Building Educational Leadership Capacity

Through a Graduate Action Research Course

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Introduction

Educational leadership preparation programs face increased pressure to ensure graduates have the knowledge, skills, and dispositions (Barnett, 2004; Bass, 1990; Yukl, 2002) to guide schools’ and districts’ progress toward achievement targets. With standards-based education reform and increased P-12 accountability for student outcomes under NCLB (U.S. Department of Education, 2002) the research focus on student outcomes has thus “trickled up” from P-12 to postsecondary settings, exploring whether educational leaders have been adequately prepared for their complex responsibilities. In addition, the current ESEA reauthorization plan proposes to affirm educational leaders are “well-prepared and effective” (Klein, 2010), portending an even greater emphasis on accountability for both leadership preparation programs and school leaders.

Increasing interest in educational leadership preparation in the 1990s resulted in efforts to establish knowledge and skill standards for school leader certification and leadership preparation programs (Hoy, 1994; Thomson, 1993). The updated Interstate School Leaders Licensure Consortium (ISLLC) standards (2008) galvanized attention to educational leadership policy, intended to improve collaboration between policymakers, researchers, higher education, and practitioners. The ISLLC standards address questions about essential leadership content and instruction in preparation programs, asking, “How can schools of education effectively convey knowledge in a coherent fashion?” (CSSO, p. 5)

The standards provide guidance for higher education by outlining core concepts for leadership practice. Among other leadership capacities and behaviors, the ISLLC Policy Standards assert the importance of leading school improvement through processes of data collection and analysis, monitoring and evaluation of the instructional program, promotion of individual and organizational learning, and collaboration between stakeholders. Collectively, ISLLC 2008 upholds the importance of inquiry to leadership for school improvement.
Fundamentally, inquiry is at the core of school improvement. When conducted by practitioners, educational inquiry differs from traditional academic research due to role-related and contextual factors (Corey, 1953; Lewin, 1948). Practitioner-led inquiry in schools is typically identified as action research (Sagor, 2000), described by Glickman and colleagues (2006) as a core task of instructional leadership.

Researchers question whether educational leaders are effectively prepared to lead school improvement. The issue, according to Murphy (2007), is that universities privilege research knowledge above practice-based knowledge. He asserts that in the absence of practice-based support in preparation programs, students create their own understandings from practice and “use stories heavily to improve their own action-oriented learning. It takes a heavy dose of academic arrogance . . . to continue to marginalize important lessons forged in the field” (p. 582). Furthermore, Barnett (2004) reports school leadership program graduates perceive that “while national standards seem to provide an accurate description of a leader’s daily activity, the preparation provided to meet those activities is lacking” (p. 121). Finally, researchers specifically question whether leadership preparation programs include effective instruction of practice-based inquiry (Clark & Clark, 1996; Levine, 2005).

Thus, an important challenge for faculty is learning how to design and teach action research to aspiring educational leaders. The research literature contains few reports of how graduate programs teach action research (Sankaran, Hase, Dick, & Davies, 2007) and even fewer peer-reviewed articles specific to educational leadership. Addressing this gap in the research literature, this study explores how a graduate practitioner research course affects students’ capacity to assume educational leadership roles. Within a participatory action research design, mixed methods are used to collect and analyze data on course design, activities, and student participation and learning.

The article is organized in four sections. First, the literature underscoring the theoretical foundation for action research, needs of adult learners, and the purposes of action research coursework in leadership preparation programs is briefly examined. Next, study parameters and methodology are
described. The third section presents study findings, while the fourth section discusses study limitations and outlines helpful practices for participatory action research courses suggested by the findings and current literature.

**Literature Review**

Action research has vied for legitimacy in higher education (Greenwood, 2007; Levin & Martin, 2007). It has survived a welter of scholarly disagreements over appropriate researcher stance, involvement of stakeholders, methods and checks for assuring reliability and validity, and the notion of action within a research cycle (James, Milenkiewicz, & Bucknam, 2008). Davies (Sankaran, et al., 2007) asserts, “In my experience, the institutional setting of higher education can retard and restrict ‘the educating of action researchers’” (p. 297). Despite points of resistance, esteemed researchers have helped develop action research theory and practice.

**Theoretical Foundation for Action Research**

Kurt Lewin, referred to as the “founding father of action research,” is credited with coining the term (Peters & Robinson, 1984). His work sought to bridge general social laws with problem solving in context, asserting that “action, research, and training [are] a triangle that should be kept together” (1948, p. 211). Lewin promoted a workshop approach for participants learning to diagnose, plan, and evaluate problem-solving actions (1948). Schön favored a similar method, described as a “practicum . . . designed for the task of learning a practice” (1987, p. 37), with coaches tutoring students through cycles of reflection and action.

Action research emerged as an instrument for educational leadership through integration with organizational development research (Argyris & Schon, 1974; Coghlan & Brannick, 2001) and systems theory (Senge, 1994). Educational leaders have implemented action research to develop and evaluate programs (Dick, 1998). When leaders search for ways to collect, analyze, and respond to data, action research invites broad collaboration and problem solving (Sagor, 2000). While varying action research
models have been promoted, they commonly include participants’ collaborative work through “a series of systematic cyclical or iterative stages of fact finding, reflection and planning, strategic action, and evaluation” (Peters & Robinson, 1984, p. 121).

**Needs of Adult Learners**

There does not appear to be one overarching theory of adult learning and development (Kilgore, 2001), but three adult learning concepts offer particular insights for this study, including the centrality of experience, the power of transformative learning and reflection, and the importance of social context and interactions.

The notion of learning through experience is not new (Glickman, Gordon, & Ross-Gordon, 2009). However, Brown, Collins, and Duguid’s (1989) theory of situated cognition explains how traditional instruction, delivering content through abstract, decontextualized methods, may actually confound learning. They assert that meaningful, lasting knowledge is created through experience. Knowles’ contributions (1984) to the theory of andragogy directly connects adults’ experiences to new learning. He proposed five characteristics of adult learners, at least three of which implicate the experiences of adult learners in creating new knowledge, theorizing that a) adults need to self-direct their learning; b) they seek to bring their experiences to bear in new learning situations; c) they learn more readily when engaged in solving real-life problems; d) they prefer to apply new learning immediately in real-life contexts; and e) they are intrinsically motivated.

Another important adult learning concept is termed “transformative learning,” described as the process by which we transform our taken-for-granted frames of reference . . . to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action (Mezirow, 2000).

As frames of reference develop through experience, adults need learning experiences that cause them to reexamine held beliefs. Being fed new information is insufficient to create changes in beliefs that will
lead to changes in action. Mezirow (1991) emphasizes that new learning is triggered through what he describes as a disorienting dilemma, creating opportunities for transformation. Further, reflection as a means of facilitating transformative learning is suggested by multiple researchers (Cranton, 1994; Schon, 1987).

Finally, adult learners benefit from learning with others, creating knowledge in action through social contexts (Schon, 1987). For adult learners, it is “the nature of the interactions among learners, the tools they use within these interactions, the activity itself, and the social context in which the activity takes place [that] shapes learning” (Hansman, 2001). Thus, learning may be facilitated by knowledgeable instructors who immerse adult learners in authentic practice to promote new learning.

**Purposes of Participatory Action Research in Educational Leadership Preparation**

Participatory action research coursework affords graduate students opportunities to build educational leadership capacity. Uniquely suited to adult learners, it heeds Murphy’s (2007) claim that students need to explore practice-based problems and solutions. Course instructors can guide projects tailored to students’ research questions and contextual factors. Developing coursework to respond to learner expertise and needs, while facilitating application to practice, addresses adult learners’ characteristics and expectations (Merriam, 2001). This also increases the likelihood that students will continue applying their new learning in practice (Muth, 2000, 2002).

As course participants learn to describe problems of practice and explore possible actions in school-based teams, professional dialogue shifts from talking “about” problems to taking ownership for them. This shift reflects Freire’s (1970) concept of conscientization, enlightening and empowering researchers through new knowledge. Thus, participatory action research can help build a culture of inquiry, involve stakeholders in meaningful professional development, and increase participants’ engagement, expertise, and professionalism (James, et al., 2008). When graduate students experience empowerment through their work with school-based teams, they begin to realize their potential for
leading inquiry and change. These experiences have been described by an action research instructor as a “metamorphosis that borders on life changing” (Sankaran, et al., 2007).

Furthermore, leading a participatory action research project allows students to practice specific skills critical to effective educational leadership. Beyond framing questions to investigate problems of practice, students can learn appropriate methods for collecting and analyzing data; how to facilitate a diverse stakeholder team; and how to increase stakeholders’ capacity for engagement, leadership, and change (James, et al., 2008; Sagor, 2000; Stringer, 2007). Participatory action research coursework can also help aspiring leaders work with other educators on core instructional improvements in a holistic manner, creating “a rippling of water that activates the four seas of direct assistance, professional development, curriculum development, and group development” (Glickman, et al., 2009, p. 310).

Participatory Action Research Study Parameters and Methodology

The purpose of this study is to explore how a graduate practitioner research course affects students’ capacity to assume educational leadership roles. Within this participatory action research study, mixed methods are used to collect and analyze data on course design, activities, and student participation and learning.

Study Parameters

Parameters of context, participants, and course curriculum bound the study (Miles & Huberman, 1994), described in the next sections.

Program and course context. This practitioner research course is offered by a large, research intensive Midwestern university, and is required of all K-12 Administration students seeking masters (MA) and educational specialist (EdS) degrees. It is the final research course in a two semester sequence, and typically concludes students’ formal coursework. The first research course sets the foundation for educational inquiry. In addition, the MA and EdS programs are delivered in cohorts. The university encourages faculty to teach some sessions online, utilizing a hybrid model of instruction.
**Course participants.** Participants included the author as course instructor, and the nine students enrolled in the course. A recent doctoral graduate, I was asked by the department’s program coordinator to teach the research sequence to this cohort, which met at a regional location approximately 60 miles from the main campus. While the department preferred not to have adjunct faculty teaching the research courses, they did not have sufficient tenure-track faculty to cover the courses. They knew me personally as a department graduate and were familiar with my scholarly and professional record.

The same nine students who took the first semester inquiry course also enrolled in and completed the second semester practitioner research course, forming the sample for this study. While not a diverse group in personal characteristics, they were quite diverse in their professional characteristics, summarized in Table 1. In addition, they were cohesive as a group when I joined their cohort in Fall 2008, displaying high degrees of mutual respect and support. Six of the students started their programs together, while the other three joined the cohort the previous summer. This helped build an inquiry-based culture during our two semesters together, allowing frank dialogue and uncomfortable issues to be addressed directly within the group.

**Course curriculum.** I met with the program coordinator to review previous course syllabi, texts, and supplemental readings. While I submitted my syllabi for review before each semester, I essentially constructed the syllabi, selected additional readings, created assignments, and delivered the course on my own. However, I also knew the coordinator was willing and available for consultation. I did contact her a few times to discuss general questions about students, grading, and plans for comprehensive exam
Table 1

*Characteristics of Action Research Course Students, Winter 2009 (n=9)*

<table>
<thead>
<tr>
<th>Characteristic/Student</th>
<th>Program Status</th>
<th>Educational Context</th>
<th>School &amp; Position</th>
<th>Years of Teaching Experience</th>
<th>Leadership Experience</th>
<th>Professional Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>MA (SS 08)</td>
<td>Suburban Public</td>
<td>PreK-5 B &amp; A Sup.(^1)</td>
<td>3</td>
<td>1</td>
<td>PreK Director</td>
</tr>
<tr>
<td>Student 2</td>
<td>MA (SS 08)</td>
<td>Suburban Private</td>
<td>8-12 Tech Coord.</td>
<td>4</td>
<td>0</td>
<td>Undecided</td>
</tr>
<tr>
<td>Student 3</td>
<td>MA (SS 08)</td>
<td>Suburban Private</td>
<td>10-12 Eng &amp; Sci</td>
<td>7</td>
<td>0</td>
<td>Private School Principal</td>
</tr>
<tr>
<td>Student 4</td>
<td>MA (FC)</td>
<td>Rural Public</td>
<td>K-5 Art</td>
<td>9</td>
<td>0</td>
<td>Elementary Principal</td>
</tr>
<tr>
<td>Student 5</td>
<td>MA (FC)</td>
<td>Urban Public</td>
<td>9-12 Soph. English</td>
<td>9 (Nat. Bd. Cert.(^2))</td>
<td>3 (Dept. Chair)</td>
<td>Secondary Principal</td>
</tr>
<tr>
<td>Student 6</td>
<td>MA (FC)</td>
<td>Rural Public</td>
<td>K-5 5(^{th}) grade</td>
<td>7</td>
<td>2 (Teacher Leader)</td>
<td>Elementary Principal</td>
</tr>
<tr>
<td>Student 7</td>
<td>EdS (FC)</td>
<td>Suburban Public</td>
<td>6-8 Special Ed.</td>
<td>13</td>
<td>3 (Dept. Chair)</td>
<td>Special Ed. Director</td>
</tr>
<tr>
<td>Student 8</td>
<td>EdS (FC)</td>
<td>Suburban Public</td>
<td>K-5 Title I</td>
<td>23</td>
<td>7 (Teacher Leader) 1 (Interim Principal)</td>
<td>Elementary Principal</td>
</tr>
<tr>
<td>Student 9</td>
<td>EdS (FC)</td>
<td>Rural Public</td>
<td>9-12 Soph. English</td>
<td>17</td>
<td>4 (Dept. Chair)</td>
<td>Secondary Principal/ Supt.</td>
</tr>
</tbody>
</table>

\(^1\)Before and After School Childcare Supervisor
\(^2\)Teacher holds National Board Certification.

Notes: MA=Masters degree student; EdS=Educational Specialist degree student; SS 08=joined cohort in Summer Semester 2008; FC=final course required for degree.

In large part, the course content and activities were co-developed with participants based on the previous semester’s experiences and in response to their emerging needs. While the course standards and final proposal assignment did not change, I modified activities and pacing of interim assignments to scaffold their work.
In choosing a course text, I sought a source incorporating common elements of action research (Peters & Robinson, 1984) that was user-friendly for a first-time instructor of action research and appropriate for graduate students. I wanted it to focus on school-based action research, with a strong conceptual model and supporting content. I found several good texts, but based on my review and positive experiences reported by a colleague, I chose a recent book authored by James, Milenkiewicz, and Bucknam (2008). Their model, termed “participatory action research” or PAR, is comprised of iterative cycles of diagnosis, action, measurement, and reflection. The text also has other beneficial features, including its emphasis on educational leaders’ work with schools and stakeholder groups.

**Methodology**

The study methods were aligned to its purpose, research questions, and the PAR model (James, et al., 2008).

**Questions.** Based on the study purpose, I formulated the following exploratory research questions:

1. How can a graduate student course in participatory action research be designed to promote student practice of critical leadership capacities?
2. What significant challenges emerge for students and instructor in a participatory action research course?
3. What are critical student outcomes in a participatory action research course? How might student outcomes be improved?

**Data Collection and Analysis.** Multiple data sources are utilized in this study. Instructor-generated data sources include the course syllabus, instructional handouts, and reflective journal entries written after each class session. In addition, data is included from the nine graduate students, including their discussion board posts and responses, action research journals, and completed assignments. Data is also incorporated from their university course evaluations, received approximately three months after the course was completed. Information on data sources is summarized in Table 2.
### Table 2

*Information on Data Sources*

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Data Collection Events</th>
<th>Pages of Data</th>
<th>Content</th>
<th>Data for Research Questions (by Question Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Syllabus and Handouts</td>
<td>10 (documents)</td>
<td>32 (SS &amp; DS)</td>
<td>Course design: Instructional activities &amp; scaffolds</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>Instructor’s Reflective Journal</td>
<td>14 (following each class)</td>
<td>11 SS</td>
<td>Intent behind course design &amp; activities, Reflections on class sessions &amp; activities, Reflections on students’ responses &amp; progress, Ideas to improve course content, process, and student outcomes</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Instructor &amp; Student Discussion Board Posts</td>
<td>7 (7 online sessions)</td>
<td>131 SS</td>
<td>Initial instructor posts to frame questions and discussion, Instructors’ responses to students’ posts, Students’ responses to initial instructor post, Students’ responses to peers and instructor’s posts</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>Student Research Journal Entries</td>
<td>7 (per student, as assigned)</td>
<td>40 SS</td>
<td>Students’ responses to instructor-provided journal prompts re: PAR project tasks and activities, Students’ free writing on unstructured journal assignments</td>
<td>2, 3, 4</td>
</tr>
<tr>
<td>Student Assignments (formative and summative assignments for PAR proposals)</td>
<td>7 (per student, as assigned)</td>
<td>216 (single and double-spaced)</td>
<td>Deconstruction of an existing PAR project, Problem description for topic, Literature review(^\d), Initial purpose statement and questions, Analysis/Reflections on baseline data, Written Critical Friends’ feedback to peers on oral proposal presentations, Final PAR Proposals/Reports</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td>University Course Evaluations</td>
<td>1 (after course completion)</td>
<td>9 + 2(^\d)</td>
<td>Students’ quantitative ranking of course and instructor effectiveness, plus open-ended comments</td>
<td>1, 2, 3, 4</td>
</tr>
</tbody>
</table>

Notes: SS=single-spaced; DS=double-spaced.
\(^\d\)Literature reviews began the previous semester during the basic inquiry course when they initially formulated study topics. Students continued their reviews to hone their study purpose, interventions, and methods.
\(^\d\)All 9 students completed course evaluations using scantron sheets, which included objective items and room for open-ended narrative comments. The raw data (9 forms) were sent directly to me, along with a 2 page computerized analysis of student scores on each item, including means and standard deviations.
The initial data review consisted of reading nearly 360 mostly single-spaced pages of raw data. Next, all documents, with the exception of the university course evaluations, were uploaded into the ATLAS TI data analysis software program. A semi-structured analytic process was used to code the data (James, et al., 2008), using predetermined codes to sort the data into broad families and finer grained coding of data within families into like groups. Six initial code families were formulated, including PAR Project Design; PAR Team Collaboration; PAR Processes/Tools; Reflections on Assignments, PAR, and Leadership; Peer-Peer Responses; and Instructor Responses. The documents were first coded by families. Iterative reviews resulted in coding of data into 34 groups subsumed under the original six families, with data receiving multiple codes when appropriate. Next, the coded text was printed, highlighted, and analyzed further for accuracy, resulting in some coding changes to ensure greater consistency within groups. The summary of code families, specific code groups, and frequencies are outlined in Table 3.

After these tasks were completed, analysis of findings continued throughout the writing process. Qualitative review did not include the university course evaluation data, which was primarily quantitative and analyzed by the university (see Table 4). Course evaluation data are included in this narrative where appropriate.

Validity and Reliability

Validity. Validity in primarily qualitative studies is evaluated by examining validity threats, or alternative explanations for findings. Maxwell (2005) identifies two primary validity threats, including researcher bias due to the researcher’s “existing theory or preconceptions” (p. 106), and reactivity, which is the researcher’s influence on participants or context. Thus, a critical research design task is to consider validity threats and incorporate methodological strategies to address them.

In this case, my bias is directly related to the study purpose and design: specifically, that the graduate course I constructed would increase participants’ capacity to assume educational leadership
### Summary of Coded Data

<table>
<thead>
<tr>
<th>Families and Related Code Groups</th>
<th>Code Frequencies for All Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAR Project Design &amp; Related Codes (9)</strong></td>
<td></td>
</tr>
<tr>
<td>• Problems of Practice/Initial Topics</td>
<td>15</td>
</tr>
<tr>
<td>• Initial Purpose Statements</td>
<td>11</td>
</tr>
<tr>
<td>• Initial Questions &amp; Evaluation</td>
<td>10</td>
</tr>
<tr>
<td>• Topic Change/Reframing Research Questions</td>
<td>16</td>
</tr>
<tr>
<td>• Preparation Stage</td>
<td>9</td>
</tr>
<tr>
<td>• Intervention Plans</td>
<td>16</td>
</tr>
<tr>
<td>• Methodology</td>
<td>59</td>
</tr>
<tr>
<td>• Student Proposal Questions</td>
<td>42</td>
</tr>
<tr>
<td>• Reporting</td>
<td>13</td>
</tr>
<tr>
<td><strong>PAR Processes/Tools &amp; Related Codes (5)</strong></td>
<td></td>
</tr>
<tr>
<td>• Assessment</td>
<td>23</td>
</tr>
<tr>
<td>• Communication skills</td>
<td>13</td>
</tr>
<tr>
<td>• Connecting to research literature</td>
<td>45</td>
</tr>
<tr>
<td>• Critical Friends Process</td>
<td>21</td>
</tr>
<tr>
<td>• Planning</td>
<td>41</td>
</tr>
<tr>
<td><strong>PAR Team Collaboration &amp; Related Codes (3)</strong></td>
<td></td>
</tr>
<tr>
<td>• PAR Team Organization</td>
<td>16</td>
</tr>
<tr>
<td>• PAR Stakeholder Roles</td>
<td>23</td>
</tr>
<tr>
<td>• PAR Team Brainstorming &amp; Problem solving</td>
<td>28</td>
</tr>
<tr>
<td><strong>Reflections &amp; Related Codes (6)</strong></td>
<td></td>
</tr>
<tr>
<td>• Assignments</td>
<td>39</td>
</tr>
<tr>
<td>• Envisioning leadership</td>
<td>43</td>
</tr>
<tr>
<td>• PAR Issues</td>
<td>23</td>
</tr>
<tr>
<td>• Presentations</td>
<td>27</td>
</tr>
<tr>
<td>• PAR Reflections</td>
<td>18</td>
</tr>
<tr>
<td>• Teacher learning</td>
<td>11</td>
</tr>
<tr>
<td><strong>Peer-Peer Responses &amp; Related Codes (5)</strong></td>
<td></td>
</tr>
<tr>
<td>• Encouragement and empathy</td>
<td>109</td>
</tr>
<tr>
<td>• Connecting peer ideas to one’s own</td>
<td>87</td>
</tr>
<tr>
<td>• Probes/requests for peer to clarify ideas</td>
<td>23</td>
</tr>
<tr>
<td>• Facilitating peers’ next steps</td>
<td>13</td>
</tr>
<tr>
<td>• Peer learning events</td>
<td>39</td>
</tr>
<tr>
<td><strong>Instructor Responses &amp; Related Codes (6)</strong></td>
<td></td>
</tr>
<tr>
<td>• Encouragement</td>
<td>94</td>
</tr>
<tr>
<td>• Noting students’ strengths and growing capacity</td>
<td>27</td>
</tr>
<tr>
<td>• Clarification re: students’ questions and/or concerns</td>
<td>39</td>
</tr>
<tr>
<td>• Probes for student thinking</td>
<td>18</td>
</tr>
<tr>
<td>• Expanding on ideas/providing information</td>
<td>82</td>
</tr>
<tr>
<td>• Reframing ideas/experiences</td>
<td>39</td>
</tr>
<tr>
<td><strong>Total Codes Assigned</strong></td>
<td>1125</td>
</tr>
</tbody>
</table>
Table 4

*Student Instructional Course Rating Report (N=9)*

<table>
<thead>
<tr>
<th>Evaluation Category and Items</th>
<th>Mean Composite and Item Rankings</th>
<th>Standard Deviation on Composite and Item Rankings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Enthusiasm for material</td>
<td>1.05</td>
<td>0.05</td>
</tr>
<tr>
<td>• Interest in teaching</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Use of examples/ personal experience to make points</td>
<td>1.11</td>
<td>0.33</td>
</tr>
<tr>
<td>• Concern with student learning</td>
<td>1.11</td>
<td>0.33</td>
</tr>
<tr>
<td>Student Interest</td>
<td>1.36</td>
<td>0.21</td>
</tr>
<tr>
<td>• Interest in learning course material</td>
<td>1.67</td>
<td>0.81</td>
</tr>
<tr>
<td>• Attentiveness in class</td>
<td>1.44</td>
<td>0.74</td>
</tr>
<tr>
<td>• Course as an intellectual challenge</td>
<td>1.11</td>
<td>0.33</td>
</tr>
<tr>
<td>• Improvement in your competence in this area due to course</td>
<td>1.22</td>
<td>0.66</td>
</tr>
<tr>
<td>Student Instructor Interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Instructor’s encouragement of student questions</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Instructor’s receptiveness to new ideas and viewpoints</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Student’s opportunity to ask questions</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Instructor stimulation of questions</td>
<td>1.11</td>
<td>0.33</td>
</tr>
<tr>
<td>Course Demands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Appropriateness of amount of course material instructor covered</td>
<td>1.16</td>
<td>0.12</td>
</tr>
<tr>
<td>• Appropriateness of pace at which instructor covered material</td>
<td>1.11</td>
<td>0.33</td>
</tr>
<tr>
<td>• Contributions of assignments to understanding of course material</td>
<td>1.22</td>
<td>0.47</td>
</tr>
<tr>
<td>• Appropriateness of difficulty of assigned reading</td>
<td>1.33</td>
<td>0.66</td>
</tr>
<tr>
<td>Course Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Instructor’s ability to relate course concepts systematically</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• The course organization</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Ease of taking notes on instructor’s presentation</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>• Adequacy of outlined course direction</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Course Enjoyment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Your general enjoyment of the course</td>
<td>1.22</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Notes:

1. Each evaluation category contained 4 items, with the exception of the last category/item.
2. Evaluation scale: 1=Superior; 2=Above Average; 3=Average; 4=Below Average; 5=Inferior.

In addition, reactivity, also referred to as reflexivity (Maxwell, 2005), is “a powerful and inescapable influence” (p. 109). In the PAR model, reflexivity is an essential component of the research.
process (James, et al., 2008). As such, the researcher-participant intentionally designs and implements interventions with other stakeholders, hoping they will produce desired results and making appropriate adjustments to increase the likelihood that interventions will be successful.

Five strategies to address validity threats were employed in this study (Cresswell, 2007; Hansman, 2001; Maxwell, 2005). First, as already noted, I have exposed my bias, thus opening it for scrutiny. Secondly, my involvement with student participants stretched over a full academic year, which allowed us to build trust and increased students’ comfort in responding honestly to course tasks and processes. The third strategy involved data collection and analysis methods. Multiple data sources were included (see Table 2). The amount of data collected was allowed for detailed and varied description in response to research questions. The course design and data collection methods required all participants to respond. In addition, the data were reviewed many times. Thus, data were triangulated across sources and respondents. Fourth, I deliberately used reflexivity to consider students’ responses to activities, developing my ideas about next steps and potential student outcomes. Fifth, in my final session with students, I solicited students’ responses to my research questions to informally assess whether their observations agreed with my preliminary findings, with comments recorded ex post facto in my reflective journal. One last form of “respondent validation” (Maxwell, 2005, p. 111) was students’ summative course evaluations completed apart from the instructor, with results provided anonymously after course completion.

Reliability. Traditionally, reliability refers to whether a study and its findings may be replicated. However, in the social sciences, human behavior is subject to change, making replication of findings difficult to achieve. Thus, “the more important question . . . is whether the results are consistent with the data collected” (Merriam, 2009). The connections between this definition of reliability and internal validity are clear; therefore, many of the same strategies for addressing validity threats also apply to reliability, detailed in the previous section. In addition, my reflective journal established a record
describing how the study was planned and conducted, strengthening the connection between data and findings. An abbreviated description or “audit trail” (Merriam, 2009) is included in the data collection and analysis section.

**Findings**

Given the amount of collected data, it would have been easy to be drawn into new areas of investigation. For example, analyzing the discussion threads rather than organizing the data into previously established codes, using critical discourse methods (Fairclough, 2001), would have provided an interesting look at power and communication dynamics between participants. While these tangents may have proved fruitful, I remained highly interested and committed to answering the exploratory research questions. Thus, the data was evaluated for its utility in answering the research questions.

**How can a graduate student course in participatory action research be designed to promote student practice of critical leadership capacities?**

I deliberately structured the course around experiential approaches I thought would engage adult learners, believing that teaching participatory action research in a traditional manner would be counterproductive to helping students build leadership capacity. Others have observed, “It is not easy to teach action research in the same didactic way as other research methodologies. . . . [It calls for] lessons and activities to help bridge the gap between theory and practice” (Sankaran, et al., 2007). Thus, rather than teaching my students about PAR, I wanted to create a Schon-like “practicum” (1987) for them to learn PAR by doing it. I aimed to promote student participation by using their self-selected problems of practice as disorienting dilemmas (Mezirow, 1991). I also intended to exploit social learning contexts in class, online, and at their school sites to help students work through iterative processes of learning, action, and reflection.

The course was organized in three modules, with the first designed to help students learn about the PAR model and develop their stakeholder teams. Before starting with PAR, I believed it was
important to surface students’ research assumptions, as some had already expressed a preference for positivist approaches in our first semester. We did this through assigned readings, a small group activity to compare and contrast the traditional scientific approach to inquiry with PAR, followed by whole group discussion. I also believed students would have a better understanding of PAR if they read and analyzed examples of practitioner research. Thus, they collaboratively and independently analyzed PAR reports using the Logic Model (James, et al., 2008) they would later use to plan their own PAR cycles. With a more solid understanding of the PAR process, students started on their own projects. We discussed final PAR proposal requirements to clearly establish standards. Next, they engaged in a number of in-class and online activities to diagnose the problem of practice they wanted to study and draft their initial purpose statements and research questions. These activities were scaffolded through readings and class discussion. Revisions took place following instructor feedback and Critical Friends review with their peers using instructor-developed protocols.

The second objective of the first module was preparing students to assemble and lead PAR teams. Collaborative work with other educators is vitally important in school and district leadership, including PAR work. Thus, session activities were developed to promote students’ work with PAR teams, including reading assignments on planning and communication strategies, self-assessment of their strengths and challenges in working with teams, and problem solving using scenarios from practice. Students brainstormed who they wanted on their PAR teams, participants’ roles, and planned their first meetings. Their reflective journal assignments gave them a space to reflect on PAR team process and progress.

The second module was a practicum in PAR research methods. Building on what they’d learned about methods in the previous semester, we discussed the relationship between study purpose, research questions, and methodology. Students identified existing school data they could use and also searched for instruments in the research literature they could use or modify. Over several sessions, they
analyzed existing student learning data, looked at exemplars of instruments, and practiced developing some of their own, including surveys, interviews, observation checklists, student assessments and protocols for evaluating student work, and anecdotal records. They were required to have three data sources for purposes of triangulation, which could include up to two existing data sources, plus an instrument they had modified or created specifically for their projects. PAR team meetings and reflective journaling continued throughout this module.

The third course module involved development of a comprehensive PAR proposal, integrating their work throughout the semester. Students developed and revised required sections, including topic and study purpose; study context, population, and sample; PAR team composition and collaborative work; literature review; data collection and analysis methods; plans for reporting data; and finally, next steps for implementing or expanding their study. Prior to submitting their written proposals, students presented their work in class and received Critical Friends feedback using an instructor-developed protocol. This enabled them to make revisions before turning in their completed proposals. Their final assignment was to write a philosophy statement that described their view of educational leadership, including leadership of school-based inquiry and change.

Though the course design was carefully structured in advance, activities and timelines were frequently adjusted to accommodate students’ interests and needs. My journal entry prior to the first session shares my aspirations for the course: “I really hope to combine a clear course trajectory and standards with flexible planning and activities to ensure students’ learning. I want their learning to be meaningful in their eyes, not just a course they tick off toward a degree” (personal communication, January 5, 2009).

What significant challenges emerge for students and instructor in a participatory action research course?
Students. The intellectual challenge of this course was rated by eight out of nine students on their course evaluations as “superior” (Table 4, $M=1.11$, $SD=0.33$). They completed tasks spanning the entire range of Bloom’s Taxonomy (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956), with most work focused at higher levels. Thus, assignments were challenging, but what added complexity was creating and leading a completely new project, involving many unfamiliar tasks. Common challenges expressed by students included uncertainty about how to frame study questions, concerns about methodology, and assuming new roles and working with teams.

Questions about questions. When we first reviewed the PAR proposal requirements, students appeared quite comfortable with the idea. However, as we started to translate the topics they’d begun to investigate the previous semester into purpose statements and research questions, concerns emerged about doing their own research. Of all the challenges that surfaced for students, developing their study focus and questions was both the most widespread and varied in nature. Of the nine students, each verbalized some kind of concern. These included professional capacity, position and power relationships, and school context.

Some found it exciting to explore project possibilities, as described by one: “I feel a bit like a kid in a candy store, having a hard time deciding on which dark chocolate bar to buy today. I’m interested in developing a project on some aspect of how leadership can impact classroom instruction.” Two others directly connected with this analogy. However, most students found developing their study purpose and research questions more stressful than they’d expected. One student expressed this difficulty with self-deprecating humor.

Holy cow! I should NOT be allowed to begin brainstorming research questions. I am TERRIBLE at it. I just don’t know where to stop and when to quit. I only managed to generate about a page of questions that I have surrounding this gigantic topic!

In some cases, PAR teams helped to revise the study purpose and questions, especially in situations where stakeholders had direct responsibility for implementing interventions. About half of the students
preferred to develop the purpose and questions to propose to their PAR teams, believing they would garner more excitement and commitment from colleagues if they had established the some initial focus. By the end, about two-thirds of them significantly changed their purpose statements and research questions.

*Capacity.* Anxieties about professional capacity surfaced for some students when they articulated their problem of practice. Framed within Mezirow’s concept of the disorienting dilemma, it appeared their anxieties provided motivation to undertake their projects. One student described his concern, resulting in a decision to investigate differentiated instruction in his classroom.

> I find myself struggling with the question of how to teach a curriculum that is geared toward average achieving students . . . . In a classroom of almost thirty students, where the curriculum is becoming increasingly difficult and we have less time to spend on each subject, how can I ensure I am meeting the needs of all my students to ensure their success?

For another, describing the problem of practice resulted in frank, painful confrontation of his feelings about teaching and student failure:

> I have concerns that what I’m teaching isn’t necessarily what I SHOULD be teaching. I know the curriculum is in place, and I know that everyone has signed off on it, but there is so little oversight with regard to assessments, data, and student outcomes, that I’m just a tad insecure in what I construct on any given day.

> I have concerns that I should be doing more for ALL kids. The reality is that kids always have and currently do find ways to fail my class. I take this failure personally, but I am unwilling to go to the lengths necessary to make these young adults pass. I’m also convinced that I don’t currently possess the necessary tools to help some of these extreme cases. I don’t think I can care for those kids at the extreme end of one spectrum without neglecting those students at the extreme end of the other spectrum.

His reflection ended, not with a focused question, but a new resolve to motivate his work: “I want to change the way we think of addressing the causes of student failure.”

The need to develop specialized skills was an issue for another student. Trained in Cognitive Coaching, she wanted to study its effects on teacher performance and student outcomes. After some experimentation, she recognized she did not have sufficient skills to do the study as planned, so shifted
her purpose and questions toward building her own capacity first, working closely with an individual teacher for their mutual benefit.

Position and power relationships. Two students particularly struggled with how to define their study purpose, locus, and unit of analyses. One of them was deeply interested in social justice. While he aspired to a leadership position and wanted to explore leading schools for social justice, he believed he would be more involved as a study participant within his teaching practice. He thus changed his focus to exploring “How (or if) I am engaging in social justice teaching in my classroom,” hoping this experience would help inform his future work as a principal. Another student, responding to the first student via our discussion board, noted

I feel that it has been difficult to nail down a practical topic that will improve practice. At first I had more esoteric questions about leadership [but] I, like you, have been thinking I should shift my attention . . . to classroom practice.

Students also wanted their projects to positively influence other adults, but had some trepidation about how to accomplish this. One stated he hoped to get teachers across the district at his grade level involved eventually, but was concerned about “stepping out of bounds” from his classroom across school lines. Another student tentatively explored issues of school security starting with his elementary school, only putting out feelers about secondary school security when his principal and other administrators signaled their support. Others discussed power relationships within their schools, not wanting to upset the status quo or make it appear that educators were not doing their jobs properly. For example, one student worked in a building with a new principal. He believed the new principal was defensive and worried about how teachers perceived him. Thus, the student believed he needed to be extremely careful about how he framed his study.

School context issues. Concerns about upsetting power relationships were also reflected more broadly in frustrations that surfaced about professional culture, leadership, and other contextual issues. One teacher appeared to have a clear study focus, having started on it earlier in response to state and
district mandates, only to have problems surface over teacher buy-in and participation. Teacher and administrator apathy surfaced in other situations. One student, despite invitations to building administrators to attend PAR team meetings, even occasionally, was politely turned down by each, though he was given administrative clearance to conduct his study. Another student expressed frustration about getting meaningful teacher participation, as his school had been through recent reforms, none of which were sustained very long. Another cited financial woes in the district and the dampening effect of “our superintendent’s doomsday scenario” on enthusiasm, saying “as a result of low morale, I’m finding my effectiveness as a motivator is being challenged.”

Finally, one student reported, “I want to be sure that my motives and belief fit the culture and environment before going too deep,” reflecting many students’ concerns about their relative position, vulnerability within the system, and initiating potential change. As one student put it, “Questioning something within a school in hopes to improve it can feel like you are putting yourself out on a limb all alone.”

**Concerns about project design and methodology.** Out of 1125 pieces of coded data, the 189 data points in the PAR Project Design family represents a predictable range of research tasks. Firming up their study purpose and questions relieved students’ initial concerns. One student noted his revised purpose and question “better addresses the missed concepts and is a lot more focused . . . . I have a lot of doubts about how I would measure this . . . but I am more excited about actually making it work. “ Some students also discovered they had to further refine their questions as they began to think about measurement.

My two biggest concerns are narrowing down the specific student outcomes I wish to measure, and the best ways to measure/analyze those outcomes. I want to reevaluate my research question and determine a focus for the student academic achievement I (and my team) truly want to measure.
In addition, getting to the action and measurement stages brought financial and time constraints into sharp focus. The student planning to study 1:1 laptop integration had to scale back her plans due to district budget deficits. Another student investigating school security recognized he had to consider “cost neutral” interventions for financial reasons.

Finding or designing good assessments to measure intervention outcomes was also a significant challenge. As we reviewed assessment principles, students shared concerns about developing appropriate assessments in class and over the discussion board. Four students found research-based assessments they could adopt or modify. Developing their own tools presented interesting challenges, as well. Regardless of whether they planned to use each tool in their studies, I required everyone to experiment with developing survey questions, interview questions, and observation protocols, wanting them to have the experience for future projects. Seven students posted comments about how much they’d learned about data collection methods by constructing their own. In my journal following our in-class session using a Critical Friends protocol to provide feedback to students on their draft survey questions, I noted

It’s fascinating to see how students are responding to developing their own data collection tools. Where they have previously paid lip service—and in a couple of cases, perhaps displayed a little arrogance—regarding the difficulty of designing good assessments and data collection tools, having them go through the Critical Friends process, where others are critiquing their tools, has been a huge eye-opener for them. T. commented ‘I was certain that I had great questions when I came in tonight. Now I realize how much I’d underestimated how hard it is to write good survey questions that are clear and as bias-free as possible.’ They’re really starting to see how ‘critical’ it is to have Critical Friends to improve their work (personal communication, March 4, 2009).

Nearly every student also wrangled with the amount of time their interventions and data collection would require of teachers and other stakeholders. One student summed up his concerns, saying

I am starting to wonder if I should be focusing on one specific part of the research. . . . Would it be too much to ask the PAR team to work at two different groups? . . . This is a large enough process as it is, and what I do not want happening is for my PAR team to
have so much information to look at that they get bogged down. There is so little time for teachers to improve practice while teaching their already immense curriculum. I wonder if I am asking too much on top of it. On the other hand, if we truly want to improve schools and our teaching, then data like this is essential to determine best practices. I think I will address both aspects of my research with my PAR team and see how they feel about it.

While daunting for some, formalizing data collection tools and procedures posed new opportunities for work existing teams were already doing. A student working on RTI implementation in his middle school noted, “The nice piece of this project is the idea that we are creating documents that can put these observations into a more formal construct.” Prior to this, there was no formalized tool used by teachers when they referred students for intervention. He asserted, “[We need to be] using observation like a researcher [where] every invested individual needs to develop a common understanding of what we’re talking about. It’s like having a common rubric for assessing writing across classrooms.”

Finally, data analysis provoked consternation for a few students. We had an early data analysis workshop in class, but not all students felt comfortable with completing the data analysis, especially for qualitative data. As a result, I put together a document to guide their work. For other students, the task of data analysis was less of a concern than how to handle what they might discover.

Personally, this is a tricky piece of my PAR project. Because we might be dealing with some psychological issues-abuse, depression, neglect-confidentiality and trust will be huge factors in identifying the various causes for self sabotage. It is unusual to see this type research being done within schools.

One student in particular was jarred into acknowledging potential bias in analyzing his data. In response to a peer, who wrote about staying “nimble and responsive to the data,” he responded, “I especially like how you're always staying open to whatever the data suggests. I'm not sure I'm currently open to the idea that my data might actually say something DIFFERENT than what I'm expecting. Thanks for the researcher reminder.”
Assuming new roles and working with teams. Leading PAR projects presented challenges that were new to most, including recruiting PAR team members, deciding on roles and contributions, and team planning.

Recruiting PAR team members. Students brainstormed potential team members in advance. For a couple of students with projects situated in schools with established professional learning communities, gaining participation was not hard. Two students also worked in private religious high schools, reporting collaborative work was very common in their small schools. However, others found getting stakeholders involved was more difficult. One student, reflecting on his efforts to involve others commented, “I think a potential challenge to me as a practitioner-researcher is to figure out how to persuade people that this research can be to their interest as well, and to draw them into the process.” For students wanting to involve parents, confidentiality issues led them to decide against involving parents in at least some meetings. Fortunately, students found PAR team allies in places they hadn’t originally anticipated: one student found an early childhood faculty member who agreed to work with her team, another student involved high school security staff, and a third found a school counselor who was delighted to assist with his project.

Team roles and contributions. Questions about team roles and contributions centered on what kind of participation to seek, how much, and what approach students should use as team leaders. One student reflected group work posed one of his “largest challenges,” focused as he’d been on tasks: “Right now I’m trying to slow down, meet with the essential people who will help this program evolve, and allow everyone involved to share in the dialogue and construction of the process.” Another student questioned how much input to allow PAR members, asking, “Do I let the course of my PAR project change considerably to assist in creating buy-in, so my teammates will feel this is as much their project as mine? I almost feel like that is part of the PAR process.”
While over half of the group wrote about wanting team members to “buy in” and “feel committed” to the work, they didn’t all use the same language to describe this concept. This may have been partially due to their relative inexperience in leadership roles, especially of a PAR group. Thus, they struggled with what meaningful engagement looked like and how to encourage members to share in the work.

I have to confess that my PAR team has been helpful at times, but I feel that most of the labor of this project is being handled by me. Is that OK? While part of this may be due to my leadership style and all of our busy schedules, the truth remains. My PAR team appreciates being in the loop, and they love progress reports, and they’re excited about where we’re heading, but they almost all are sitting in the back of the seat watching me drive the bus.

One student remarked, “I have a lot more empathy for what my principal goes through on school improvement. While I think there are better ways for getting people involved, I have a better sense for what he’s up against.”

Team planning and time management. Students consistently described the importance of planning meetings in advance and ensuring productive use of time. They expressed concern about asking PAR team members to contribute their time and talents given their other professional responsibilities. This was a focal concern that went further than just the PAR work, as summarized by one student:

About my PAR project, I am always concerned and feel it is important to be careful about adding more to anyone’s already full plates in schools. I know this type of project makes great sense. I know we are in dire need of structuring ways for teachers to collaborate with one another, and build capacity among them. I also do not see one thing being taken off their plates. . . . I’m not suggesting we not do PAR projects but what I am suggesting is we figure out how to give teacher consistent time during the work day to collaborate, and engage in meaningful PD such as PAR projects.

Thus, in working with PAR teams, students faced some of the same issues educational leaders routinely address in their daily work.

Instructor. The challenges this course presented were twofold: 1) making sure I was doing the “right things” in planning the course, and 2) responding to students’ learning needs as effectively as
possible. My inexperience in teaching practitioner research added a layer of uncertainty. I hoped above all that the course would be a fruitful learning experience for everyone involved.

By investing time designing the course, I addressed initial concerns about course design. The next and more critical task was to facilitate student learning and completion of their PAR proposals. The diversity of students’ professional roles, contexts, and research interests stretched my ability to respond effectively to their questions and needs. I felt lucky to have only nine students. Designing lessons for the group that could be adapted for individual needs—the task of every teacher—took on added meaning, as students were learning new ideas, creating and implementing vastly different projects, and leading teams simultaneously. Their questions spurred me to mull through their experiences, consult the research literature, find or develop new resources, and leverage the growing capacity of the group. My journal helped me explore emerging issues and consider how to respond.

Overall, I felt great responsibility for ensuring students got what they needed to accomplish two things: to have a meaningful experience leading inquiry in their schools and to successfully complete their PAR proposals. As typical, the range of student experience and capacity was wide. Three ways I tried to facilitate their work included 1) providing clear performance standards, while giving as much technical assistance as possible; 2) creating the conditions for them to direct their own projects, with appropriate flexibility on tasks and timelines; and 3) providing frequent formative feedback at various stages of their proposal development.

**What are critical student outcomes in a participatory action research course? How might student outcomes be improved?**

The formal course evaluation data represents broad student outcomes. The most pertinent data is students’ responses to “Improvement in your competence in this area due to this course.” Eight students rated their improvement as “superior,” while one rated his/her improvement as “average” ($M=1.22;\ SD=0.66$). Thus, most believed they had greatly increased their competence in course-related
content. The lowest and most variable student ratings were on engagement ("interest in learning course material" $M=1.67; \ SD=0.81$; and "general attentiveness in class," $M=1.44; \ SD=0.74$). Finally, most students reported their course enjoyment was “superior” ($M=1.22; \ SD=0.66$).

However, the course evaluation data provides little evidence in two important areas: explaining the increases in specific domains of student competency increase and the greater variability in student engagement ratings. While the qualitative data provides a much richer understanding of critical student outcomes, it does not explain the quantitative variability in student engagement, particularly given higher ratings in the areas of improved competency and course enjoyment. I might suggest student interest in most courses is variable and attentiveness is not easy to maintain following busy school days, but this would be speculative. Further research might account for student variance in these areas and investigate additional ways to maximize interest and attentiveness.

What the qualitative data does provide is greater understanding of critical student outcomes. Significant student outcomes included increased student capacities for 1) understanding, using, and conducting research; 2) using PAR to promote collaboration, school improvement and professional development; and 3) enacting leadership for inquiry and change.

**Understanding, using, and conducting research.** Students demonstrated an improved command of research in several ways, suggesting a synergistic relationship between the previous semester and this one. Seven students wrote about their increased confidence in comprehending and using academic research. One student remarked

> Now that I’ve learned some of the significant aspects of academic research, I consider myself a confident and competent consumer of research. . . . [And] now that this experience is concluding . . . I can conduct efficient and effective research to learn answers to the issues that are most vexing.

Six students discussed the interdependence of scholarly and practitioner research, appreciating the value they hold for one another. In one student’s words, “PAR incorporates academic research through
literature reviews which establish the validity and direction of the PAR project,” while scholarly research needs PAR “to test how research-based interventions work” in local practice.

Whether in discussion or writing, most students described their increased efficacy for leading school-based inquiry. One student wrote in her final reflection, “I can see the value and learning that happened for me during the process of developing this PAR project. I’m excited to be at this point in the process and be able to say, “I understand the PAR process.” Another commented, “It’s not scary, and it should be the basic foundation for our professional future.” My journal following the last class noted, “What a reward to see their pride and jubilation. They feel as though they’ve ‘gotten PAR’ and understand what they might be able to accomplish in their schools through PAR” (personal communication, April 29, 2009).

**Using PAR to promote collaboration, school improvement and professional development.**

While students seemed to view academic research as a product they could consume to learn about promising interventions, their comments about PAR nearly always referred to it as a process or vehicle that could help them do important work. Students’ PAR reflections demonstrated their appreciation for its value in specific school-related domains. Most commented on its power for improving collaboration. One student observed

Others are more likely to listen to a team compared to an individual. The PAR process is challenging but effective at bringing about research based decisions and change based on quality teamwork. What I have learned most is that the PAR process is capable of bringing collaboration into the forefront of creating change, supporting change, and sustaining change. I’ve seen it work for my team.

Another stated, “I am amazed at myself and at the quality collaboration that this PAR process brings about.” Others had experienced more modest collaboration, one of whom wistfully noted, “Maybe as time goes on with my project, other teachers will want to get involved once they see the results.”

Students also made strong connections between PAR, school improvement, and professional development. Their discussion board threads and reflective journals ruefully recounted the opportunity
costs involved in poorly led school improvement and professional development, problems they described as “horror stories,” and “a major issue among teachers, causing much despair and reticence to really engage in any sort of process, no matter how worthwhile.” One stated school improvement work “always felt like you were spinning your wheels.”

Students stated they believed PAR work was more worthwhile than most other school improvement or professional development they’d experienced. One was quick to note,

I don’t think the work associated with PAR is easier, but it’s definitely smarter. With all of the school improvement models that schools can adopt, it seems silly to ignore the authentic voices of teacher leaders employed right at home in the district.

In fact, two students from a district that mandated participation in professional learning communities (PLCs) described the aims of PLCs and PAR in very similar terms. They thought the mandate for PLCs was somewhat contradictory to their purpose, but reported it had established a great foundation for their PAR work. One of them wrote, “PAR has the potential for being one of the most powerful forms of PD there is, because it engages teachers and other stakeholders . . . rather than feeding information to them and hoping they’ll do something with it.” Others lauded PAR’s potential for empowering teachers, giving them “a strong voice when often we feel we have none.” Simply put, one student affirmed, “It is real and happens where we live.”

**Enacting leadership for inquiry and change.** Designing and leading PAR development afforded students significant opportunities to envision, practice, and reflect on their leadership skills. It was fascinating to see that when discussing their projects, they most often described the work they did with others, accomplishing “so much more by discussing and collaborating with the team than I would have if I worked on this alone.” They talked about PAR as an opportunity to “contemplate all sides,” as a “method for principals to develop and nurture shared leadership,” a way for “teachers to take ownership and explore their own practice,” and a means to “build leadership capacity among teachers.” One student remarked he learned “to allow others to define their role, play their role, and celebrate
their role” in PAR work. He described his expanded concept of an effective school leader as one who “builds the leadership skills of teachers . . . who will lead projects and initiatives in the school.”

When describing their leadership as a capacity they were working to develop, they reported their activities in individual terms. Within course activities, students envisioned how they would handle various PAR phases and challenges. Students’ final reflections summarized what they learned by leading. They described how they “provided a framework for helping stakeholders to discuss shared problems,” using “good listening and communication skills, research, problem solving, and planning actions and measurements to move the project forward.” Thus, within the practicum environment, they rehearsed leadership tasks and processes, implemented and adjusted their plans at school, and returned to reflection within the practicum setting. One student referred to her PAR work was “sort of like a leadership pilot project.”

While the course required PAR proposal development rather than a full-fledged study, students reported observable outcomes by semester’s end. One student planning to measure student outcomes following a study skills class reported greater teacher interest in applying study skills in content classes and increased student interest in enrolling in her class. As part of a Title I review, one student was queried about action research practices in the school and described her team project, which helped validate the importance of her study to local educators participating in the review. One student who was actively collecting student data on RTI in his middle school reported some modest increases in students’ math performance. Another student began to receive e-mails from teachers in other schools about how he planned to differentiate homework menus in his study. Students were also garnering notice from administrative staff. Two students were requested to do School Board presentations on their work.

Thus, the course experience affected both how students saw themselves and how others viewed them. One student wrote
During the PAR project I have grown as an individual and as a future educational leader. Based on what I have learned last semester and this semester, I now feel much more confident in my ability to read and understand a research study, and in my abilities to conduct a research project. This knowledge is essential to me as a future leader who will base the implementation of teaching innovations on research that proves their effectiveness.

Another student spoke about how the experience built his “credibility” with his colleagues, saying, “I’ve enjoyed playing the role of leader among these other professionals. I’ve loved being the voice of the PAR process and the designer of our program. I found that these individuals began to see me differently than before.” All the students reported they’d benefitted from their course experiences with PAR. One student wrote, “actually developing my own PAR proposal to implement at my school was extremely beneficial for me,” while another remarked, “I haven’t even begun to appreciate the full scope of all I’ve learned as a result of this project.”

Finally, evaluation of students’ progress on course assignments throughout the semester revealed significant gains in student application of PAR concepts. All of the final projects met course standards, ranging from satisfactory to exemplary work.

**Using student outcome data to improve the course.** Despite positive outcomes reported by students, the course could be improved in several ways. The feedback I received through discussion boards on reading assignments has helped me weed out and replace less effective assignments. The final assignment also needs improvement so students have a greater degree of success with it. This assignment required them to write a philosophy of leadership for school-based inquiry, and was not well understood or completed effectively by half of the students. My intention was to help them pull together their reflections on leadership of inquiry, putting it in a document to include in their leadership portfolios. Hence, this might have assisted them in preparing to search and interview for leadership positions. I did not provide a model or scaffold for this assignment, hoping to avoid receiving thinly disguised regurgitations about leadership of inquiry. They asked for clarification; thinking they had
prior experience with writing a philosophy statement for their teacher portfolios, I drew an analogy between writing a teaching philosophy and this assignment. It turned out the majority hadn’t done teaching philosophy statements or teaching portfolios, nor had most prepared leadership portfolios. Thus, it was a missed opportunity, which I will need to scaffold more deliberately in the future.

Another issue is how to incorporate data analysis instruction in the course. The data workshop I did with them, using their baseline data to practice data analysis skills, was insufficient for some students. Moreover, some had difficulty applying what they learned about data analysis during the previous semester to their PAR data. As a critical strand running through leadership preparation courses, it makes sense to talk with program coordinators and course instructors about previous coursework involving data analysis, so that I can address it more effectively in this course.

Finally, I have concerns about students making school-based inquiry part of their educational practice now that they’ve completed the PAR course. Given their concerns about teacher time, competing demands, and having seen how new leaders get overwhelmed with other responsibilities, it may be important to have them address strategies for embedding inquiry in practice. Collaboratively brainstorming ways to institutionalize inquiry-based practices may help them apply these practices when they assume formal leadership positions.

Discussion and Conclusions

It is important to note study limitations prior to discussing conclusions. This study was based on a small student sample, likely affected by other program and contextual factors. Most students were taking the course at the end of their MA or EdS programs. Student outcomes may also have been influenced by our work together over two semesters. In addition, the study did not directly measure leadership capacities, how they changed, to what extent, and which course elements were most strongly correlated to improvements in students’ leadership capacities. Further research is needed to
explore these relationships and to elaborate whether and how students are applying PAR methods in their current practice.

Nonetheless, the findings suggest helpful practices for educational leadership preparation for participatory action research, particularly when combined with existing literature. Considered broadly, study findings and related literature affirms the value of aligning coursework to adult learning principles, conducted in a practicum organized to promote learning, action, and reflection (Avgitidou, 2009; Grant, 2007; Greenwood, 2007; Levin & Martin, 2007; J. M. Peters & Gray, 2007; Sankaran, et al., 2007; Szabo, 2004; Taylor & Pettit, 2007). Specific recommended practices include elements of program design, course design, work with students, and professional reflection.

Program Design

**Implement a cohort model.** Cohort-based programs bear advantages for using socially constructed learning processes in a practicum environment. Students in this study found their Critical Friends groups to be invaluable in improving their work, a finding suggested by other studies (Szabo, 2004; van Swet, Smit, Corvers, & van Dijk, 2009). Students stated the Critical Friends work would have been less effective outside of their cohort, which enabled them to build trust over time (personal communication, April 29, 2009).

**Articulate data analysis through multiple courses.** Students may benefit from more comprehensive instruction in data analysis (Clark & Clark, 1996; Levine, 2005). Repeated practice through multiple courses may help increase their skill application to new situations. This merits faculty collaboration to examine ways to improve students’ data analysis skills. Applying PAR methods to program development may also lead to improved faculty collaboration and student outcomes in other areas (Margolin, 2007).

**Establish a basic research methods course as a prerequisite for participatory action research.** Students repeatedly emphasized how their understanding of research methods helped them design
their PAR projects. Taylor and Pettit observed teaching research methods while also teaching action research was much more demanding and time-consuming than they had anticipated (2007). When students have a solid foundation in research methods, they are better prepared to develop their own PAR proposals.

**Course Design**

*Create a course practicum using constructivist learning activities.* Many theorists assert action research is learned through iterative cycles of action and reflection (Grant, 2007; Greenwood, 2007; Peters & Gray, 2007; Sankaran, et al., 2007; Szabo, 2004; Taylor & Pettit, 2007) rather than traditional methods of teaching research courses. Levin and Martin emphasize, “Engage students in explicit cycles of practical action and reflection,” and “Insist on socially relevant field work that requires the development of action-oriented skills in the field” (2007, p. 226).

*Implement action research models flexibly.* This course was appreciably strengthened through use of the PAR model and text (James, et al., 2008). However, using action research models inflexibly may inhibit student progress. Grant warns of the “isomorphic” effects of using “prescriptive ‘cookbook’ frameworks” (2007, pp. 266-267).

*Use social learning contexts and processes to promote student learning.* The cohort model provides great opportunities for collaboration, but it needs to be exploited effectively. Class sessions were used to promote collegial discourse and problem-solving, provoking one student to comment, “I am very proud to be a member of this group. You all help me think at a deeper level and work at a higher one.” Students’ PAR teams and work in Critical Friends groups also improved students’ work. Processes for implementing Critical Friendship are recommended by van Swet and colleagues (2009).

*Include reflection as a central component in coursework.* Reflection is an essential element of participatory action research (Grant, 2007; Greenwood, 2007; James, et al., 2009; Peters & Gray, 2007; Sankaran, et al., 2007; Szabo, 2004; Taylor & Pettit, 2007) and should be taught, modeled, and
incorporated in course assignments (Beisser & Connor, 2004). Reflection also reorients students when they get caught up in action or lost in the weeds of data analysis (Taylor & Pettit, 2007).

**Design activites to translate theory into practice.** A variety of learning activites can help students apply what they are learning throughout the research phases. These include modeling and guided practice (Szabo, 2004), group discussion, written assignments and reflections.

**Surface general assumptions about research early in the course.** Students had biases that may have inhibited their involvement with PAR, a finding also noted by Greenwood, who reported students tend to have “a positivist image of what is legitimate social science” (2007, p. 256). A substantive discussion of traditional and participatory action research addresses philosophical conflicts that help students engage more productively in PAR work.

**Include content to help students anticipate uncertainty and confusion.** Students need to hear the research process is built on unanswered questions that need to be framed effectively, which is difficult even for seasoned researchers. However, it is also important to recognize the differences between “productive vs. erosive discomfort” (Szabo, 2004, p. 73) and help students work through related issues.

**Emphasize both process and product in coursework.** The process of learning participatory action research is demanding. I found it most helpful to focus students on development of a quality PAR proposal, including reflection, rather than having them deliver a completed project report. The practice of having them turn in drafts of proposal components provided students with formative feedback to use in improving their work, thus honoring both process and product. Levin and Martin assert, “We must hold the values of experiential learning, reflective practice and transformational learning on the one hand and, on the other hand, insist on written work of a quality to influence scientific thinking” (2007, p. 226).
Give careful consideration to scheduling and planning for class and online sessions. Other researchers have reported the challenges of teaching action research online (Aune, 2002; Sankaran, et al., 2007). I found the hybrid model of both inclass and online sessions an enjoyable and productive way to engage students in PAR work, but found some work more suited to in class sessions (i.e., Critical Friends work), while online sessions sometimes resulted in more substantive contributions from quieter students and deepened dialog between students.

Work with Students

Take time to build relationships with students. Positive relationships facilitate students’ willingness to work outside their comfort zones and accept guidance. Szabo observes leadership is “grounded in relationships” and relationships with and between students should be “the instructor’s highest priority” (2004, p. 72).

Encourage and reframe experiences. Frustration and discouragement can facilitate students’ “self-awareness . . . to further development and knowledge” (Grant, 2007, p. 270). I helped students reframe many experiences as “building capacity for future leadership practice” and directly called their attention to instances when they were demonstrating effective leadership. This may also help students prepare for the transition to formal leadership roles (Browne-Ferrigno & Muth, 2004).

Professional Reflection

Finally, as we promote reflection to improve participatory action research practice, instructors benefit from reflection on course design, student work, and outcomes (Taylor & Pettit, 2007). I have learned a great deal through this study, which I believe will improve my practice. It has elevated my understanding of teaching and learning as an important, reciprocal endeavor.
References


