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USING ACTION-RESEARCH STRATEGIES AND COHORT STRUCTURES TO ENSURE RESEARCH COMPETENCE FOR PRACTITIONER-SCHOLAR LEADERS

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Introduction

As the pressure for P/K-12 reforms has increased and broadened, institutions of higher education also have come under the scrutiny of the public and policy makers. In this era of increased program accountability, especially in assessing student-performance outcomes (Huba, Schuh, & Shelley, 2006), much public attention is aimed at accreditation and educational program improvement in post-secondary educational institutions (Borkowski, 2006; Darling-Hammond, Wise, & Klein, 1999; U.S. Department of Education, 2006; Van Meter & Murphy, 1997). For instance, the major accrediting body of colleges of education in the United States—the National Council for Accreditation of Teacher Education (NCATE)—now requires educational leadership programs to incorporate program standards and performance assessments (National Policy Board for Educational Administration, 1998, 2002). In addition, faculty in graduate programs with doctoral degrees are urged to make their coursework and learning experiences more relevant, shorten the time to graduation, and increase access to under-represented groups (Association of American Colleges and Universities, 2000; National Research Council, 1996b). Further, colleges and universities have developed explicit processes for outcomes assessments (Banta, Lund, Black, & Oblander, 1996; Bilder & Clifton, 1996; Huba et al., 2006; Loacker, 2000; Palomba & Banta, 1999; University Planning & Analysis, 2006), some in response to higher-education

accrediting agencies that now specify *programmatic* outcome assessments as a regular expectation (Higher Learning Commission, 2003).

A central issue in the reform of graduate programs deals with "questions about graduate preparation in educational research methods" (Page, 2001, p. 19). Among the most complex problems associated with doctoral research preparation is the lack of relevancy of research, resulting in the inability of many graduate students to complete their dissertation research. Estimates reveal that as many as half of the doctoral students in education do not complete the dissertation (Dorn, Papalewis, & Brown, 1995), a figure that parallels data for all disciplines (Council of Graduate Schools, 2004; Lovitts, 2006). These estimates reflect national trends that point to the structure of programs as the primary explanation for non-completion, rather than idiosyncratic or patterned individual shortcomings (Lovitts, 2001; National Research Council, 1996a). Further, Muth (1989) contends that traditional modes of inquiry overshadow attempts to incorporate applied research methods and that most coursework tends to isolate research from the real, practical problems facing educational practitioners, who constitute the bulk of students populating educational leadership doctoral programs nationwide. This trend is particularly troublesome as educational leaders are encouraged to become practitioner-scholars, capable of investigating and dealing with social issues of equity and democracy (Horn, 2001; Jenlink, 2001a, 2001b).

The debate about reforming graduate research is even more critical today because our elementary and secondary schools need competent researchers who understand how children's learning can be improved (Young, 2001). Yet, if doctoral programs in education intend to increase the pool of qualified researchers, our colleges and universities appear to be failing. A major flaw in the preparation of competent researchers is the reliance on a socialization model that "sees doctoral students as coming to learn appropriate [research] skills and values as they move through a set of developmental stages" (Pallas, 2001, p. 7). This developmental model assumes that students are "empty vessels" (Kolb, 1984) who

have no perspectives on research or relevant experience in school organizations, two highly questionable assumptions given the extensive professional background of most entering doctoral students. However, this perspective helps university professors justify maintaining "distance" from their field associates and helps professors protect status and power asymmetries (Horn, 2001; Jenlink, 2001a, 2001b; Rapp, Silent X, & Silent Y, 2001).

We assert that a more viable approach to preparing practitioner-scholar leaders is to build on these professionals' experiences by immersing them in collaborative structures for learning about and practicing research. Such structures would replicate the kinds of working relations that distinguish their professional lives and address university-field disparities that Bridges (1977) articulated years ago and others (Black & English, 1986; Clifford & Guthrie, 1988) since have discussed from various perspectives. Distinctions between the Ed.D. as a practitioner degree and the Ph.D. as a research degree have been articulated for years (e.g., Townsend, 2002), suggesting that preparing practitioner-scholar leaders would be more appropriate for the Ed.D. degree (Grogan, Donaldson, & Simmons, 2007). However, because there is ample evidence that in reality there is very little difference in the coursework and types of dissertations completed by Ed.D. and Ph.D. students in educational leadership programs (Bredeson, 2006; Irby & Lunenburg, 2006), we contend that the ideas presented here would be applicable to both types of degree programs.

Therefore, the purpose of this article is to advocate how *action-research methods* and *cohort-learning structures* can be used to develop confident, competent, and capable practitioner-scholar researchers. We begin our exploration by describing the moral obligation of graduate programs to help students complete their degrees and then argue for using a practitioner-scholar model. Next, we underscore the viability of action research for developing effective practitioner-scholar leaders before describing how collaborative, cohort structures are best suited for preparing such researchers. Finally, we conclude by presenting essential ingredients of ideal graduate-preparation programs, particularly ones that prepare educational leaders who can significantly affect the social fabric of school organizations and

communities through meaningful social-action research. These foci support our argument that doctoral programs, by employing action research and using cohorts, can prepare capable and confident practitioner scholars who will be able to use research meaningfully to lead their schools and districts.

Moral Obligations of Doctoral Programs

Too many doctoral students do not complete their programs—that is, they do not complete a dissertation and earn their doctoral degree—for reasons that cannot be explained directly by factors inherent to the individuals themselves (Denecke & Frasier, 2005; Dorn et al., 1995; Lovitts, 2001). It stands to reason, then, that those who do finish either have found a "secret" that escapes others or have persisted in the face of elements arrayed against their success (Lovitts, 2006; Rapp et al., 2001). Such persistence may be particularly critical for the majority of those enrolled in educational leadership doctoral programs: part-time students, full-time professionals, and family members as well as older than doctoral students in most other areas. Even so, the dominating assumption in many doctoral programs is that students must make a full-time commitment and engage in full-time study. Further, programs may be predisposed to ensure that certain types of students—especially those who most closely reflect or emulate their professors' research interests—become the "clones" of faculty who seek to replicate their values and their substantive and methodological orientations, ensuring continuity and decreasing or eliminating threats to sacrosanct preferences. Thus, the success or failure of a student in a doctoral program appears to reside mostly outside of the individuals who enter these programs.

Factors Contributing to Student Attrition

While many personal factors affect attrition rates (e.g., job mobility, family and health issues), much of the failure to complete the doctorate can be laid at the feet of the

faculty who promulgate and support programs whose normative systems mitigate success (Rapp et al., 2001). Factors which contribute to non-completion of doctoral work primarily are structural (Lovitts, 2001), including unclear processes, expectations, and unclear outcomes (Lovitts, 2006). Each of these structural impediments is explored below.

Processes. Structured processes, such as course requirements, exams, and other compliance measures, can affect non-completion. Course syllabi specify completion dates for readings and other assignments, detail the nature of assignments and the manner in which they are to be completed, and define assessment criteria. These structures replicate and reinforce similar processes experienced since doctoral students began attending grade school. Moreover, besides program-level factors doctoral students must negotiate various university-level rules and procedures (e.g., dissertation and graduation requirements).

Conversely, when it comes time to prepare a dissertation proposal, the point at which most students falter, the specifications are far less clear (Lovitts, 2006). Graduate programs may offer a dissertation proposal course of one kind or another, provide guidelines for dissertation proposals (see, for example, Sanders & Muth, 2005) or dissertations, or recommend books on dissertation writing (see, for example, Brause, 2000; Cone & Foster, 1993; Fitzpatrick, Secrist, & Wright, 1998; Johnson, 2003; Zerubavel, 1999); however, little is done to connect problems to research practices or to provide experiences in conducting research. Only a fortunate few can leave their jobs and work intensely on research projects where they can learn first-hand through trial and error about connections among research problems, research methods, and research outcomes (Muth, 1989, 1997). Further, it is doubtful that this model, one which extols the “life of the mind” (Lovitts, 2006), applies neatly to educational administration programs, a practice-oriented discipline.

Expectations and skills. Another structural problem in many doctoral programs is unclear expectations or goals for student learning. In addition, the skills needed to do a dissertation—analysis, interpretation, and synthesis; comprehensive understanding of the

field's literature; clear and strong use of methods appropriate to the problem; "sequential and logical" presentation of findings; and the ability to draw larger meaning from the results (Council of Graduate Schools, 1997, as cited in Lovitts, 2006, p. 185)—may or may not be addressed overtly until the very end of coursework. Thus, students may reach the dissertation stage without the skills, the experience, or the confidence needed to develop a proposal and complete the study (Guzmán & Muth, 1999). The absence of an explicit focus on building needed research skills places many students at risk of failing when confronted by demands that require these skills.

In our own institutions, we have struggled with this issue, trying to specify concretely what we expect doctoral graduates to know and be able to do. At the University of Colorado Denver (UCD), for example, this led to a "building-block" approach, in which core knowledge and skills, particularly in research, have been defined and opportunities to learn them have been integrated throughout the program (Guzmán & Muth, 1999). In addition, several courses require major research syntheses, labs engage students in literature reviews to support lab research agenda, and students' portfolios must include products that demonstrate skill at knowledge synthesis (Educational Leadership and Innovation Doctoral Committee [EDLI Committee], 2005-2006). Similarly, at the University of Texas at San Antonio (UTSA), early learning experiences provide students with opportunities to prepare individual and collaborative literature reviews and obtain constructive feedback from faculty.

Outcomes. Faculty also struggle with what constitutes a quality dissertation (Lovitts, 2006) and academic freedom often relieves faculty of the difficult task of conjointly defining typical and alternative dissertation products. Thus, what faculty individually prepared themselves, what the field of educational leadership generally accepts, and whatever meets ambiguous criteria of "empirical" or hypothesis-generated research is the norm. On one hand, in educational leadership programs this often means trivial studies of insignificant problems where instrumentalist becomes the norm, as Haller (1979) pointed

out so many years ago. On the other hand, by specifying outcomes, programs, faculty, and students can better understand their respective roles and responsibilities (Lovitts, 2006; Muth, 2000, 2002).

Inattention to the Moral Obligation to Facilitate Students' Completion

When doctoral programs accept applicants, the faculty initiates an unwritten, social-moral contract, espousing that applicants have the wherewithal to complete the program successfully. This is what students are told and generally believe when they are accepted. After all, few students would invest years and large sums of money pursuing something that they knew was likely to be realized only 40% or 50% of the time. This implied "contract," however, except for the program requirements and structure outlined in an institution's governing catalog or bulletin, does not specify the responsibility of the program to create an environment, process, and culture that ensures students can succeed, barring genuinely idiosyncratic problems not resolvable by time or other means.

Indeed, cynics might suggest that doctoral programs are designed to fill classrooms but then weed out students, particularly as the expense involved in their education rises. For instance, it is cheap, relatively speaking, to educate 10 to 20 students in a series of courses over time. It is very expensive, though, to mentor dissertations through one-on-one student-professor contact. The time spent by additional members of a doctoral committee further raises the cost of seeing a doctoral student through to completion. Thus, at the doctoral level, it is in an institution's best financial interest to admit large numbers of students to fill courses, while ensuring that hurdles—mainly in learning about and doing research—systematically cull students before they reach the most labor-intensive stage in their studies. An alternative view, not shared here, is that these processes ensure that only the very best students complete the doctorate. This argument is specious, when you recall what we said previously about admissions, and immoral.

Other questionable practices are documented by Rapp and her colleagues (2001), including normative systems that automatically disadvantage various non-privileged groups, such as women and minorities. Another questionable practice is the acceptance of foreign students into programs without opportunities to develop their English oral- and written-language skills. Large percentages of non-native English speakers are likely to flounder through classes, becoming overtaxed at the dissertation stage by their lack of language mastery and inadequate support for improving these skills along with the normal structural impediments to completing their doctorates. Many foreign students leave a program feeling that they alone are responsible for their failure. Such problems are compounded when students are not enrolled full time. Students who can only devote part of their attention to their doctoral studies start their programs at a distinct disadvantage, yet most educational leadership doctoral programs depend primarily on such students.

Critical Disconnections

These problems are compounded and abetted by program structures that fail to ensure needed skills are developed during a program of study. In most doctoral programs, learning opportunities are course-based. Thus, learning about research, often viewed as learning “statistics” (Metz, 2001; Muth, 1989), occurs in courses, often taught by professors with a narrow area of expertise in which to contextualize statistics as a research tool. Students tend to learn “formulae,” separated from their practical applications to real-life issues they face in their school settings. When they do get to the dissertation stage, faculty often are surprised that students know little about research methods and designs or how to construct and conduct a high-quality research study (Muth, 1997).

Several disconnections seem to be built into typical doctoral programs. For example, although learning “research” usually is separated from learning “content,” the selection of research methods for any study depends on the nature of the “problem” (content) being investigated. Instead of coupling content- and research-learning activities so that students

gain experience developing, conducting, and explaining successively more complex levels of research on problems of knowledge or practice (Muth, 1990), students are expected to understand these complexities on their own and are held responsible for integrating the various elements of a research study (Muth, 1997).

Another disconnection is the use of inexplicit norms for defining what qualifies as appropriate research (Lovitts, 2006). Faculty specialties, research training, and research interests form the bases for what a program can and cannot do with and for a student. Yet, many—if not most—doctoral programs do not advertise their limitations by saying to potential applicants, "If you are deeply interested in areas other than those listed here, please do not apply to this program as the faculty will not be able to support your research interests."

Further, as Rapp et al. (2001) show, inexplicit norms can be devastating. That is, by admitting students without clearly saying from the start that some types of research studies or research foci are unsupportable, students are mislead to believe that their pet projects or growing social concerns might be possible subjects of study. For example, if faculty cannot support qualitative studies because of lack of interest or expertise (Metz, 2001), which now is much less likely, then students should know this up front. Additionally, if faculty do not have the background or social orientation to support, for example, gender studies, social-action or intervention dissertations, textual analyses, oral histories, or other types of studies, then potential students should be forewarned.

Moreover, many studies that students want to undertake might be seen as inappropriate by faculty because they do not have an interest in the topic, sufficient expertise to support such a project, or the political or moral resolve to help a student carry it out. The problem here is that many students come to doctoral programs believing that they can follow their passion, only to find that faculty determine that their passion—and research interests—are unsupportable or unacceptable. Students who successfully overcome these obstacles are those who are the most persistent, can devote the most time to learning

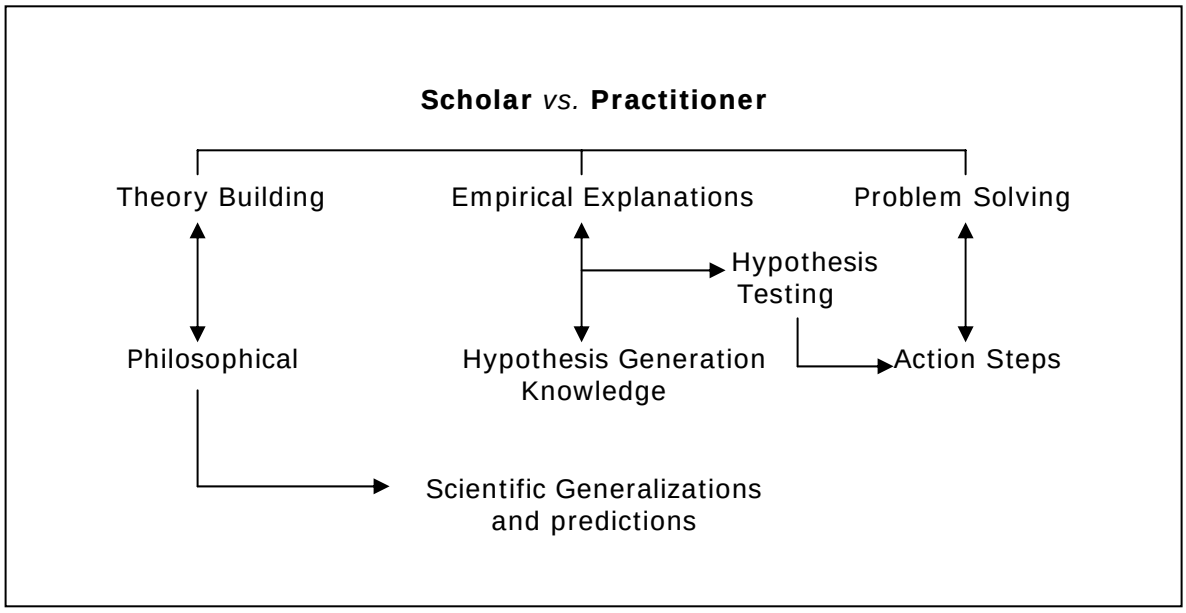
on their own, are best able to emulate their professors, or have supportive faculty who make it their mission to help their students succeed in spite of the program's structure (Lees, 1996). Too often, though, faculty do not even recognize the disabling aspects of program structure.

The Development of Practitioner-Scholar Leaders

Approaches to research can differ along multiple lines—and hybrids are surely possible. It is critical, then, that faculty—and students—know what is appropriate within a program both for developing research competence as a methodologist and for focusing on topics permissible for dissertation studies. Further, programs must decide which orientation to research—"scientist" or "practitioner"—will dominate both its preparation processes and its dissertation studies.

Nevertheless, to sharpen the distinctions made here, the artificial dichotomy in Figure 1 highlights the different research expectations of scholars who wish to build theory and practitioners who wish to solve problems. The scholar model dominates most schools of education (Clifford & Guthrie, 1988; Schön, 1987). Most research, however, falls between the two extremes, adapting the scholar model to meet the needs of practitioner students. These realities of educational research may, in fact, anticipate wider acceptance of alternative models, such as action research, and the harder task of developing practitioner-scholar leaders who can capably address the entire research continuum. Whether a program decides to follow one or another—or both—will depend on how the faculty approach research themselves, what problems they believe are worthy of attention, and which methods they value. In some cases, both approaches may be viable, if the faculty is large enough or collaborates with other departments in supporting dissertation research.

Figure 1. Expectations of research (adapted from Muth, 1989).



Most traditional programs emphasize the scholar paradigm, seeking to emulate traditional arts and sciences approaches (Clifford & Guthrie, 1988) and to train knowledge producers who separate themselves from the sources of knowledge production. Conversely, programs that emphasize social action would focus more intently on producing practitioners who can make a difference in the field, which is the foundation of practitioner-scholar leadership.

Table 1 lays out some general characteristics of scholar, practitioner-scholar, and practitioner research. Scholars, often destined for the professoriate, tend to direct their research at their “disciplines” or the profession as a whole (McCarthy, Kuh, Newell, & Iacona, 1988). Their orientation is supported by “methods” courses, controlled by those who promote traditional models emphasizing theory building and empirical explanations. Practitioners-scholars, however, direct their research to the improvement of practice, based in the needs of the organizations that they seek to help, and blend research methods and

problems of practice. In contrast, practitioners are primarily oriented to solving pragmatic problems.

Each of these orientations has different motivations and directions, and each could profit from the other's assumptions and guiding principles. Problems arise, however, when one approach is assumed to be superior and is presented as universal. Tensions between the dominant scholar model and the other two are exacerbated further by those who challenge the research status quo but remain complacent about conditions in the field (McCarthy et al., 1988). Additionally, it is instructive to recall Bridges' (1977) criticism that university programs in educational administration too often invalidate the very skills that make practitioners effective, making clear at the outset the irrelevance of university-based education for seasoned administrators.

Table 1. Orientations toward research

Function	Scholar	Practitioner-Scholar	Practitioner
Purpose	Development and dissemination of knowledge	Improvement of practice, drawing on both theory and experience	Improvement of practice, drawing primarily on field experience
Research focus	Phenomena	Problems of practice	Practices
Reasoning	Deduction from knowledge base	Induction from general or specific context	Induction from specific context
Assumptions	Knowledge valuable in itself and *for* practice	Knowledge *for*, *of*, and *in* practice	Knowledge *in* practice
Orientation	Neutral investigation of issues	Exploration and identification of general solutions to problems	Application of successful interventions
Consequences of research	Generalization or prediction	Change in groups, organizations, institutions, or society	Changes in specific groups or organizations
Outcome	Discovery of knowledge and theory building	Improvements of general or local practice grounded in theory	Intervention in practice to meet local needs
Reference group	Profession or “discipline”	Institutions, organizations, or groups	Practitioners in own organization or group
Professional aspiration of researcher	Professor in top-ranked universities	Leadership in field organizations or professional associations	Leadership of or successful practice in field organizations
Observational standpoint of researcher	Neutral, unaffected	Partner in intentional change with group, organization, or institution	Partner in intentional change with local group or organization
Role of research participants	Uninvolved	Engaged or involved	Involved

Note. Expanded from Muth (1989) with adaptations from Jenlink (2001a), Quigley (1996), and Quigley & Kuhne (1996, *passim*).

Table 1 also suggests programmatic orientations that align with the research orientations described. For example, programs that prepare scholars focus on theory building, phenomena, and advancing knowledge for the profession or discipline. In contrast, programs that prepare graduates to return to the field tend to focus on improvement of practice, outcomes of practice, and the organizations or groups in which practice occurs. These two orientations can be discrete in "ideal" settings, but the majority of leadership doctoral students is concerned with issues of practice (Boyan, 1981) and expect preparation that will serve them well in their roles as leaders of educational institutions. Instead of pitting their very real needs against the values of scholarly research, programs might well look for opportunities to strengthen the value of research *in*, *of*, and, *for* the field (Jenlink, 2001a).

Here lies the difficulty of creating programs for practitioner-scholar leaders. Rather than preparing students to conduct research that they see as an arbitrary hurdle or simply a utilitarian means of completing a degree (Haller, 1979), practitioner-scholar programs must connect academic requirements and models with students' desire to improve practices in their home institutions and to solve genuine problems (Brown, Markus, & Lucas,1988-1989; Heller, Conway, & Jacobson, 1988). Besides making research practices and their consequences accessible and useful, university faculty could gain considerable credibility with the field by redeveloping their own research and that of their students toward improving practice locally and generally. Improving practice, by the way, is not mutually exclusive with—or antagonistic to—research rigor or knowledge generation. It is made to seem that way merely to elevate the university at the expense of practitioners and other outsiders.

Regardless of how one conceptualizes a program—whether oriented toward encouraging social justice internally (Rapp et al., 2001), externally (Jenlink, 2001a, 2001b), or supporting the status quo—making the implicit assumptions, preferences, and outcomes explicit for all to see is direct and honest (Lovitts, 2001, 2006). Such openness could

increase the productivity of all involved by focusing their work and also could help faculty and students alike to determine appropriate priorities, learning activities, research foci, and supporting methodologies.

Competent, Confident, and Capable Practitioner-Scholars

Besides needing to provide clear expectations about what students can do for their dissertation research, programs need to ensure that graduates become competent, confident, and capable researchers who are skillful practitioner-scholar leaders, capable of investigating and resolving problems of practice (Guzmán & Muth, 1998, 1999; Muth, 1997). Before a program can determine how to ensure that students can almost universally succeed, program faculty must do a detailed analysis of their program's philosophy, pedagogy, expected outcomes, opportunities to learn, enabling structures, and responsibilities (Muth, 1989, 1997, 2000, 2002; Muth et al., 2001). Table 2 provides a partial guide to determining various choices and preferences associated with the functions and types of research in education (Quigley, 1996; Quigley & Kuhne, 1996).

Table 2. Purposes and outcomes of research

Functions	Technical	Practical	Emancipatory
Goal	To understand/generalize	To understand/improve	To understand/redress
Nature	Deductive	Inductive	Inductive
Type of research	Empirical	Interpretive at individual/group level	Interpretive on a group basis
Level of research	Basic	Applied Action	Applied Participatory
Outcome of research	Truth	Local intervention per needs	Structural, political intervention at macro level
Consequence of research	Generalizations/predictions	Change specific group/organization	Large-scale or societal change
Approach	Control	Observe Collaborate	Engage Interact
Methods	Experimental Quasi-Experimental Descriptive	Action Research Grounded Theory Transformative Case Study Phenomenology Ethnography Historical	Any useful methods Community-based Participative Transformative
Subject's role	Uninvolved Acted on	Participate, limited involvement	Participate, high Involvement
Observational standpoint of researcher	Neutral, unaffected	Partner in intentional change: specific, local, often short term	Participant in intentional change: societal, long-term
Researcher responsibility	Ethical standards/practices	Ethical standards/practices Diagnose change	Ethical standards/practices Share in change process

Note: Elaborated and amended from Quigley (1996, p.17) and Quigley & Kuhne (1996, *passim*).

For us, a *competent* doctoral researcher (Guzmán & Muth, 1999) is one who has the substantive knowledge and the methodological skill to develop, organize, and conduct a major research study, the dissertation, as well as future studies of note. Competent researchers have methodological skills that clearly support examination of a focal problem and have deep and broad knowledge of a problem area. Second, a *confident* doctoral researcher is one who has had successful experience conducting various phases of the research process and clearly knows how the pieces relate to one another. In addition, confident doctoral researchers know that they have the support of their faculty in their research endeavors. Finally, a *capable* doctoral researcher is one who has demonstrated the ability to undertake successfully all parts of a research process that constitute the necessary building blocks appropriate to particular research genre (Guzmán & Muth) and can demonstrate these intermediately through research-based presentations and, perhaps, publications.

Action Research and Scholar-Practitioner Leader Development

The preceding analysis and discussion suggests that faculty face a formidable task on two fronts. On one hand, they have the moral obligation to assist doctoral students to complete their degrees. Accounts that indicate that 50% or fewer doctoral students in education complete a dissertation and ultimately receive their degree (Dorn et al., 1995; Kluever, 1997; Sheridan, Byrne, & Quina, 1989) provide us a clear challenge. On the other hand, faculty are charged with developing capable practitioner-scholar leaders who support social change by investigating and resolving persistent problems of practice. This two-pronged dilemma raises an important question: How can faculty help doctoral students complete dissertation research that is socially relevant and practical, yet does not overwhelm them?

A promising approach to this dilemma is the incorporation of *action research* (Macdonald & Wisdom, 2002; Stringer, 1999; Stringer et al., 1997) as a viable option for doctoral students in education. While this is not a new research tradition, many faculty may be reluctant to embrace it because action research may be viewed as less rigorous and more subjective than other forms of research. Further, some purposes may be seen by some faculty as outside of their preferred research traditions (Boyer, 1990; Cooper & Muth, 1994; Quigley, 1996; Quigley & Kuhne, 1996; Schön, 1995). From one vantage point, faculty imbued with canons of objectivity and empiricism may be more comfortable with traditional, technical approaches to research that are designed to elicit knowledge to advance a field of inquiry. From another, students often want to change their organizations or institutions (through practical or action research), if not the world (through emancipatory research). In developing our argument for using action research for practitioner-scholar leaders, we are sensitive to these issues. In the following sections, we (a) define action research and its underlying assumptions, (b) review different types of action research, and (c) examine how action research reflects important tenets of practitioner-scholar leadership.

Defining Action Research

Action research has been defined in numerous ways; however, the following two descriptions capture the essence of this approach:

> Action research is a disciplined process of inquiry conducted by and for those taking action. The primary reason for engaging in action research is to assist the “actor” in improving his or her actions. (Sagor, 2000, p. 3)
>
> Action research is social research carried out by a team encompassing a professional action researcher and members of an organization or community seeking to improve their situation. . . . Together, the professional researcher and the stakeholders define the problems to be examined, cogenerate relevant knowledge about them, learn and

> execute social research techniques, take actions, and interpret the results of actions based on what they have learned. (Greenwood & Levin, 1998, p. 4)

What distinguishes action research from most other research paradigms is the active participation of an individual or a research team in collecting and using data to make decisions in the workplace. By being actively engaged in the research process, those practitioners conducting such research are more likely to find practical and useful results (Stringer, 1999). They also are more likely to learn and effectively use methods essential to informed action (Stringer et al., 1997).

Action research's time may have come because schools and teachers are being held accountable for promoting and graduating competent citizens, and educators are in the best position to "conduct the research on 'standards attainment' themselves" (Sagor, 2000, p. 11). Thus, action research in some form can assist practitioners in making insightful decisions about important aspects of their work. This is quite different from the experience of many educational leaders who have claimed that they had little time to conduct research, perceived most research as impractical, or were unaware of different research paradigms (Black & English, 1986; Glanz, 1998). Further, focusing on problems of practice in dissertation research can provide data for more "basic" or conceptually oriented research as well as contribute practice knowledge to the knowledge base in educational administration.

As practitioners engage in collaborative inquiry, they are afforded the chance to become more reflective about their practice, work on school-wide priorities, and build a professional culture (Sagor, 2000). To facilitate this orientation, action research emphasizes collaboration, focuses on practical problems, and attends to the professional development of the participants (Oja & Smulyan, 1989). Advocates of action research also assume that individuals who are closest to problems of practice in schools—teachers and administrators—are best situated to know what data to collect and how to use it most effectively for making decisions. These assumptions are captured by Caro-Bruce (2000) who

claims that teachers and principals (a) work best on the problems that they identify, (b) are more effective when they examine their own work, (c) need time to think about their work, and (d) provide one another with help, support, and encouragement through collaboration.

Action Research in Practice

As mentioned earlier, action research can be conducted by an individual teacher or principal as well as by a team of researchers. Calhoun (1997) describes three approaches to action research, which differ in the scope of the investigation and the number of people involved: (a) individual teacher action research, (b) collaborative action research involving several classroom teachers, and (c) school-wide action research, which addresses an issue of interest to all teachers and administrators in the building.

Scope. Regardless of the type of action research being conducted, a series of steps or phases guide the process. Stringer (1999) indicates that three phases reflect the action-research process: *looking* (i.e., defining or describing the problem and its context), *thinking* (i.e., analyzing and interpreting the situation), and *acting* (i.e., formulating and incorporating solutions to the problem). Alternatively, Caro-Bruce (2000) breaks action research into a series of discrete steps which include identifying a problem, determining a plan of action, collecting and analyzing data, and planning future action. Perhaps the most detailed process has been outlined by Sagor (2000), who recommends the following critical steps: (a) selecting a focus, (b) clarifying theories, (c) identifying research questions, (d) collecting data, (e) analyzing data, (f) reporting results, and (g) taking informed action. We add to this sequence (h) evaluating the outcomes of one's actions and (i) recycling what is learned. Regardless of the model selected, it is essential to use it explicitly, consistently, and thoroughly.

Potential. Typically, action research begins with practitioners identifying a particular problem, based on examining classroom interactions, reading literature, or reflecting on issues of personal interest or concern (Caro-Bruce, 2000). Although many reports of action-

research projects in education tend to address student learning in K-12 classrooms in the United States, accounts also have surfaced from teachers in other countries on the effects of action research on their own practices (Hollingsworth, 1997). For instance, Sagor (2000) examines action-research projects by classroom teachers and reports that teachers in one school examined how their classroom practices affected students' spelling abilities, independent learning skills, lifelong fitness skills, social skills, and problem-solving abilities. Other studies have explored the influence of college tutors on students' reading abilities, the benefits that students realize from experiential learning activities, and the impact of service learning on students' attitudes (Caro-Bruce, 2000). While most of these studies were local and targeted, their accumulation can lead to ideas for broader, more general research applications.

Action Research and Practitioner-Scholar Leaders

Because practitioner-scholar leaders often are particularly concerned with social change, equity, and democracy in schools (Jenlink, 2001a, 2001b), action research is most appropriate when preparing practitioner-scholar leaders. Some of the earliest proponents of action research have advocated its use for social change (Kemmis, 1988). Others have claimed that action research is necessary for "taking action to promote social change and social analysis" (Greenwood & Levin, 1998, p. 6); consequently, practitioners who engage in action research must have the "explicit ideological commitment to addressing social and political problems of education through participatory research" (Hollingsworth, 1997, p. 89).

To highlight this direct connection to practitioner-scholar leadership, a growing number of action-research studies address social change and equity. Specific examples of the propensity for action researchers to examine issues of social importance include the following:

1. How school partnerships affect social justice and teachers' control of their own professional practice (Hollingsworth, 1997)
2. How teachers influence gender equity (Hollingsworth, 1997)
3. How a sense of belonging affects the achievement of African-American students (Caro-Bruce, 2000)
4. How students in ESL classrooms sort themselves during academic and social activities (Caro-Bruce, 2000)
5. What teaching strategies support the reading development of struggling 9th grade readers (Caro-Bruce, 2000)
6. How working with low-academic elementary students affects college tutors' understanding of diversity (Caro-Bruce, 2000)

Jenlink (2001a) reminds us that practitioner-scholar leaders not only see classrooms and schools as legitimate research sites but also guide their scholarly inquiry with the ethics of social justice, equity, and care. Thus, we contend that action research is an appropriate research orientation for educational leadership doctoral programs for two important reasons. First, it is an approach to inquiry that is viewed as relevant and practical by and for educational practitioners, especially teachers and principals, who comprise the vast majority of educational leadership doctoral students. Therefore, if the dissertation is the major stumbling block to completing a doctoral degree (Burnett, 1999), then encouraging action research for dissertation studies may help motivate individuals to prepare themselves to be competent researchers who graduate with relevant skills that they can use capably to improve their environments continuously over time. Second, if doctoral programs are serious about developing practitioner-scholar leaders, then a social-action agenda of action research can ensure that doctoral graduates understand the importance of research aimed at advancing change, equity, and care in school organizations. Such engagement also

increases the likelihood that research learning will be retained, used, and transferred to novel settings.

Cohorts and Scholar-Practitioner Leader Development

Most doctoral programs incorporate an apprenticeship model in which graduate students learn research by working under the expert direction of a research advisor and dissertation committee members while conducting an in-depth research study (Burnett, 1999). Because this approach is highly individualistic and generally ignores the potential of collaborative research, using learning cohorts and research teams during doctoral programs is gaining popularity (Barnett, Basom, Yerkes, & Norris, 2000; Browne-Ferrigno & Muth, 2003; Burnett; Dorn et al., 1995; Muth & Barnett, 2001; Norton, 1995). The intended outcome of cohort models not is only to provide doctoral students with collective guidance in an attempt to improve the quality of their research supervision but also to encourage their persistence to degree completion. As Murphy (1993) argues, “the cohort structure promotes the development of community, contributes to enhanced academic rigor, and personalizes an otherwise anonymous set of experiences for students” (p. 239).

Besides encouraging collaborative support throughout the research process, the cohort model has been advocated as a means for developing practitioner-scholar leaders and for achieving “social justice and caring in our schools and communities . . . because of its inherent social and interpersonal potential” (Horn, 2001, p. 320). In order to explore the collaborative potential of cohorts for developing practitioner-scholar leaders, we briefly summarize existing evidence on the use and effects of cohorts, and examine their influence on persistence in doctoral programs.

Use and Effects of Cohorts

Although cohorts are not a new approach in delivering leadership-development programs (Achilles, 1994; Basom, Yerkes, Barnett, & Norris, 1996/1997), they experienced

a revival beginning in the mid-1980s (Cordiero, Krueger, Parks, Restine, & Wilson, 1992; Milstein & Associates, 1993). Estimates suggest that as many as 50% of graduate leadership preparation programs are using cohorts (Barnett et al., 2000) and adapting program delivery to this model. For instance, reports mention increases in curriculum integration, team teaching, and interactive, experiential learning activities as well as reductions in course scheduling problems (Martin, Ford, Murphy, Rehm, & Muth, 1997; Yerkes, Basom, Barnett, & Norris, 1995).

Faculty and students also report various advantages of cohort learning. Not only are students' scholarship, reflective abilities, and group learning enhanced (Burnett, 1999; Hill, 1995; Leithwood, Jantzi, & Coffin, 1995; Norton, 1995), but their interpersonal relationships also are affected, as evidenced by their collective sense of social bonding, cohesiveness, and community (Browne-Ferrigno & Muth, 2003; Dorn et al., 1995; Herbert & Reynolds, 1992; Horn, 2001; Murphy, 1993). Further, some evidence suggests that cohort experiences extend beyond a graduate program by building professional networks and altering other workplace behaviors (Muth & Barnett, 2001).

Nevertheless, some distinct disadvantages attend cohort structures for students, faculty, and program delivery. For instance, the intense nature of the cohort experience can produce interpersonal conflicts among cohort members and between them and faculty. Academic competition may occur (Hill, 1995) and cliques may develop, resulting in power struggles among students (Teitel, 1997). Often, cohort members hold faculty more accountable for their teaching strategies and the relevance of course content (Barnett et al., 2000; Muth & Barnett, 2001), thus increasing faculty workloads (Burnett, 1999; Norton, 1995). Despite the perception of many faculty that cohorts provide more predictable course scheduling and program delivery, this structure is sometimes viewed as increasing program rigidity and decreasing flexibility because students cannot enter whenever they wish or speed up or slow down their programs (Barnett et al.).

Cohorts and Persistence

Most students entering educational leadership doctoral programs face the difficult demand of completing their degrees while being employed full time and handling family responsibilities (Burnett, 1999; Dorn et al., 1995). Despite these challenges, faculty often claim that students involved in a cohort are more likely to complete their doctoral degrees (Norton, 1995). Growing empirical evidence suggests that cohort structures do influence persistence and doctoral degree completion. For instance, in examining educational leadership doctoral programs in several universities, Dorn et al. (1995) discovered that students find that when they have the opportunity to "work together as a team earning doctorates [they] benefit from the experience, share those benefits with their workplaces, and most importantly, tend to find the motivation to complete their doctorates" (p. 305). In addition, when students enroll in a cohort seminar where they provide feedback to one another on their proposals and dissertations, the quality of their work improves and they are more likely to complete the dissertation (Burnett, 1999). These examples suggest that cohorts are a powerful way to influence doctoral students' persistence, model the principles of collaborative research, and encourage educators to spend time together thinking about their work and providing one another with mutual support and encouragement (Caro-Bruce, 2000).

Toward an Improved Practitioner-Scholar Doctoral Program

Throughout, we have raised concerns about the current way in which educational leadership doctoral students learn how to conduct research. We also have suggested the promise of cohort learning and action research to develop practitioner-scholar leaders, ones who are highly qualified to conduct meaningful research in their organizational settings. In this final section, we synthesize our arguments by (a) identifying the principles that should guide outstanding practitioner-scholar leadership preparation programs, (b) describing

specific structures and activities that reflect these guiding assumptions and principles, and (c) clarifying the types of evidence needed to ascertain whether doctoral program are preparing capable practitioner-scholar leaders.

Guiding Principles

Most educational leadership doctoral programs view students as having little or no research expertise (Pallas, 2001). Furthermore, doctoral students' research preparation generally is piecemeal and conducted in isolation from their colleagues in segregated courses, often taught by specialists unfamiliar with issues in educational administration. We contend that a more realistic approach is to tap the individual and collective professional experiences and curiosities of practitioners who enter and progress through graduate study together. Thus, the following assumptions and structures might guide a doctoral program's research program, especially one dedicated to developing practitioner scholars:

1. Educators are motivated to learn about and resolve their day-to-day workplace problems (Caro-Bruce, 2000) and should be treated as "expert novices" (Muth, 1997).
2. Research activities are learned best when applied to the realities of the workplace (Muth, 1989, 1997).
3. Adult learning principles, particularly the use of experiential, hands-on learning activities, are most effective in teaching research (Guzmán & Muth, 1999; Muth, 1989).
4. The study and practice of research should be embedded throughout the entire program of study (Guzmán & Muth, 1999; Metz, 2001; Muth, 1997; Page, 2001).
5. Useful learning and persistence result when professional colleagues engage in collaborative cohort activities (Burnett, 1999; Dorn et al., 1995; Norton, 1995).

Structures and Activities

If taken seriously, these guiding principles could shape the ways in which doctoral programs are organized and the types of learning activities that graduate students would experience. In particular, practitioner-scholar programs will need to (a) adjust their application and admission requirements, (b) build doctoral students' capabilities to become collaborative practitioner scholars, and (c) provide an in-depth, action-research dissertation experience. Examples of how these program features would appear are described below.

Application and admission practices. Typically, educational leadership doctoral students decide to apply on their own, with little or no involvement or support from their employing school districts. Interestingly, many school-university partnership programs for students seeking a master's degree or leadership certification, have implications for doctoral program admissions (e.g., Murphy, 2006; Whitaker & Barnett, 1999). For instance, doctoral program faculty might approach district officials to learn about the challenges and problems that their schools are facing, consider how doctoral program applicants from their districts might conduct research to understand these problems better and to resolve them, and identify promising applicants for the program. Based on this information, cadres or teams of practitioners from a single district might be encouraged to apply for the program, indicating how their involvement would have both personal and organizational benefit (Furtwengler, Furtwengler, Hurst, Turk, & Holcomb, 1996). Finally, district administrators might support students admitted to the program by providing financial reimbursement and agreeing not to reassign participants to new jobs during their doctoral program of studies. These types of application and admission strategies have the potential of gaining greater commitment and relevancy of participants' involvement in the doctoral program, particularly in gathering research evidence on the important issues districts and schools encounter.

Foundations for practitioner-scholar leaders. If program faculty are committed to developing practitioner-scholar leaders, then they must provide numerous opportunities for collaborative scholarship throughout students' program of study, not just during the

dissertation (Metz, 2001; Page, 2001). As Grogan, Donaldson, and Simmons (2007) suggest, if students are expected to use action-research methods to complete their dissertations, then they should "have the opportunity of learning how to use action research to address one or more of the problems *they identify together with relevant colleagues* [italics added] during course work" (p. 9). We completely agree with their assessment, and based on our experiences implementing doctoral programs, we have found several promising strategies for facilitating the types of collaborative scholarly relationships necessary for developing scholar practitioner leaders and researchers, which include scholarly writing projects, vertical labs, and electronic networks.

Scholarly writing projects. Often, graduate students in educational leadership have little or no prior experience conducting research or writing for scholarly audiences. Because many graduate students have limited views of what constitutes effective scholarly writing, arguments abound about the need for formal assistance for students in developing their scholarly writing skills (Koncel & Carney, 1992; Torrance & Thomas, 1994). During their first year of study, doctoral students at UTSA learn about scholarly writing and research by completing a scholarly writing project intended "to develop and/or enhance the form, style, content and quality of their academic writing during the initial phase of their doctoral study" (Caffarella & Barnett, 2000, p. 40). The development of the paper is a collaborative effort; each student initially drafts a scholarly piece, which is then formally critiqued by an instructor and another student in the cohort. Based on this feedback, students respond in writing to the critiques and prepare a second draft; once again, the peer colleague and instructor provide a written critique of the revised paper. The third and final version of the paper then is submitted at the end of the semester. Students completing the scholarly writing project report that the collaborative aspect of the assignment, particularly the personalized attention and the iterative feedback, is responsible for building their confidence as academic writers (Caffarella & Barnett).

A variation on this theme at UCD is supplied through ongoing workshops offered only to doctoral students on process writing and APA (American Psychological Association, 2001) academic style. These workshops have been developed by a professional academic editor and writer who has worked with several doctoral programs over the last 25 years. During these workshops, students work on texts of their own choosing, including course assignments, portfolio products, grant applications, conference presentations, dissertation proposals, or dissertation chapters. Workshop sessions concentrate on expectations of academic readers, writing practices, revision strategies, long-term project management, and collaborative examination of student texts.

Vertical labs. The concept of the applied "laboratory" in educational leadership preparation was developed at UCD in the early 1990s (Muth, 1997). Based loosely on laboratories in the sciences, these educational labs, or vertical cohorts, focus faculty and student attention on significant problems of practice. They allow students to work directly with faculty over time on research activities that lead to portfolio products, topic focus area papers, and dissertation studies. Like many institutions, UCD does not have funds to support full-time students. For part-time students, who comprise 95% of UCD's leadership doctoral students:

> The doctoral labs play a pivotal role in the EDLI program. We are committed to improving professional practice through a scholarship of practice. We reject the dichotomies of research versus practice, theoretical versus applied, and academic versus "real-world." We acknowledge the value of practitioner research and encourage mutual respect and support for different scholarly roles for diverse members of universities, schools, and other organizations. The doctoral labs provide the community within which you accomplish your scholarly goals. (EDLI Committee, 2005-2006, p. 11)

Thus, the doctoral labs support faculty and students as they collectively and collaboratively establish research agenda, work in and with communities of practice to identify and address significant problems of practice, and develop student inquiry competencies necessary to conceptualize and complete major research studies.

Electronic networks. Finally, electronic networks can facilitate ongoing collaboration between graduate students and faculty. For instance, UCD's high reliance on e-mail and online course structures (e.g., eCollege, Blackboard) is an illustration of how graduate programs can establish integrating processes to support doctoral students' collaborative research efforts. Besides giving students almost instant access to faculty advice, these structures also facilitate (a) exchanges of documents and bibliographies among students and faculty, (b) asynchronous discussions of topics between classroom and vertical lab sessions, (c) planned and just-in-time synchronous "chats" on various subjects, (d) peer reviews of topic-focus papers and pre-dissertation topic papers, and (e) preparation for in-class and other scholarly presentations. These communication devices are particularly useful for students who do not live in close proximity to the university or to one another. Google Documents (http://docs.google.com/) and ZOHO.com (http://www.zoho.com) now provide free access to "groupware" which allows all participants to change documents and view changes by others in real time.

In-depth dissertation action research. Recent discussions of how to improve the relevancy and usefulness of the dissertation process for educational leadership programs reinforce our arguments for incorporating action research (e.g., Firestone & Riehl, 2005; Grogan et al., 2007; Herr & Anderson, 2005). While action research does not have a long tradition in education (Grogan et al., 2007), it draws attention now because of its potential to influence individual practitioner's actions, to impact teams of practitioners working on joint projects, and to transfer ideas and practices to similar workplace settings (Coghlan & Brannick, 2005).

Today's dissertation is intended to be the capstone experience in which doctoral students apply the research knowledge and skills gained throughout their program of studies: The foundations for collaborative, problem-based research are best developed early in a program so that students can build sequentially toward the dissertation (Guzmán & Muth, 1999). This holds as well for action research, which clearly should become part of the expected learning activities and engagements as a student progresses through a program. One of the more compelling arguments for using action-research dissertations has been advanced by Grogan et al. (2007). They suggest a developmental approach during the first two years of study, in which graduate students reflect on current practices in their schools, using various conceptual and theoretical lenses. As students gain the ability to connect theory and practice, they formulate a plan for an action-research project, which ultimately becomes the capstone dissertation research study.

If, however, an action-research dissertation process is undertaken, faculty-student roles and relationships will shift. In general, a more collective, inclusive relationship emerges between faculty and students. For instance, if cohorts of students have been admitted to address common problems facing their schools and/or districts, then subgroups of students might be working on dissertations tackling various aspects of the problem being investigated. In addition, faculty advisors would need to appreciate and support the multiple roles of researcher, organizational insider, administrator, and employee played by the graduate student (Herr & Anderson, 2005). Finally, the composition of committees would need to include external representation, such as a school leader from a similar organization (Grogan et al., 2007). As a result, committee members not only take on their traditional role of advising students about appropriate research methods for collecting and analyzing data, but they also extend their role by assisting students to develop intervention plans for resolving the issues confronting their organization.

Evidence of Success

In recent years, a growing debate has focused on whether graduate programs influence the performance and effectiveness of school administrators (Achilles, 1994; Brent, 1998; Levine, 2005). For instance, Haller, Brent, and McNamara's (1997) analysis revealed that schools led by principals with doctoral degrees were no more successful in improving student performance than those schools led by principals without the advanced degree. Despite the current absence of clear evidence that graduate programs significantly affect educational leaders and the performance of their schools, we contend that a systematic series of investigations might reveal the degree to which graduate programs are producing capable and competent practitioner-scholar leaders (Muth & Barnett, 2001). In particular, the framework developed by Guskey (2000) for evaluating the effects of professional development activities can serve as a foundation for determining the effectiveness of graduate programs that strive to develop practitioner-scholar leaders. This model reflects five levels of possible impact:

1. *Participants' reactions* (Level 1): Do the participants feel that their time is well spent in the program, and did the materials, activities, and learning environment facilitate their learning?
2. *Participants' learning* (Level 2): Do the participants acquire the program's intended knowledge, skills, and dispositions?
3. *Organization support and change* (Level 3): Do the organization's policies and practices support the innovations introduced by program participants?
4. *Participants' use of knowledge and skills* (Level 4): Are program participants able to apply new skills and knowledge in their organizations?
5. *Student-learning outcomes* (Level 5): Is student performance or achievement affected by innovations introduced by program participants?

The first two levels of impact tend to rely on the perceptions of program participants, although Level 2 also can be assessed in field-related activities and work environments. By surveying and interviewing doctoral students during their graduate program, faculty could determine how students react to the learning environment and the practitioner-scholar knowledge, skills, and dispositions they are acquiring. Of course, faculty would need to be very clear about the knowledge, skills, and dispositions that they expect to impart. Levels 3, 4, and 5 are more difficult to ascertain; however, if action-research principles are used to guide inquiry processes, these levels might be revealed during the students' program of study or become subjects of study for succeeding cohorts and faculty concerned about short- and long-term program effects.

Because one of the main purposes of action research is to determine the results of an innovation or solution (Greenwood & Levin, 1998), as they implement specific programs or solutions in the workplace, doctoral students would be gathering data about the support structures in the school and the effectiveness of innovations (Stringer et al., 1997). Thus, their research activities would not only be extremely relevant and practical, but also would help determine whether their innovations have the desired results, especially in terms of organizational change (level 3) and student learning (level 5). Such data would be useful to analyze programs, to assess how well students realize program intentions, and to propose modifications (Muth & Barnett, 2001).

A Concluding Note

As mentioned earlier, implementing coherent, cohort-based doctoral programs with rich and diverse research experiences requires faculty to develop long-term partnerships with schools, districts, and related agencies and organizations. Such partnerships would change program focus significantly as districts and their research needs become the focus of attention, rather than only faculty research preferences. To prepare practitioner-scholar

leaders, districts, faculty, and students would then collaborate to develop viable research foci that mutually address their joint and individual needs.

Because collaboration requires significant investments of time, it seems appropriate to establish school-university partnerships with a broad spectrum of collaborative programs: (a) pre-service educational leadership preparation cohorts for aspiring school leaders, (b) in-service professional development leadership cohorts for practicing school leaders, and (c) doctoral cohorts designed to gather research data to reveal and resolve persistent problems facing school districts. By developing such partnerships, university faculty could create rich action-research agenda that facilitate their work with students on important problems of practice. At the same time, leadership in schools and outcomes for children and youth in their schools and communities would benefit. Further, compilations of such studies over time and across schools and districts could add significantly to our knowledge base about effective field practice (cf. Bellamy, Fulmer, Murphy, & Muth, 2007). Our suggested partnerships and the reconceptualization of research practices during doctoral preparation can help to develop competent, confident, and caring practitioner-scholars, ones who can make a significant difference on the lives of children and adults in schools.

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