to such components as candidate selection, course content, instructional strategies, and fieldwork (Orr, 2006). Case- and problem-based teaching strategies are on the rise as means to “ground aspiring leaders in the problems of their field and to expand their problem-framing and problem-solving capabilities” (Orr, 2006, pp. 495-496). And, more frequently, field experiences and internships provide preservice leaders the opportunity “to take on the challenges of trying to make a difference in schools” while under the close supervision of a skilled mentor (Daresh, 2001, p. xii).

Although these recent innovations move preparation programs closer to developing school leaders who can effectively make decisions and solve problems, the simulated situations characteristic of problem-based learning and the disparate administrative experiences that typically comprise fieldwork may fall short of providing students the opportunity to wrestle with the same urgency, sense of responsibility, and discomfort experienced by principals in today’s highly charged reform environment. As candidates do the real work of improving learning results for students, they learn about and engage naturally in all aspects of school leadership, seeing them as interrelated rather than discrete actions performed out of context. Furthermore, these integrated field-based learning experiences provide aspiring leaders “initial socialization into a new [leadership-focused] community of practice” (Browne-Ferrigno, 2003, p. 495).

In this study, we followed master’s-level school leadership candidates as they participated in the first phase of a comprehensive effort to reform principal preparation at one large, urban California university. The reforms were

based on an overall philosophy of inquiry-based learning, where candidates engage actively in authentic, integrated leadership tasks and reflect individually and collectively on the outcomes of their experiences. This phase of reforms sought to design an 18-month field experience that would constitute the centerpiece for preparation. Here, leadership candidates were purposefully placed in positions of uncertainty about how to improve learning outcomes for specific populations of students. In support of the field experience, concurrent coursework offered candidates opportunities to learn the various research-based leadership and management practices necessary to performing their in-the-field inquiry. At the time of the study, the program included three closed cohorts, with one cohort participating in this first phase of program reform. Research participants were chosen from the cohort that experienced the new field-based learning design. Given that the aim of such active learning is “to challenge students’ assumptions about the role and capacity of educational leadership and to enable them to incorporate new knowledge, skills, and capacities into their working repertoire” (Orr, 2006, p. 495), we were interested to know how and to what degree candidates’ immersion in practical situations of inquiry changed their perceptions of school-leader responsibilities and fostered their capacity to lead, particularly within the context of highly challenged urban schools.

Beginning with a review of educational leadership preparation reform across two decades, we then summarize the empirical research on recent innovation within leadership preparation and consider the effects of these innovations on program graduates. Underscoring the value of these experiences in building candidates’ understanding of and confidence to undertake the work of leading learning within schools, we examine field-based learning opportunities as a means to develop requisite skills and dispositions. We also consider theoretical and empirical studies of principal socialization and transformative learning, as generated through active inquiry and reflection. Finally, we draw from the experiences of one preparation program, scrutinizing its efforts to redesign coursework and fieldwork in ways that will better prepare aspiring leaders for this challenging work.

Two Decades of Educational Leadership Preparation Reform

Contemporary efforts to reform educational leadership preparation programs span more than two decades. Beginning with the 1987 National Commission of Excellence in Educational Administration papers and the 1989 National Policy Board for Educational Administration report, educational leadership

professional organizations, the larger policy community, and scholars of the field acknowledged the need to reform educational leadership as a profession, spurring close scrutiny of more traditional approaches to leadership preparation (Griffiths, Stout, & Forsyth, 1988; Murphy, 1992). A number of subsequent publications, including the *Handbook of Research on Educational Administration* (Murphy & Louis, 1999), *The Educational Leadership Challenge: Redefining Leadership for the 21st Century* (Murphy, 2001), and a special-themed issue of *Educational Administration Quarterly* (Young & Peterson, 2002) continued to probe “the relevancy of university-based preparation programs to the complicated, tumultuous, and practical conditions of educational leadership” (Lindle, 2002, p. 129). As scholars have chronicled this critical examination of leadership practice and preparation, they have also plotted new directions, addressing the very fundamentals of preparation program design, including student selection, content, pedagogy, field-based learning, and assessment (American Association of Colleges for Teacher Education [AACTE], 2001; Clark & Clark, 1996; Elmore, 2000; Forsyth, 1999; Grogan & Andrews, 2002; McCarthy, 1999; Milstein & Kruger, 1997; Murphy, 1999, 2005, 2006; Murphy & Forsyth, 1999; Murphy, J. & Louis, K.S, 1999; Murphy & Orr, 2009; Murphy & Vriesenga, 2004; Young, Peterson, & Short, 2002).

Scholars from within the field of leadership preparation have acknowledged the need to move beyond more traditional management-focused content and lecture-centered pedagogy to provide authentic course and field-based learning experiences. Research and scholarship have increasingly reflected a collective sense of urgency to address the fundamentals of effective teaching and learning, the nuances of assessment (especially in response to national, state, and local accountability requirements), the explicit logistics for supervising and evaluating instruction, the mechanisms for aligning professional development to identified needs (as well as the strategies for assessing its potency), the complicated dynamics of organizational redesign, and the cultural competencies necessary for fostering social justice and building cohesive communities of diverse participants and stakeholders (AACTE, 2001; Brown & Irby, 2006; Brown, 2004; Cambron-McCabe & McCarthy, 2005; Copland, 1999; Hoff, Yoder, & Hoff, 2006; Lyman & Villani, 2002; McCarthy, 1999; McKenzie et al., 2008; Murphy, 1992, 2002; Pounder, Reitzug, & Young, 2002).

Even as the field has engaged in rigorous self-study and preparation, programs across the United States have instituted various reforms and innovations, critics have continued to target preparation practices they claim have “done little to cultivate new skills in school leaders” (Hess & Kelly,

2005, p. 177) and redesign efforts they maintain are “focused on the wrong things” (Frye, O’Neill, & Bottoms, 2006, p. 10). This continued critique begs rigorous investigation of effective preparation program practices.

Empirical Investigations of Leadership Preparation

Empirical study of specific leadership preparation program policies, practices, and outcomes has been slow to develop (Browne-Ferrigno, 2003; Murphy & Vriesenga, 2004; Orr, 2007; Orr & Orphanos, 2010). In their extensive analysis of more than 2,000 articles within leading scholarly journals in the field, Murphy and Vriesenga (2004) found only 3% of the articles reported findings from empirical studies focused on specific preparation program components and outcomes. The University Council of Educational Administration, Learning and Teaching in Educational Leadership Special Interest Group Taskforce to Evaluate Educational Leadership Preparation Program Effectiveness has set an ambitious agenda to address this gap, piloting research in multiple settings and seeking funds to support the work (Orr, 2006; Orr & Pounder, 2006). As well, researchers have sought to identify and describe promising practices across programs engaged in innovation (Jackson & Kelley, 2002; Orr, 2006) and to synthesize the growing body of knowledge related to leadership preparation program reform (Young, Crow, Ogawa, & Murphy, 2009; *please see remainder of this special issue*). Researchers have also followed a number of program innovations funded by national foundations, including the Danforth Foundation Initiative (Cordeiro, Krueger, Parks, Restine, & Wilson, 1993; Leithwood, Jantzi, Coffin, & Wilson, 1996; Milstein, 1992; Murphy, 1995), the Wallace Foundation’s district initiatives, and the Southern Regional Education Board (SREB) curriculum development project (Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen, 2007; Jacobson, O’Neill, Fry, Hill, & Bottoms, 2002; Wallace Foundation, 2008). These empirical studies provide an important foundation for continuing research.

Exemplary leadership preparation programs. More recent investigations into promising leadership preparation practices have identified core elements of effective preparation, including coherent curriculum, cohort structures, school–university collaborations, in-depth field experiences, low faculty–student ratios, and actively engaged full-time, tenure-track faculty (Darling-Hammond et al., 2007; Davis et al., 2005; Fry, Bottoms, & O’Neill, 2005; Jackson & Kelley, 2002; Orr & Barber, 2007).

Darling-Hammond et al. (2007) examined eight exemplary pre- and in-service principal development programs. Data were triangulated across policy case studies in the states represented, interviews with program faculty and administrators, participants and graduates, district personnel and other stakeholders, document analyses, and surveys of program participants and graduates. Program participant responses were further compared to those of a national random sample of principals. Researchers also observed graduates in their jobs as principals, interviewed and surveyed their teachers, and considered data on their schools' practices and results. Authors of the study acknowledged the limitations of the mostly self-report data that were focused on a small sample of "reputationally-exemplary" programs (Orr, 2007, p. 31). However, these data, along with document analyses and postgraduate observations, revealed important evidence of highly effective practices and noteworthy professional growth on the part of program graduates. Darling-Hammond and colleagues observed comprehensive and coherent coursework; instructional approaches that combined problem-based learning, action research, and field-based projects; highly qualified faculty including both university professors and experienced school administrators; student cohort structures combined with formalized mentoring; targeted recruitment and selection; and well-designed, carefully supervised field-based experiences. On average, graduates of these programs left better prepared and more positively inclined toward the principalship than did their national counterparts. Once on the job, they spent more time on instruction-related work and were more likely to report improvements in instructional effectiveness and organizational functions at their schools (Darling-Hammond et al., 2007).

Research by Fry, Bottoms, O'Neill, and Walker (2007), sponsored by the SREB and funded by the Wallace Foundation, focused on 18 university preparation programs involved in or applying to the SREB network at the time of the study and four additional programs reputed to have made significant progress in program redesign. Data were collected across these 22 universities through in-depth interviews with program department heads, probing progress toward core conditions of reform as identified by SREB. These core conditions included the presence of university-school district partnerships, an emphasis on knowledge and skills for improving schools and students' performance, well-planned and supported field experiences, and rigorous candidate and program evaluation strategies. Each core condition was further defined by means of specific quality indicators. For example, within the core condition related to improving student performance, one indicator addressed the presence of instruction and assignments designed to ensure mastery of various competencies for improving student

learning and achievement. Interview methods were triangulated with document analyses of selected course syllabi.

Study findings revealed that 18 of the 22 universities had made some or substantial progress on three of the four conditions, with only one university making some progress on candidate and program evaluation. Within programs that had made significant progress on curriculum and instruction, researchers found strong evidence of new courses that emphasized the principal's role in initiating and directing schoolwide efforts to improve learning results for all students through data-informed inquiry. According to Fry et al. (2005), such courses provided opportunities for candidates to apply research-based school and classroom practices focused on addressing achievement gaps. These programs also engaged candidates directly in identifying and solving real problems contributing to these gaps. Well-designed, carefully supervised field-based experiences provided candidates extended opportunities to actively engage in authentic leadership responsibilities, with school leaders and university faculty members shaping and guiding these experiences through carefully aligned course learning activities and readings. This active, student-centered instruction integrated theory and practice and stimulated ongoing individual and collective inquiry and reflection.

The aforementioned SREB-sponsored research adds important specificity to the knowledge base on contemporary leadership preparation program curriculum and pedagogy, in particular the characteristics of high-quality field-based learning experiences (Fry et al., 2005). In that educational leadership department chairs were the primary research participants in these studies, the research does not explore the effects of reforms on program participants and graduates. Continued empirical study of preparation program outcomes constitutes the most effective means to improving program quality and addressing the challenges to university-based preservice training (Browne-Ferrigno, 2003; Murth & Barnett, 2001; Young et al., 2002).

The effects of field-based learning experiences on leadership candidates' professional growth. Conclusions drawn from research on leadership preparation reflect broad consensus about the importance of field-based learning (Browne-Ferrigno, 2003; Darling-Hammond et al., 2007; Leithwood et al., 1996; Milstein, Bobroff, & Restine, 1991; Milstein & Kruger, 1997; Orr & Barber, 2007). Beyond preliminary leadership preparation, doctoral programs participating in the Carnegie Project on the Education Doctorate have also identified "laboratories of practice" (Perry & Imig, 2008, p. 45) as a key pedagogical approach to developing professional practice programs at the doctoral level. These laboratories of practice are intended to "teach ways of doing" as students engage in work "in situ" alongside

practicing professionals (p. 46). According to the research, these authentic field-based learning experiences build leadership skills and expertise (Daresh & Playko, 1997; Leithwood et al., 1996), develop increased understanding of the principal's role (Crow, 2006; Milstein & Kruger, 1997), and spur initial socialization into leadership positions (Browne-Ferrigno, 2003; Crow, 2006; Crow & Glascock, 1995).

Still, the depth and emphasis of these practical experiences vary widely program to program. In compliance with accreditation requirements, preparation programs typically involve candidates in some combination of field-work tasks, making efforts to ensure these are appropriately aligned with professional and state standards. Too often, fieldwork constitutes little more than a compliance activity for faculty *and* students. In fulfillment of program requirements, candidates complete and chronicle a set of discrete, disconnected administrative tasks or projects, learning little about the complex and interrelated nature of challenges contemporary principals face on the job (Fry et al., 2005).

In their study of Danforth Initiative innovative preparation programs, Leithwood et al. (1996) surveyed site coordinators, program graduates, and teachers or colleagues who worked with the program graduates at the time of the study. Although research results revealed little variation in respondents' ratings of various program components, these differences appeared to have important consequences for leader effectiveness. In particular, effective leadership programs provided authentic field-based learning experiences that engendered real-life problem-solving skills in their graduates (Leithwood et al., 1996).

More recently, Orr and colleagues (Orr, 2007; Orr & Barber, 2007; Orr & Orphanos, 2010) have studied the effects of various exemplary preparation program characteristics and components on program graduates, comparing candidates who graduated from innovative preparation programs to those who completed more conventional programs. In Orr and Barber's (2007) comparison of graduates from two innovative district-university partnership programs and one conventional program, results indicated a positive relationship between the length and quality of the field-based internship and career intentions and advancement of the graduates.

Orr (2007) extended the scope of these innovative versus conventional program comparisons, surveying two broad samples of preparation program graduates (246 usable surveys, 125 principals), including all graduates from the five innovative leadership preparation programs studied by Darling-Hammond et al. (2007) and a national comparison sample of 1,229 principals (661 usable responses). In this study, results confirmed a strong, positive

correlation between high-quality internships and principals' reported learning about how to "lead learning for students and teachers and facilitate organizational learning" (Orr, 2007, p. 23). As well, quality internships had a modest, positive relationship with principals' positive beliefs about the job as well as their perceptions about their engagement in effective leadership practices and progress toward school improvement goals.

According to Browne-Ferrigno (2003), these authentic field-based experiences begin to initiate the necessary transformation that occurs as a teacher prepares to become a principal, "relinquish[ing] the comfort and confidence of a known role—such as being a teacher—and experienc[ing] the discomfort and uncertainty of a new unknown role—being a principal" (p. 470). At the midpoint in her year-long exploratory case study of 18 practitioners participating in one principal preparation cohort program, Browne-Ferrigno asked participants to identify "what else they needed to learn in order to feel competent, confident, and comfortable to lead a school" (p. 487). "Experience" emerged from the data as the most commonly reported need (p. 487). This particular program ended with an intensive internship within which cohort members worked directly on authentic problems of practice and chronicled their experiences in reflective logs. Of the 18 participants, 9 received quasi-administrative positions during their programs or were able to complete their internship earlier on, thus integrating their in-class and in-field learning experiences. These candidates appeared to be the more confident and goal oriented, perhaps in part because of these opportunities to lead and reflect on the outcomes of their leadership. These experiences helped to facilitate the transformation from teacher to principal, as candidates stepped outside their comfort zone to learn new behaviors (Browne-Ferrigno, 2003).

Active Inquiry and Reflection as Vehicles for Leadership Preparation and Principal Socialization

Although by no means new constructs (Dewey, 1910, 1922, 1938), active inquiry and reflection are increasingly posited as important vehicles for preparing and developing educational leaders (Copland, 1999; Creasap, Peters, & Uline, 2005; Osterman, 1991; Osterman, 1993; Rich & Jackson, 2006). According to adult-learning theorists, active engagement with others, combined with self-reflection, lies at the heart of transformative learning (Cranton, 1994; Daloz, 1999; Taylor, 2000). Through critical reflection, adult learners scrutinize experiences, discovering more "inclusive, discriminating,

and integrative understanding” (Mezirow, 1991, p. xvi). As they examine, question, and validate their assumptions, they are able to realize a transformation of sorts. Developing leaders grow as they grapple with recently acquired knowledge and information, “linking textbook learning to authentic practice” (Browne-Ferrigno, 2003, p. 468). Searching for new insight, they begin to develop a clearer view of their own leadership intentions and capacities (Creasap et al., 2005).

Inquiring educational leaders view problems as pockets of information about their schools that, when linked together through questioning and reflection, allow them to project the need for, degree of, and direction of reform. Absent inquiry, each problem stands alone, seemingly unrelated to the next and, perhaps, irrelevant to larger organizational goals (Perez & Uline, 2006). Through inquiry and reflection, leaders make connections across problems, discovering relationships among sources and solutions. These connections yield new understandings about a school’s capacity to function in times of tension or conflict and to recognize and respond to the needs of the school community (Argyris & Schon, 1996; Leithwood & Louis, 1998; Senge, 1990).

When applied to field-based learning experiences, the gradual and collaborative nature of productive inquiry and reflection offers preparing school leaders more than solutions to the problems at hand. It offers knowledge—knowledge of the leadership practices they will use to improve teaching and learning, knowledge of how to apply those practices effectively to engage others in the process, and knowledge of their own sense of efficacy to act in ways that will transform their schools.

These habits of mind are nuanced and, by necessity, interrelated, thus requiring time to develop and refine. Still, the current, highly accountable policy context renders time a rare commodity. Preservice preparation exists to provide leadership candidates this time, prior to entering formal positions of authority. And yet in the absence of opportunities to inquire about, plan, and enact solutions to authentic student learning problems, preservice leadership preparation risks being characterized as a misnomer.

Methods of Inquiry

In this study, leadership candidates were followed through an 18-month master’s-level principal preparation program. The primary purpose of the study was to understand how and to what degree candidates’ immersion in practical situations of inquiry changed their perceptions of school leader responsibilities and fostered their capacity to lead, particularly within the context of highly challenged urban schools. Embedded within this focus were questions about

Table 1. Participant Characteristics

Name ^a	Age	Gender	Ethnicity	School Level Involvement	Teaching Experience (Years)
Alex	32	M	White	Elementary	5
Amanda	31	F	White	Special education	4
Emily	30	F	Black	Secondary	5
Jeff	30	M	White	Secondary	4
Kevin	35	M	Hispanic	District	10
Liz	41	F	Hispanic	Elementary	10
Natalie	31	F	Black	Elementary	7
Teresa	34	F	Hispanic	Secondary	5

a. All names are pseudonyms.

how participants (a) conceptualized the achievement problem they were asked to address; (b) understood, enacted, and engaged others in the process of solving the problem; and (c) felt about their capacity to lead on behalf of resolving the problem. Thus, a qualitative interview study was conducted (Kvale & Brinkmann, 2009; Rubin & Rubin, 1995). Eight participants were selected purposefully from the 17-member cohort to construct a manageable sample that represented the variation of gender, ethnicity, school-level involvement, and teaching experience across the cohort (see Table 1 of participant characteristics).

Like those in the larger group, the majority of our participants were in their 30s and female, with between 4 and 10 years of teaching experience in elementary or secondary schools. In both groups, candidates' leadership experiences were limited primarily to conducting professional development activities, serving as department or grade-level chairs, and/or heading various committees. However, as we aimed to understand candidate experiences from a variety of represented backgrounds and perspectives, our sample purposefully included the cohort's only special education teacher and district resource teacher.

On their selection, participants were invited via email to participate in the study. The email message outlined the purpose of the study, how participants were selected, and details about the interview process. It also clearly stated that candidates were under no obligation to participate and that their grades in the program as well as their relationship with the university would not be influenced by their participation, or by what they said or did not say during the study. Prior to the beginning of data collection, informed consent,

consistent with the university's Institutional Review Board, was obtained from each participant.

Data Collection

Participants engaged in three rounds of in-depth, face-to-face, individual interviews. Seven of the eight participants were interviewed during all three rounds. We were unable to contact the eighth participant within the time frame set for the second round of interviews. Thus, although this participant was not interviewed during the second round, she did participate in both the first and final rounds of interviewing. Each interview lasted approximately 45 minutes and was conducted by one of two contracted researchers not affiliated with the leadership preparation program. Standardized, open-ended protocols were used for each round of interviews to increase the comparability of responses and reduce interviewer effects and bias (Patton, 1990). These multiple rounds of interviews, independent interviewers, and open-ended questions were employed to minimize the effect of being studied on the behavior and responses of participants. The first round of interviews, conducted near the beginning of the first semester, asked participants to share (a) their perceptions of the core work of school leaders, (b) their understandings of the achievement problems they were addressing, and (c) their feelings about their own capacity to address them. Subsequent interviews (the second at the end of the first year and the third at the conclusion of the program) revisited each of these overarching questions in more detail, asking participants to reflect on how their thinking might have changed in the context of their field experiences and coursework. The interviews were digitally audio recorded and transcribed. Participants' admission documents (i.e., letters of intent, recommendations), end-of-course self-assessments, and capstone leadership platforms (developed across the 18-month program by each participant and submitted for assessment at the end of the program) were also collected and analyzed to test the consistency of our findings (Patton, 1990; Yin, 2009).

Data Analysis

The data were organized, classified, and coded using manual techniques as well as NVivo 7, a computer software program designed to handle unstructured qualitative data (QSR International, 2006). First, the data were organized by grouping together participants' responses to each of the interview questions asked during each of the three rounds of interviews. This initial

step in the coding process provided the research team a means to understand participants' collective thinking about (a) the core work of school leadership, (b) the achievement problems they were aiming to resolve, and (c) their sense of efficacy to resolve the problem. Next, the data were linked to the individual participants, allowing for analysis of each participant's growth over time and for comparison and contrasting of responses across participants. Data analysis occurred continuously throughout data collection as the researcher attempted to identify emerging themes as well as tease out anomalies and contradictions (Holsti, 1969; Merriam, 1998). The research team electronically managed this list of emerging themes when coding and analyzing data.

Constant effort was made to test and confirm findings as they emerged from data collection and content analysis. The quality and credibility of the inquiry were enhanced as researchers considered alternative explanations, engaged in negative case analysis, and employed data source triangulation (i.e., comparing interview data to document data, comparing responses to similar questions across interviews, comparing responses across participants, and comparing individual to whole-sample outcomes). Participant cohort members' leadership platforms were compared and contrasted to assess the differences in learning outcomes. Thick description, assertions supported by evidentiary warrant, and interpretive commentary were employed "to provide an extensive and careful description of the time, the place, the context, the culture in which [this study's] hypotheses were found to be salient" such that judgments about transferability can be made by "others who wish to apply the study to their own situations" (Guba & Lincoln, 1989, pp. 241-242). Finally, the maintenance of an organized documentation system also helped confirm the research findings.

Study Context: The Field Experience as the Core of Leadership Preparation

All preparation program candidates were recruited through cooperative efforts of the university's educational leadership department and school districts within the university's service area. Candidates were identified through a variety of methods including superintendent and principal nominations and former graduate recommendations. Once admitted, candidates joined one of three closed cohorts. One evening a week, cohort members participated together in six classes designed to develop their knowledge, skills, and dispositions across the six areas of competency required by the California Standards for Administrative Credentials. However, prior to the implementation of the

reform, coursework and fieldwork functioned separately with few opportunities for candidates to draw connections between what they were learning in class and doing in the field. The fieldwork itself, composed of 25 authentic leadership tasks such as “design and deliver a staff in-service for improving school–community relations,” “lead a group of teacher to design multiple learning strategies to meet differentiated learning styles,” and “observe/participate in teacher/staff interview for one position,” (Unpublished in-house university document, 2005), operated more as a list of isolated administrative acts than as a meaningful and productive field-based learning experience. In addition to coursework and fieldwork, each candidate was required to develop an educational leadership platform. The platform, begun during the candidate’s first course and submitted at the end of the 18-month program, summarized in writing his or her values, beliefs, and philosophies about educational leadership.

One of the three cohorts was chosen to participate in the first phase of the reform. Simultaneous to ongoing coursework, members of the cohort completed an 18-month field experience, which constituted the centerpiece for their preparation. Preceding their formal entry into the field, candidates took a prerequisite course during which time each candidate (a) identified, in collaboration with his or her school site supervisor, an achievement problem of a target student population at his or her school; (b) gathered data pertinent to the achievement problem (e.g., attendance, demographic, discipline, graduation rate, etc.); (c) reviewed the literature on best practices relevant to this population; (d) selected benchmark schools where similar student groups were achieving at high levels and interviewed the principals of these high-performing schools; (e) developed a preliminary plan to engage stakeholders at his or her school; and (f) created personal and professional growth plans to support his or her efforts to improve student achievement.

With university and site supervisory support and direction, and, when appropriate, in collaboration with school and preparation program colleagues, each candidate then conducted a prolonged in-school field experience aimed at developing his or her capacity to lead ongoing inquiry on behalf of these students. A common set of comprehensive, integrated leadership tasks served as the overall framework for the programs’ field-based learning. Along with their school site supervisors, candidates shaped these authentic tasks to advance their ongoing efforts to improve learning results for the specific student populations at their schools (e.g., low-performing English language learners, 9th grade students enrolled in Algebra I classes, 3rd grade readers achieving below proficiency, etc.). For example, each candidate was asked to create an advisory committee of teachers, other administrators, and relevant support

staff to guide all efforts. At an initial meeting, the committee reviewed preliminary data and constructed a vision for improvement. During subsequent monthly meetings, the committee continued to scrutinize data and develop strategies for instructional improvement, student engagement, professional development, and parent involvement. Each candidate, in consort with his or her advisory committee, identified relevant gaps in the data, clarified the problem or problems to be resolved, formulated and enacted a plan of action, monitored progress, reflected on the outcomes, and adjusted the plan as necessary. Each candidate took care to publicize progress to garner the positive attention of staff, parents, and students.

In the field, candidates also employed sound management practices, eliminating barriers that might impede or derail their action plan implementation. They analyzed master schedules and teacher assignments. They reviewed the collective bargaining agreement, along with district policies and procedures, to ensure their proposed strategies were appropriately aligned. They identified ways to modify current or future budgets to support the implementation of various strategies, including no-cost options that allowed immediate progress toward the vision.

In support of the field experience, concurrent coursework offered candidates opportunities to learn various research-based leadership and management practices necessary to performing their in-the-field inquiry. Teams of program faculty, including tenure-track professors and experienced school administrators, codesigned all course curricula. Classes were held at school district sites and taught by these same university professors and school administrators. In-class instruction and learning activities facilitated candidates' individual and collaborative consideration of these ongoing inquiries, providing knowledge and skills that informed the questions asked and solutions developed. Course instructors modeled leadership behaviors conducive to inquiry, thereby creating safe classroom problem spaces and providing explicit examples of leadership actions aimed at creating inquiry-friendly spaces within schools.

Each class was designed to provide just-in-time learning. For example, in the course on community engagement, candidates probed issues of linguistic diversity, disabilities, poverty, and race, confronting their own beliefs and biases and assessing their level of cultural competence. As they simultaneously led stakeholders at their respective schools in the development and implementation of a parental involvement strategy (a required fieldwork task), class resources and discussions informed their efforts to maintain productive engagement of targeted population parents in support of their children's education. In their curriculum course, candidates learned strategies for facilitating

teacher discussions about the standards, student achievement data, and benchmark assessments—strategies they applied as they worked with their advisory committees to identify professional development needs as indicated by benchmark results.

As fieldwork and coursework drew to a close, candidates evaluated the effects of their plans with substantive feedback from their site and university supervisors. They celebrated accomplishments, acknowledged limitations, and posed new questions for continued inquiry on behalf of their target student populations. Across 18 months, leadership candidates reported their thoughts and perceptions regarding the experience and their subsequent learning. Findings from three rounds of candidate interviews follow.

Findings

Educational leadership preparation programs produce three initial outcomes—*“what graduates learn, what they believe about the role of principal, and their commitment to the principalship as a career [italics added]”* (Darling-Hammond et al., 2007, p. 38). Thus, our presentation of the findings begins with what participants learned as a result of the fieldwork and coursework. We then discuss what participants came to believe about the core work of school leadership. Finally, we consider participants’ growing sense of commitment and efficacy regarding the work of ensuring excellent learning results for all students.

We provide verbatim quotes from the eight research participants as evidentiary warrant for various claims. Although we do not include comments from all eight participants regarding each claim advanced, the quotes provided represent the majority of responses. The dissenting voice is also represented within the findings.

What Candidates Learned: Solving a Problem of Student Achievement

In consultation with their site supervisors, all cohort members selected one target group of students at their schools on which to focus their fieldwork efforts. Five participants chose English language learners and three selected African American students as their target populations. Of the five who chose English language learners, three decided to focus on math achievement (one each at elementary, middle, and high school), one on vocabulary development, and one on English learners’ achievement in general. Those focused on African American students chose to concentrate on either elementary reading comprehension or secondary math.

Understanding and formulating the problem. Having selected their target groups, candidates set out to develop a clearer understanding of the achievement problem at hand. During the first interview, we asked the candidates to share their understandings of the problem. Although most responded by describing their target groups, sharing the groups' achievement data, and offering their initial take on the reasons for their groups' less than desirable achievement, two participants indicated that the information they had gathered created a sense of uncertainty about the root cause of the problem, prompting them to question the status quo. Said Alex,

I looked [at the data] over the last few years, and they continually flatlined. Then I looked at the literature to find a methodology that suits the kids, at how I could help the teachers with how they perceive African American students..... There's got to be something out there, but I haven't found it yet. I'm still searching.

These questions led to new ways of formulating the problems they faced. "What I found is that a lot of parents don't even know about the high school exit exam," explained Natalie. "So, it just showed me that parents are not aware of some of the things that their children need to be learning. That might be a reason why this particular population is not doing well." Furthermore, through their interactions with principals of successful urban schools, participants learned that the solutions to these problems were not only possible but also well within their grasp. Natalie explained,

I was able visit schools that looked just like [our school] as far as demographics and the neighborhood environment and talk with the principals about.... the techniques they used to become high-performing. It was different than what I was used to seeing, and I felt like that was a major turning point.

One participant chose a target group for whom he had significant background knowledge. In his role as district mathematics resource teacher, Kevin was able to approach the fieldwork task from the perspective of his current position, relying on past progress to assist him in formulating his problem.

I'm going to be pulling on what our district has been doing [to improve math instruction] and how is it being used at the school..... Having taught these teachers 2 years ago when we rolled [the program] out,

being very comfortable with the work that needs to be done in classrooms, I don't think I'm going to have a problem with it.

Although Kevin settled on a problem that was well within his control, he used this field experience as a platform to build important leadership skills. In fact, Kevin was one of four participants hired as an administrator on graduation. We share his supervisors' assessment of his readiness for the job later in this article.

As the candidates advanced through the program, participant responses revealed increasingly clearer conceptions of their problems. For example, where Amanda originally described the root cause as the lack of differentiated instruction, by the end of the program, she offered this more nuanced understanding. "I think it has to do with teachers being comfortable teaching what they know. They didn't see how they could take one lesson and break it down.... adapting it to fit [student] needs."

Participants' conceptions of the problem not only grew clearer but also, in some cases, created a new sense of disequilibrium that sparked a new round of due inquiry. Early on, Alex suspected that the achievement gap in his school was in part due to the use of instructional methods that were out of sync with African American students' learning styles. Yet, as he worked with teachers to implement new strategies, he came understand the problem at a much deeper level. He expounded,

I didn't think [it] was an issue, but, I observed a different classroom every other week on my prep times, and it's kind of given me this insight.... some teachers have come to me with "these kids can't," and they're not willing to change their perceptions..... So, I think the biggest issue I have is teacher perception.

Reformulating the problem as a social justice issue, Alex acknowledged the need to confront teachers' deeply rooted beliefs about students' capacity to learn.

Creating and enacting the solution. The next step in productive inquiry involves considering the alternatives for resolving the problem and implementing the chosen solution. As explained earlier, each candidate led the development and execution of an action plan aimed at improving achievement. These plans were neither created nor enacted in isolation. Working with their committees, candidates learned the tools of effective leadership, approaching the problem from multiple perspectives and reaching consensus on a chosen solution. They began the solution process by creating among

stakeholders a clear, shared understanding of the current state of achievement for their target populations. Each candidate shared the data via a PowerPoint presentation that contrasted the performance of the target population with that of other student populations at the school and, then, guided their committees in the creation of a vision of high expectations for their target group. As a result, like many of her cohort colleagues, Natalie learned how to convene stakeholders and use data to create a collective sense of urgency around the need for change.

What has stood out for me the most.... is the importance of a leader figuring out who are the stakeholders, the people who actually are invested in the school, and how do I get them on board?.... When you're able to present data, I think that moves people.

Furthermore, Natalie found that "showing them the data kind of helped to keep the teachers accountable. They had something to look at [and say], 'Okay, we need to get here.'"

With the end in view, candidates set out to craft solutions to the achievement problems they faced. Natalie, in consultation with her principal, created four committees (i.e., parent involvement, curriculum and data analysis, systems of support, and school uniforms), each with a different perspective on improving learning results for their African American student population. She began by planning for and facilitating the collaborative formulation of the each committee's task. "My job as a leader," she affirmed, "is to facilitate and guide them in discussion." Thus, Natalie worked to advance each committee's decision-making process by "planning relevant professional development, answering tough questions, and just encouraging them." To assist in the curriculum committee's search for a solution, Natalie applied what she had learned from her mock supervision of two teachers (a fieldwork requirement involving the collaborative development of an observation tool aimed at assessing teachers' use of an instructional strategy tailored to the learning needs of the target population). "I started out by observing two teachers on the committee," Natalie explained. "I was in my supervision class, so it was really easy to focus." She continued, "We looked at the information I got from those two teachers.... how they were planning, teaching, and assessing reading comprehension." Informed and supported by the intersection of fieldwork and coursework, Natalie guided her colleagues toward a solution strategy—professional development and supervision aimed at improving teacher planning, implementing better questioning strategies, and developing more accurate benchmark assessments.

Reflecting on outcomes. At multiple points across the fieldwork experience, candidates were purposefully engaged in written reflection. Candidates were asked to summarize their work at the completion of each required fieldwork task, as they did following their guidance of the advisory committee's selection of strategies for increasing student engagement. Fieldwork writing requirements also pushed candidates to extend their learning—to critique, compare, and contrast, for example, the leadership actions of two shadowed principals. Furthermore, at the end of each semester, candidates were asked to evaluate the overall effects of their leadership of the advisory committee by responding in writing to questions about what worked, what they would do differently, what they learned, and so on. Amanda shared the value of reflection to her development.

I mean there were challenges, road bumps, and mistakes that we learned from as a group.... and we were able to take those mistakes and turn them around and really reflect on why didn't it work and what are we going to do better next time.

Opportunities for written reflection were also provided through companion coursework assignments and self-evaluations. As Emily wrote at the end of the course on curriculum development and evaluation, "Through time to reflect and revise [this project] I believe that I genuinely grew and am clear as to my ideas about curriculum."

In addition to written reflection, the periodic interviews described here engaged participants in further reflection through questions about the likelihood of their success in reaching the goals they had set, how they would know, and what factors influenced their success. According to the data, by the program's end eight of the nine participants had either experienced some success or expressed confidence in eventually resolving the problem. When asked how they would know their solutions were working, five of the eight indicated that they would look to achievement data from benchmark and other assessments. As Amanda contended, "From our previous year's test scores to this year, we've already made a significant increase. I mean, we're seeing kids move. I hope.... at the end of the year to have the full strand [of data] to see the progress made."

Alex clearly understood the value of hard evidence. Yet, in its absence, he looked for other indicators of movement toward the goal state. So did Emily.

On Tuesday night we had a huge parent dinner. At one time, we might have had only three parents show up. We had 150 people in the room.

When I see parents saying, “We want to be involved. What can we do?”.... When I see a principal, a counselor, and our school police saying, “We’re willing to make home visits to get students in school on a regular basis.”.... When I see teachers here willingly at 5:30 [or] 6:30 at night.... when I see students asking what they can do to contribute.... when I see that, I know something’s happening. Progress is gauged in so many ways, and I see people working harder and smarter than ever before.

As with Emily, some candidates indicated that their inquiry into improving student achievement was beginning to transform more than teaching and learning; it was beginning to transform their schools. Amanda explained how the committees she put in place provided structures for collaboration, inviting teachers into the decision-making process.

They wanted to be a part of a team-building thing because, frankly, that was missing at our school. So to be able to [do] something collaborative and reflective was a breath of fresh air. Some teachers that weren’t typically involved [started] appearing more, signing up for these committees that were making changes for kids. I mean they have more of a voice.

As candidates reflected on the factors they believed had influenced their ability to resolve the achievement problem, most named teacher attitudes, both positive and negative, as the chief contributors. Perhaps most significant, however, was how candidates perceived and responded to the challenge of teacher resistance. “Basically they’re throwing it back at the students and saying, ‘It’s their fault they’re not learning,’” Jeff explained. “I mean that’s the attitude of the teachers that were working with us.... Getting a teacher to change who has done something the same way for many years and is not comfortable with changing is a difficult process.” Although Jeff recognized that some of his colleagues’ negative attitudes impeded student success, he chose to focus his initial energies on the teachers who were most willing to engage. He expounded,

My focus is on the teachers who are willing to change, who recognize that these students are capable of learning. Hopefully, the others will feel a little peer pressure and want to tag on eventually. The teachers I’m referring to are near retirement, so maybe you just kind of wait it out. I think sometimes when you’re dealing with teachers that may be all you have to do.

As indicated earlier, Alex also shared concerns about his colleagues' negative perceptions of students. Yet Alex was determined to challenge the status quo, calling *all* members to account. "My task force has to find a way to change people's mind-set.... to change [their] attitudes towards what students can and can't do."

What Candidates Believe: Understanding the Core Work of School Leadership

From across the data emerged evidence of significant change in participants' perceptions of the principalship. During the first interview, when asked to explain the core work of school leadership, participants offered fairly traditional notions of the job. They cited such operational tasks as "making sure the budget is done appropriately," "that the lunch is getting out on time," and "ensuring there is a safe environment for all students to learn." They also described the principal as "in charge," "running the school," or "the [source of] information.... [and] direction." Initially, for these aspiring school leaders, effective principals wielded unilateral, role-based authority to manage people and operations. As Liz explained, "The administrator would be managing the plan at the school, bringing the staff together to discuss issues. But it was more like the principal had the information, presented it, and had already made the decision." Although a few participants described something beyond management, naming tasks such as "planning professional development," "making sure teachers are teaching in a certain way," and "building teamwork," their responses stopped short of conveying what that something was. In Emily's words, "I think the responsibilities of a leader pertain to management. I think the people component plays a huge role, but I don't know how to articulate what that should look like, or how it should go."

Overall, candidates' early beliefs seem to have been heavily influenced by what they had observed and experienced before entering the program. As Liz explained, "I was just basing what I would do on what other principals I had worked with had done." These prior experiences were clearly influential, as candidates relied on the leadership actions they had seen, or not seen, to help them describe the work. In some cases, observations of these leader actions led to troubling conclusions. An example emerges from Amanda's first interview.

My experience with leadership has been definitely a dictatorship—"I tell you what to do, and you do it." I felt that was kind of the role, even though I didn't believe that's how it should be. So, part of the

reason I entered the program was to actually see, what are the components of a good leader?

For Amanda, and others like her, quality opportunities to reconstruct misguided theories of action through the lens of current research, rigorous fieldwork, rich dialogue, and personal reflection are vital to their development as effective instructional leaders—a finding made more significant in light of alternative pathways to the principalship that allow applicants test directly into jobs.

Well into the first semester, all participants described school leadership as much more complex and demanding than originally conceived. “There’s definitely a lot more to it,” Teresa admitted. Alex agreed. “They’re everywhere.... responsible for everything a school accomplishes and all the setbacks, as well.” Although some participants seemed to conceptualize the work as a set of discrete tasks, others were beginning to see the interdependence of administrative actions. “I see more of the cause and effect,” Emily explained, “how when we drop the ball in one area, that impacts everything else.” In light of class content and preliminary fieldwork activities related to vision, participants began to talk about vision as central to effective school leadership. “Now I have an understanding of what it means to create and try to live by a vision, so that it guides any decisions that I make,” Kevin declared. “That’s a whole new understanding of what it means to be an instructional leader.” Candidates began to see, in Emily’s words, “the principal’s role as a visionary, leading this work in a way that motivates students, parents, teachers, and community members to want to be part of it.” Alex expounded,

[Principals] find ways to get all of the teachers to buy in to a vision that’s cocreated by all of the people involved in the school, a vision of what this school will become in the future, and continue to strive to be.

As coursework and fieldwork progressed, eight of the nine participants came to conceptualize leadership as a decidedly collaborative endeavor. “It’s not a one man job,” said Amanda. “It takes involvement from everyone,” Liz continued. “It’s not just, ‘I see the problem and this is what we need to do to fix it,’ but it’s bringing people to table to analyze the situation and to mediate and guide those discussions.” As Teresa remarked, “A shared decision-making process is going to get better results and the buy-in from your staff.” Teresa and her colleagues were coming to see the principal as the facilitator of collaborative problem solving, building the processes, structures, and individual capacities necessary for shared leadership. “I look at leadership not isolated to

a position or role,” said Emily. “It’s helping me understand that, as an administrator, I might initiate change by identifying people with strengths across the campus who are able to take on that work.”

At the end of the program, we asked participants, one last time, to describe the core work of school leadership. All participants acknowledged that their views had changed significantly. In Natalie’s words,

When I started the program, I looked at the principal as one who manages, or is kind of the face of the school.... not really the one who is hands on. But, now, an effective principal is someone who embodies the concepts of a servant leader, who’s willing to get their hands dirty.... to model for the teachers from a sincere place.

Participants also named building relationships, inspiring trust, and empowering others to make decisions as central to effective leadership. Similar themes emerged from our review of each participant’s capstone leadership platform. As Emily wrote in her platform,

Leadership shows itself when leaders build partnerships to make a vision a reality. As a leader, it is my responsibility to involve others in the process of providing a quality education for all students. No one person can do this work alone. It takes leaders joining around a common vision and placing that vision of what is best for students at the center of all decision making.

Taken together, participant responses located the work of school leadership squarely in improving learning outcomes for all students. To accomplish the work, participants collectively contended that principals engage in four core actions. First, these candidates reported that *effective school leaders develop, communicate, and lead others toward a clear, shared vision of excellence*. As Emily explained, school leaders “help people see the vision and include them in creating it, but, most importantly, carrying it out.”

Second, they suggested that *effective school leaders mobilize a collaborative effort*. In Natalie’s words, an effective school leader “figures out who are the people invested in the school and how to get them on board.” She continued,

It’s someone knows how to garner support from all the stakeholders, not just at the school, but within the community. The core work of school

leadership really entails building relationships with people in order to create the change that's needed in a school.

Third, our participants contended that *effective school leaders build the individual and organizational capacity to enact the vision*. They "lead people to take risks and extend their learning," Amanda said. "I used to think that the core work was about managing people and a school," Liz recalled. "Now I think it's about ensuring that there is a transformation, and, in order to do that, [principals] have to make sure that everyone is learning and engaged in the transformation."

Finally, these leadership candidates noted that *effective school leaders use data to drive change*. Natalie stated what many expressed. "I'm learning how important the data is. The more data you know.... it just guides your thinking, guides your planning, guides the problem solving." Participants pointed to the need for leaders who can analyze data and effectively communicate it to others. In Alex's words,

You want to make sure that you look at the data in multiple ways so you can kind of see, "Okay here's where we are, here's where we're going, what do I need to do to change this to continue to make these students achieve?"

Emily summarized her colleagues' thinking. "I'm clear now more than ever about the need to establish an evidence-based, decision-making culture."

During the final interview, when we asked participants what had influenced any change in perceptions of school leadership, most pointed to the combination of fieldwork and coursework. Said Alex,

Our fieldwork was phenomenal. I mean, being able to say, "This is my [target] group. This is what I need to do and, how am I going to implement these programs? Are they affecting the school? Is it affecting a contract? Is it affecting a budget?" But then also using the supervision model, going into classrooms and saying, "Okay, I'm looking to see how these professional development strategies are being implemented in this classroom and how is it helping the students?" Really getting into the work as opposed to just, you know.... I had an idea of what our principal has to do, but not to the extent that this program helped me see.

Alex's comments seemed to support the earlier conclusion that participants' experiences during the fieldwork helped them to see the work of school leadership more systemically.

Candidates' Commitment to Leadership: Building Self-Efficacy for the Work

Recent studies, comparing graduates of exemplary leadership programs to a national sample of administrative graduates, found that exemplary program graduates felt significantly better prepared and reported more positive beliefs about and a greater commitment to the principalship (Darling-Hammond et al., 2007; Orr, 2007). Consequently, we were interested in knowing how and to what degree our participants felt ready to assume the role of school leader—readiness defined, in part, by a shift in orientation from *teacher* to *leader* (Browne-Ferrigno, 2003). To gain a sense of participants' mind-sets prior to entering the program, we reviewed the letters of intent participants submitted as part of the application process. All program applicants were required to write about their beliefs regarding the future of public education, their beliefs about the role of educational leaders, their willingness to learn the skills and knowledge needed to fill this role, and their own leadership experiences. As we might have expected, most of our participants responded to the prompts from a strong teacher orientation. They wrote at length about their teaching experiences, filling their two-page letters with support for and examples of "meeting students' learning needs," "differentiating the curriculum," and "using culturally relevant pedagogy." They expounded on the value professional development, describing their work planning and facilitating peer workshops and advocating for lifelong learning. For evidence of leadership experience, they pointed to "managing peer tutoring programs," and "serving on school site councils"—experiences all closely related to the classroom and unlikely to challenge long-held role conceptions. However, one participant wrote in a way that suggested she had begun to shift her mind-set from teacher to leader. Where her colleagues wrote that the future of education rested in "having high expectations for students," "a rigorous standards-based curriculum," and "being able to look at ourselves critically," Emily wrote,

The future of public education is dependent on the people in leadership positions. Public education will have a bright future if educational institutions continue to nurture leaders who are empowered to empower the people with whom they work—inspiring them not to work

from a feeling of obligation, but of sincere commitment. I have this commitment already and a plan to effect positive, productive changes in public education.

Once our participants had begun the program, we asked them, during each of the three rounds of interviews, to assess their readiness to lead. At the first interview, most participants shared some sense of confidence in their ability to address and resolve the achievement problem they faced. In general, the efficacy they described was grounded in either an overall sense of confidence, or in a few, discrete skills like “being able to motivate people” and “having a good relationship with the people who are working on [the problem].” Yet, as Liz came to see the work of school leadership as much more than management, she admitted, “I’m confused about where I stand.”

Overall, candidates’ confidence had increased by the second interview. As Liz commented, “Compared to where I was, I now feel comfortable enough to bring teachers together to talk, giving them the support they need, [and] allow, them to make decisions for themselves.” Alex explained that his original sense of efficacy came from the leadership he had provided to colleagues he knew he “worked well with.” He continued,

This time, I kind of opened it up to everyone, and I have a couple that challenge in a negative way and when I’m working with them it’s helping me to see, you know.... before I started getting into this work I thought, no one is going to listen to me. But now, people want to partake in it, and they’re coming in on their own time to learn and to see what we can do to help these students achieve, so I think my capacity to lead is pretty good.

Natalie credited her growing sense of capacity to resolve the achievement problem at her school to seeing firsthand “some really great examples of how it can work at schools that look just like mine with less resources and because I’ve learned that there are a lot of people who would like to help and feel that they have a purpose.”

By the end of the program, six of the eight participants clearly stated that they were ready to serve as either a principal or a vice principal. Although Alex admitted that he still had more to learn, he concluded,

I really think that I could do this..... I love to teach, but I’ve hit this point now in my life where I want to help out more kids than just the

group that I've been given. After going through this whole program, I am very prepared, very ready to take on the task, and I'm looking forward to it, actually.

Emily agreed.

I feel really good about it. I feel really strong. I feel that there're some things that I would personally like to tighten up.... budgetary issues, issues around master schedule. Those logistical things that do play a role in what you're doing, but I'm not as concerned about that because I feel like there have been leaders across this nation who figured out master schedule and budget. It's been the human dynamics that happen on a day-to-day basis about helping people to shift paradigms, and that's the stuff that I feel good about.

Even Liz said,

I can't say I'm ready to be a principal, but I know I'm ready to be a vice principal. I think the coursework was physically and mentally exhausting because it pushed me out of my comfort zone. It forced me to look at things differently, and I came to realize that what I was reading wasn't just theoretical, that it could actually be done.

Overall, responses suggest that these aspiring school leaders developed an increased sense of efficacy around and commitment to leading the improvement of student achievement. Across the interviews, participants expressed growing confidence in their ability to create a shared vision of excellence, to identify and engage stakeholders in the collaborative resolution of a problem, to build leadership capacity in others, and to use data effectively across the process. When asked what leadership knowledge or skills they had yet to gain, Emily and Natalie said they would like more practice working with budgets around maximizing resources and advocating for more. Teresa also mentioned budgeting, but added "union things" and her tendency to procrastinate as areas for professional development.

Although Liz and Alex shared the desire to develop the skills to respond effectively to resistant teachers, Alex's concern emanated from his new conception of leadership as "changing people's mind-sets." He expounded,

So, that's the big thing I need to learn is really reading people and being able to change them, not in an instant, but over time [by] incorporating

them into the work that I'm doing or having them see what's going on in another classroom. Being able to do that, to change people's attitudes towards what students can do and what students can't.

The majority of candidates talked about the specific sources of their developing sense of efficacy and commitment to leadership. Said Emily,

I've had more confidence in making the shift from the classroom level to this dean's role just because I've been in this program. I know that so much of what I think, what I do, what I reflect on comes from the things that I've read, heard, or experienced while being in this program. Now that I'm in this role, I can to reflect back and say, "If I took on a vice principalship somewhere, if I took on a principalship somewhere, I would feel comfortable with it."

Most participants cited the same sources as those that influenced their beliefs about leadership, but some also spoke to the influence of a supportive and challenging site administrator. As Natalie explained, her principal supported her with substitutes for her visits to high performing schools, asked her to present what she had learned to the faculty, gave her time each month to present professional development sessions to her staff, and allowed her to develop and facilitate the work of four action committees.

For Alex, the cohort structure also provided an invaluable source of efficacy. He explained,

I couldn't say enough about my colleagues in that class. I mean everyone really was pushing each other. I can't really just say the coursework did it for me. I'd have to say that however they selected my group to be together, I'm thankful that they did that. I've gotten more out of it because I would hear what other people were doing. Then I'd bring stuff back [to my school] and say okay, this is what I've heard from other groups. What do you think about this?

With university and site supervisory support and direction, and, when appropriate, in collaboration with school and preparation program colleagues, candidates learned the specific strengths and limitations of their own leadership capabilities. As they led ongoing inquiries in the field and shared their results with one another in class, these aspiring leaders came to realize what they knew and could do as well as what they still would need to learn.

We followed this continued learning with the four participants who moved into leadership positions following graduation. As they navigated their first year as administrators, we assessed the degree to which, and in what ways, their learning transferred and informed their practice as new administrators. Early findings of this new stage of research seem to suggest that all four (Emily, Kevin, Alex, and Amanda) were perceived by their supervisors as well prepared to take on the roles and responsibilities of their new jobs. When asked to assess Alex's work as a first-year vice principal of a large urban elementary school, his principal responded, "Of all the VPs I've worked with, he's probably one of the most prepared. I don't know what his program was like,.... [but] anything I gave him, he tried on. He came with lots of tools in his bag." She continued, "I think he's going to be a fabulous principal. I wouldn't be surprised if they tried to recruit him next year." Commenting on Kevin's strengths as a new district-level administrator, his supervisor remarked, "He is very confident. He knows data. He knows how to connect information. He knows how to question without putting people on the defensive so it becomes a conversation about teaching and learning.... He could be a principal tomorrow." When asked, "How can we best prepare candidates to take on leadership positions?" Kevin's supervisor responded, "The fieldwork experience, the hands-on with a professional expert wrapping his/her arms around the candidate to support them and give them feedback. I think that practicum piece of any training program is critical."

Counter Experiences

From the first interview forward, Jeff was the only participant either unable or unwilling to articulate an area of potential personal growth. He entered the program believing himself, in his words, to be "a born leader," a self-perception that persisted throughout the program as evidenced by his reply to a final question about his sense of leadership capacity.

When I was approached with a task to lead the group, I felt like I was kind of one step ahead as to where we should be going and how to get there. I think having the initiative to come up with the idea of how to get to where we wanted to, kind of separates me from the others. I don't think a lot of the others have that.

Perceiving himself in this way may have influenced his desire and capacity to fully engage in and reflect about his work in the program. During the second interview, Jeff described the coursework as "theoretical" and of "zero"

value. And, at the final interview, although he found the fieldwork to have “a good design and some good components,” he felt that “a lot of it was staged.” This self-perception may also have influenced his response to the problem of improving learning results for the English learners at his school. As Jeff noted during his first interview, “Some of these teachers around here, you know, you’re not going to get through to them. We’re a very established school, a lot of older teachers, stuck in their ways, and they don’t want to change for anybody.” When faced with the challenge of leading resistant teachers to change instructional practices, a leadership skill not among those he already possessed, Jeff may have taken path of least resistance, opting instead to work on a response he felt he could accomplish—increasing his target populations’ involvement in after-school activities. Such a choice may also reveal the limitations of Jeff’s mentorship experiences with a principal who likely failed to recognize Jeff’s field-based learning as an important opportunity to challenge Jeff and other members of his faculty.

Jeff’s experience in the program may also have been hampered by limitations of his prior teaching experiences. He described his school as “very affluent [with] high-performing students.” He continued,

Being English language learners, they don’t have the necessary skills to achieve at this level, especially with this type of schooling that we have here where the high is expected..... A lot of it is apathy of the students. [They] just don’t see the purpose of putting forth effort to achieve a better outcome of their own life.

Jeff’s lack of experience with diverse student populations and current job context provided him little opportunity to confront his assumptions, and, once in the program, his inability to be reflective about his leadership capacity and the work at hand limited potential growth. Jeff’s example prompted program faculty to rethink the significance of leadership candidates’ prior experience to their success in the program. Should teaching experiences with diverse populations be a prerequisite to program entrance? If not, how might we construct fieldwork experiences such that they push candidates to confront their assumptions? Or how might we do a better job of preidentifying candidates with beliefs and values that promote their effective leadership of diverse schools? Jeff’s example also underscores the importance of providing candidates adequate time in the field. As he expounded on his reason for seeing the program as “staged,” Jeff explained,

In order for the fieldwork to be more authentic, it would have had to have been longer. I don’t necessarily want to be in class longer to make

it happen, but in order to make it true and authentic I don't think it was manageable in [three] semesters.

Discussion and Implications

In summary, the results of our study reveal marked changes in participants' understandings of the core work of school leadership. For example, over the three semesters, most participants' perceptions of school leadership evolved from seeing the principal as managing people to seeing the principal as leading instructional improvements aimed at student achievement. Most participants came to perceive the work of school leadership as nuanced and complex, with all aspects (curriculum, supervision, budget, etc.) as interrelated. They developed a deeper recognition of the significance of relationship and trust building, collaboration, and leadership capacity to creating and sustaining stakeholder buy-in. More and more, participants conceptualized data as powerful evidence to stimulate urgency for change. The group also articulated significantly greater confidence as leaders and change agents. They acknowledged substantial growth in their ability to identify, understand, analyze, communicate, and use pertinent data to lead the improvement of teaching and learning. Increasingly, they found synergy between coursework and fieldwork. With only one exception, the participants specifically cited their fieldwork experience as providing real-life problems to solve, thereby contributing to their growing sense of confidence and capacity to improve learning outcomes for students.

Studies of highly effective leadership preparation programs underscore the value of extended field-based learning experiences, in particular full-time, paid apprenticeships. Where programs have sought to augment local university and school district funds with foundation support, scholars have questioned the program's ability to sustain such high-cost models over time (Darling-Hammond et al., 2007). Indeed, in our current economic environment, it will become increasingly difficult to garner resources in ways that would render such practices sustainable, let alone replicable.

Although participants conducted their fieldwork in schools where they continued to fulfill their current job responsibilities, these individuals assumed leadership roles in addressing actual student learning problems in their schools. Through leadership of their various advisory committee activities, faculty colleagues learned critical knowledge and skills. Parents received new sources of support, and students experienced tangible improvements in their day-to-day classroom learning experiences. These sorts of substantive contributions to the school effectively leveraged mentor principals' interest in improving results.

An example emerged from across the regular meetings among Emily, her university supervisor, and her principal. Early on, the three met to confirm that the achievement problem selected was significant enough to warrant the principal's full support. As Emily began to ask questions, seek and analyze relevant data, and review her findings about the data with the rest of the faculty, conversations about the specifics of these activities continued across all subsequent meetings with her principal and university supervisor. Before long, the principal also began sharing data during staff meetings to assist in generating a sense of urgency about the need to change instructional practices.

The evidence here reported suggests that when various preparation program elements are carefully designed in complementary fashion, aligning coursework with fieldwork, university supervision with site supervision, and preparation program work with the real work of improving learning results, a synergistic influence on candidate development results. Research participants experienced the connectedness of these program elements and expressed the importance of this alignment to their learning.

Still, our findings do indicate that one participant did not learn with depth and breadth equal to his cohort colleagues. His understandings about the core work of school leaders were not equally transformed. This participant dodged the opportunity to wrestle with real-life uncertainty, leaving the program with unchanged measures of his capacity to lead. In addition, several other students were somewhat hindered by the limitations of the mentorship they received from their site principal supervisors. At the university level, these variations in program outcomes resulted in further tightening of the alignment between coursework and fieldwork, renewed efforts to train and support principal mentors, and more focused strategies for recruitment and selection of preparation program candidates.

In pursuit of these continued reform efforts, the program faculty have initiated a partnership with a large local urban school district to identify a student cohort from school district employed teachers. The planning committee composed of district principals, central office administrators, and university program faculty is currently engaged in defining the goals of and processes for living out this university-school district collaboration. The committee has agreed to invite each district principal to nominate one teacher who has demonstrated strong leadership potential. Together, university faculty and school district representatives will conduct admissions interviews and decide jointly on preparation program candidates. Plans also call for the identification of exemplary principal coaches who will work in concert with the chosen candidates' site principals and faculty supervisors, supporting candidates' successful completion of the extended field experience activities. As the

university preparation program faculty collectively engage in their *own* cycles of inquiry, with one another and with their community partners, they will continue to formulate problems relevant to this collaborative endeavor, reaching consensus about the solutions they will create and enacting and reflecting on outcomes as they move forward in the redesign process, all this on behalf of leadership candidates and, ultimately, the students they serve.

Conclusion

A growing body of research suggests that leadership candidates benefit from coherent, field-based learning experiences that inform course content and are purposefully designed to provide application, practice, and reflection on the concepts and skills necessary for leading school improvement. This study followed master's-level candidates as they participated in a principal preparation program redesigned to reflect an inquiry-based approach to learning. Here, master's-level preparation was designed to place candidates in real situations of uncertainty, provide them the necessary leadership and management tools, and, under the guidance of site and university supervisors, require them to identify and resolve a learning problem at their schools.

As leadership candidates actively engaged in understanding the current challenges facing their schools, they learned, firsthand, how to utilize student assessment data as a primary tool of school improvement, leading others at their schools through a process of analysis and discovery. Evidence from the data suggests that this sort of active inquiry and reflection allowed them to connect preparation program experiences with genuine school leadership responsibilities, leading us to conclude that this type of fieldwork can increase candidates' understanding of, confidence in, and ability to enact specific leadership practices that influence student learning.

From these findings emerge lessons that have the capacity to inform the work of other university program faculty engaged in similar reform efforts. We learned that inquiry-based preparation programs should be designed to provide leadership candidates adequate time to engage fully in the field—time to implement their plans and assess the degree to which their actions were successful. Program designers must also address issues related to candidates' in-the-field supervision, ensuring that candidates are guided in the field by competent and committed site supervisors who understand the purpose of the field experience and their role in supporting it. And to provide candidates concurrent coursework that informs and supports fieldwork tasks, program faculty must continuously reassess course content, checking for rigor, relevance, and alignment.

In this article, we offer the lessons learned from one effort to redesign a leadership preparation program in a manner that connected candidates' field-based learning experiences with their academic study of school leadership, all to address specific problems of improving student learning in authentic school settings. Although this merging of the academic and practical worlds presents a formidable set of challenges for any university-based preparation program, as we have found in this case, incorporating real-life problems in which candidates must address current and pressing student needs at their schools not only helped them to better understand the job of principal, but also focused important attention on improving learning results for the students in their respective schools.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Funding

The authors received no financial support for the research and/or authorship of this article.

References

- American Association of Colleges for Teacher Education. (2001, March). *PK-12 educational leadership and administration* (White paper). Washington, DC: Author.
- Argyris, C., & Schon, D. A. (1996). *Organizational learning II: Theory, method, and practice*. Reading, MA: Addison-Wesley.
- Brown, G., & Irby, B. J. (2006). Expanding the knowledge base: Socially just theory in educational leadership programs. In F. L. Demboski & L. K. Lemaster (Eds.), *Unbridled spirit: Best practices in educational administration. 2006 Yearbook of the National Council of Professors of Educational Administration* (pp. 7-13). Lancaster, PA: Destechn.
- Brown, K. M. (2004). Leadership for social justice and equity: Weaving transformative framework and pedagogy. *Educational Administrative Quarterly*, 40, 79-110.
- Browne-Ferrigno, T. (2003). Becoming a principal: Role conception, initial socialization, role-identity transformation, purposeful engagement. *Educational Administration Quarterly*, 39, 468-503.
- Cambron-McCabe, N., & McCarthy, M. (2005). Educating school leaders for social justice. *Educational Policy*, 19, 201-222.
- Clark, D. C., & Clark, S. N. (1996). Better preparation of educational leaders. *Educational Researcher*, 25(8), 18-20.

- Copland, M. A. (1999). Problem-based learning, problem-framing ability and the principal selves of prospective school principals. *Dissertation Abstracts International*, 60(08), 2750.
- Cordeiro, P. A., Krueger, J. A., Parks, D., Restine, N., & Wilson, P. T. (1993). Taking stock: Learnings gleaned from universities participating in the Danforth program. In M. M. Milstein (Ed.), *Changing the way we prepare educational leaders* (pp. 17-38). Newbury Park, CA: Corwin Press.
- Cranton, P. (1994). *Understanding and promoting transformative learning: A guide for educators of adults*. San Francisco, CA: Jossey-Bass.
- Creasap, S., Peters, A., & Uline, C. (2005). The effects of guided reflection on educational leadership practice: Mentoring and portfolio writing as a means to transformative learning for early career principals. *Journal of School Leadership*, 15, 352-386.
- Crow, G. M. (2006). Complexity and the beginning principal in the United States: Perspectives on socialization. *Journal of Educational Administration*, 44, 310-325.
- Crow, G. M., & Glascock, C. (1995). Socialization to a new conception of the principalship. *Journal of Educational Administration*, 33, 22-43.
- Daloz, L. A. (1999). *Mentor: Guiding the journey of adult learners*. San Francisco, CA: Jossey-Bass.
- Dareesh, J. C. (2001). *Leaders helping leaders* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Dareesh, J. C., & Playko, M. A. (1997). *Beginning the principalship: A practical guide for new school leaders*. Thousand Oaks, CA: Corwin Press.
- Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M. T., & Cohen, C. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.
- Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). *School leadership study: Developing successful principals*. Stanford, CA: Stanford Educational Leadership Institute.
- Dewey, J. (1910). *How we think*. Boston, MA: D. C. Heath.
- Dewey, J. (1922). *Human nature and conduct*. New York, NY: Modern Library.
- Dewey, J. (1938). *Logic: The theory of inquiry*. New York, NY: Holt, Rinehart & Winston.
- Elmore, R. F. (2000, Winter). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Forsyth, P. B. (1999). The work of UCEA. In J. Murphy & P. B. Forsyth (Eds.), *Educational administration: A decade of reform* (pp. 71-92). Thousand Oaks, CA: Corwin Press.

- Fry, B., Bottoms, G., & O'Neill, K. (2005). *Challenge to lead series: The principal internship: How can we get it right?* Atlanta, GA: Southern Regional Education Board.
- Fry, B., Bottoms, G., O'Neill, K., & Walker, S. (2007). *Challenge to lead series: Schools need good leaders now: State progress in creating a learning-centered school leadership system.* Atlanta, GA: Southern Regional Education Board.
- Fry, B., O'Neill, K., & Bottoms, G. (2006). Schools can't wait: Accelerating the redesign of university principal preparation programs. Atlanta, GA: Southern Regional Education Board.
- Griffiths, D. E., Stout, R. T., & Forsyth, P. B. (Eds.). (1988). *Leaders for America's schools: The report and papers of the National Commission on Excellence in Educational Administration.* Berkeley, CA: McCutchan.
- Grogan, M., & Andrews, R. (2002). Defining preparation and professional development for the future. *Educational Administration Quarterly*, 38, 233-256.
- Guba, E., & Lincoln, Y. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.
- Hess, F. M., & Kelly, A. P. (2005). An innovative look, a recalcitrant reality: The politics of principal preparation reform. *Educational Policy*, 19, 155-180.
- Hoff, D. L., Yoder, N., & Hoff, P. S. (2006). Preparing educational leaders to embrace the "public" in public schools. *Journal of Educational Administration*, 44, 239-249.
- Holsti, O. R. (1969). *Content analysis for the social sciences and humanities.* Reading, MA: Addison-Wesley.
- Jackson, B., & Kelley, C. (2002). Exceptional and innovative programs in educational leadership. *Educational Administration Quarterly*, 38, 192-212.
- Jacobson, A., O'Neill, K., Fry, B., Hill, D., & Bottoms, G. (2002). *Are SREB states making progress? Tapping, preparing and licensing school leaders who can influence student achievement.* Atlanta, GA: Southern Regional Education Board.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: Sage.
- Leithwood, K., Jantzi, D., Coffin, G., & Wilson, P. (1996). Preparing school leaders: What works? *Journal of School Leadership*, 6, 316-342.
- Leithwood, K., & Louis, K. S. (1998). *Organizational learning in schools.* Lisse, Netherlands: Swets & Zeitlinger.
- Lindle, J.C. (2002). Ensuring the capacity of university-based educational leadership preparation: The collected works of the National Commission for the Advancement of Educational Leadership Preparation. *Educational Administrative Quarterly*, 38(2), 129. doi: 10.1177/0013161X02038002002
- Lyman, L. L., & Villani, C. J. (2002). The complexity of poverty: A missing component of educational leadership programs. *Journal of School Leadership*, 12, 246-280.

- McCarthy, M. (1999). The evolution of educational leadership preparation programs. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration: A project of the American Educational Research Association* (pp. 119-239). San Francisco, CA: Jossey-Bass.
- McKenzie, K. B., Christman, D. E., Hernandez, F., Fierro, E., Capper, C. A., Dantley, M.,... Scheurich, J. (2008). From the field: A proposal for educating leaders for social justice. *Educational Administration Quarterly*, 44, 111-138.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (1991). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. San Francisco: Jossey-Bass.
- Milstein, M. M. (1992, November). *The Danforth Program for the preparation of school principals. Six years later: What we have learned*. Paper presented at the annual meeting of the University Council of Educational Administration, Minneapolis, MN.
- Milstein, M. M., Bobroff, B. M., & Restine, L. N. (1991). *Internship programs in educational administration: A guide to preparing educational leaders*. New York, NY: Teachers College Press.
- Milstein, M. M., & Kruger, J. A. (1997). Improving educational administration preparation programs: What we have learned over the past decade. *Peabody Journal of Education*, 72, 100-106.
- Murphy, J. (1992). *The landscape of leadership preparation: Reframing the education of school administrators*. Newbury Park, CA: Corwin Press.
- Murphy, J. (1995). Rethinking the foundations of leadership preparation: Insights from school improvement efforts. *DESIGN for Leadership: The Bulletin of the National Policy Board for Educational Administration*, 6(1), 1-6.
- Murphy, J. (1999). Changes in the preparation programs: Perceptions of department chairs. In J. Murphy & P. B. Forsyth (Eds.), *Educational administration: A decade of reform* (pp. 170-191). Thousand Oaks, CA: Corwin Press.
- Murphy, J. (Ed.). (2001). *The educational leadership challenge: Redefining leadership for the 21st century*. Chicago, IL: University of Chicago Press.
- Murphy, J. (2002). Reculturing the professional of educational leadership: New blue prints. *Educational Administration Quarterly*, 38, 176-191.
- Murphy, J. (2005). Unpacking the foundations of ISLLC standards and addressing concerns in the academic community. *Educational Administration Quarterly*, 41, 154-191.
- Murphy, J. (2006). *Preparing school leaders*. Lanham, MD: Rowman & Littlefield.
- Murphy, J., & Forsyth, P. B. (Eds.). (1999). *Educational administration: A decade of reform*. Thousand Oaks, CA: Corwin Press.

- Murphy, J., & Louis, K. S. (1999). *Handbook of research on educational administration* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Murphy, J., & Orr, M. T. (2009). Industry standards for preparation in educational leadership. *Leadership and Teaching in Educational Leadership*, 17, 9-11.
- Murphy, J., & Vriesenga, M. (2004). *Research on preparation programs in educational administration: An analysis* (Monograph). Columbia: University of Missouri-Columbia, University Council for Educational Administration.
- Murth, R., & Barnett, B. (2001). Making the case for professional preparation: Using research for program improvement and political support. *Educational Leadership and Administration: Teaching and Program Development*, 13, 109-120.
- Orr, M. T. (2006). Mapping innovation in leadership preparation in our nation's schools of education. *Phi Delta Kappan*, 87, 492-499.
- Orr, M. T. (2007, April). *How preparation influences school leaders and their school improvement: Comparing exemplary and conventionally prepared principals*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Orr, M. T., & Barber, M. E. (2007). Collaborative leadership preparation: A comparative study of innovative programs and practices. *Journal of School Leadership*, 16, 709-739.
- Orr, M. T., & Orphanos, S. (2011). How graduate-level preparation influences the effectiveness of school leaders: A comparison of the outcomes of exemplary and conventional leadership preparation programs for principals. *Educational Administration Quarterly*, 47(1), 18-70.
- Orr, M. T., & Pounder, D. (2006). *UCEA/TEA-SIG Taskforce on Evaluating Leadership Preparation Programs taskforce report: Six years later and future directions*. Austin, Texas: University Council of Educational Administration.
- Osterman, K. F. (1991). Reflective practice: Linking professional development and school reform. *Planning and Changing*, 22, 208-217.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Perez, L. G., & Uline, C. (2003). Educational administrative problem solving in the information age: Building and employing technological capacity. *Journal of Educational Administration*, 41, 143-157.
- Perez, L. G., & Uline, C. (2006). *Leading through inquiry: From uncertainty to knowledge*. Unpublished manuscript.
- Perry, J. A., & Imig, D. (2008). A stewardship of practice in education. *Change*, 40(6), 42-49.
- Pounder, D., Reitzug, R., & 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, IL: University of Chicago Press.
- QSR International. (2006). NVivo 7 [Computer software]. Doncaster, Australia: Author.
- Rich, R. A., & Jackson, S. H. (2006). Building the reflective capacity of practicing principals. *AASA Journal of Scholarship and Practice*, 2(4), 12-18.
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. London, UK: Sage.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday.
- Taylor, E. W. (2000). Analyzing research on transformative learning theory. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 285-328). San Francisco, CA: Jossey-Bass.
- Wallace Foundation. (2008). *Becoming a leader: Preparing principals for today's schools*. New York, NY: Author.
- Waters, T. & Grubb, S. (2004). *The leadership we need: Using research to strengthen the use of standards for administrator preparation and licensure programs*. Aurora, CO: Mid-continent Research for Education and Learning.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
- Young, M. D., Crow, G., Ogawa, R., & Murphy, J. (2009). *The handbook of research on leadership preparation*. New York, NY: Taylor & Francis.
- Young, M. D., & Peterson, G. J. (Eds.). (2002). Ensuring the capacity of university-based educational leadership preparation: The collected works of the National Commission for the Advancement of Educational Leadership Preparation [Special issue]. *Educational Administration Quarterly*, 38(2).
- Young, M. D., Peterson, G. J., & Short, P. M. (2002). The complexities of substantive reform: A call for interdependence among key stakeholders. *Educational Administration Quarterly*, 38, 137-175.

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