USING ACTION RESEARCH TO CONNECT PRACTICE TO LEARNING: A COURSE PROJE

Dehler, Gordon E;Edmonds, Rosemary K Journal of Management Education; Oct 2006; 30, 5; ProQuest Central pg. 636

USING ACTION RESEARCH TO CONNECT PRACTICE TO LEARNING: A COURSE PROJECT FOR WORKING MANAGEMENT STUDENTS

Gordon E. Dehler College of Charleston

With Commentary By

Rosemary K. Edmonds
Internet and Project Management Consultant

A long-standing challenge for management educators concerns developing pedagogies that confront the complexities associated with the process of managing. Faculty need to simultaneously acknowledge the practicality of content as well as the salience of students' experience. This article proposes action research to raise pedagogy above methodology to surface epistemological and ontological aspects—distinguishing between descriptive, interpretive, and critical theoretic approaches to knowledge. Starting with an actual organizational problem, students invoke descriptive, interpretive, and critical theoretic approaches through observation, explanation and sensemaking, and critical reflection. As action research is grounded in democratic principles, student commentary illuminates the pedagogy as it unfolds.

Keywords: action research; adult learning; work-based learning; reflection; critical reflection; epistemology; ontology

Authors' Note: Sincere appreciation is extended to the many students who contributed to this action research course, and especially to those students who offered their candid thoughts for inclusion in this article. The ideas presented here benefited greatly from constructive comments provided by M. Ann Welsh and Joe Raelin's counsel. An earlier version of this article was presented at the 2004 Academy of Management annual meeting in New Orleans.

JOURNAL OF MANAGEMENT EDUCATION, Vol. 30 No. 5, October 2006 636-669

DOI: 10.1177/1052562905277302

© 2006 Organizational Behavior Teaching Society

Learning things about management is not learning to manage. . . . Our challenge now is to teach how to manage.

—Payette (1993, p. 452)

What seems to be missing from most of the learning models is the learner and his or her actual experience of learning as he or she understands it.

—Akin (1987, p. 37)

Adult working students typically enroll in graduate management programs as a direct result of their lived experience in organizations. Classroom discussion that seemed tangential to their technical training as undergraduates now takes on increased relevance to their work lives. Many seek added insight into understanding their workplace, such as managing or coping with change initiatives, while others see graduate qualification as a prerequisite for career progression or transition. As a response, management educators have endeavored to integrate more explicitly students' work experience with their learning objectives (e.g., Limerick & Moore, 1991; Watson & Temkin, 2000). In advocating closer connections of learning to organizations, Bilimoria (1998) suggested that "real-world learning is based on the notion that experiences generate knowledge and skills" (p. 266). In that context, this article describes the development of a course in action research, a pedagogy expressly designed to incorporate students' work experience into the learning process. Acknowledged as "an appropriate research paradigm for educational, professional, managerial and organisational development" (Zuber-Skerritt, 1996, p. 3), action research has been linked to educating management practitioners literally for decades.

A fundamental purpose of action research "is to produce practical knowledge that is useful to people in the everyday conduct of their lives" (Reason & Bradbury, 2001, p. 2). Although the presence of action research in management education and learning has permeated the literature, it is surprising to note its contribution as a paradigm and pedagogy has received less attention in the United States. This article describes an action research course that has been iterated during the past 4 years in a graduate program in organization management.

The ideas elaborated below contribute to the scholarship on management education and learning by describing a course that utilizes an action research project as the medium for student learning. The project allows students to combine their experience with their curricular learning in addressing a practical organizational problem. Learning, therefore, has relevance because it is

contextualized and provides the opportunity for students to demonstrate their acquisition of knowledge, creation of meaning, and understanding in a way that is unique to each individual. Readers will recognize the overlap of action research and self-directed learning whereby students struggle with ambiguity and complexity—skills that Ramsey and Couch (1994) contended cannot be taught. In addition, as students often are not always aware that they have learned (Rhee, 2003), the project prompts students to make their learning explicit through the reflection process.

This article incorporates recent theoretical developments on action research pedagogy within a rigorous learning framework in a manner that has not been previously employed in the management learning domain. True to the roots of the action research pedagogy, real organizational problems serve as the starting point for students. However, the approach extends beyond the pragmatic, problem-solving aspects of the pedagogy by guiding students into and through less familiar epistemological and ontological terrain. Students incorporate observation (empiricism) and reflection on how experience is linked to organization and management knowledge (interpretivism), then they proceed toward analyzing their own learning through critical reflection (critical theoretic). Most important to these students, this process privileges and preserves the value of their experience with an eye toward improving practice—both important objectives to working students—while retaining integrity and rigor in the learning context.

Before proceeding to an overview of action research, limited discussion of learning-centered approaches that "challenge students to take responsibility for their own learning" (Coombs & Elden, 2004, p. 526) is warranted. The approaches most closely associated with action learning are problem-based learning and project-based learning. (For an overview of each within journal special issues, see Raelin [1999] for action research; Coombs & Elden [2004] for problem-based learning; and DeFillippi [2001] for project-based learning.) Frankly, boundaries that might differentiate these approaches are difficult to draw. For instance, the origins of problem-based learning in the medical profession parallel those of action research in the teaching profession. Both invoke the same basic principles. However, in a management education context, an often-noted difference is that action research occurs in an organizational setting whereas problem-based learning typically occurs within the confines of a classroom. In the end, however, each has evolved a distinct literature base, research tradition, and language that provide a framework for research and practice. Putting too fine a point on similarities or differences would be self-defeating.

Finally, to be complete, in recent years related approaches have emerged, including work-based learning (Raelin, 1997c, 2000) and service learning

(e.g., McCarthy & Tucker, 2002; McCarthy, Tucker, & Dean, 2002). On a larger scale, some institutions have historically incorporated work experience into their curricula. The University of Cincinnati (the first school to initiate such a curriculum) and Northeastern University are well known for their undergraduate cooperative education programs. More recently, Northeastern University launched its Practice-Oriented Education initiative. Another example is Bentley College's field-based learning curriculum. These institutional efforts have been accompanied by parallel attempts to take advantage of student work experience within management education programs (e.g., Davies & Easterby-Smith, 1984; Mintzberg & Gosling, 2002) to create learning contexts with the aim of enhancing effective action.

Management Learning and Action Research

The origin of action research is generally credited to Kurt Lewin (Raelin, 1997a); however, historically Revans (e.g., 1986) is its recognized champion. Drawing from the work of Jean Piaget, Revans (1982) contended that learning "stems from responsible experience" (p. 2), that is, "all learning is the product of action" (p. 772). The pedagogical implication is that people learn effectively when working on real problems grounded in their own work context (experience). This is essentially a developmental approach designed to apply and generate theory from actual work-based problems rather than simulated or contrived ones, for example, cases.

VARIETIES OF ACTION RESEARCH

Perhaps the central dilemma to emerge concerning action research is its very meaning. Robinson (1993) and others have commented on the extant confusion. The "term is sometimes used rather loosely" (Eden & Huxham, 1996, p. 526), and the label is misapplied to types of inquiry that are not really action research (Kemmis, 1988). Chisholm and Elden (1993) highlighted the evolving nature of action research. Recent evidence of this evolution is provided by Raelin (1999), who identified six different action strategies: action research, participatory research, action learning, action science, developmental action inquiry, and cooperative inquiry.

In this article, the term action research is employed because the framework for understanding the process presented is grounded primarily in the recent work of McNiff (2000; McNiff, Lomax, & Whitehead, 1996). Her treatment is favored because it is "distinguished by its insistence on letting people speak for themselves . . . (to) tell and interpret their own stories.... [McNiff's] role, as a teacher of action research, is to help others learn

how to tell their stories" (Friedman, 2002, p. 526). (Following her example, student commentary accompanies this article.) In explicitly choosing the action research term, the intention is to be inclusive of the diverse approaches noted above (acknowledging there are subtle distinctions) rather than gloss over the variety of approaches in the literature. (Making distinctions, however, would not enhance the discussion in this article.)

Action research, then, is defined as a "form of practitioner research" that can be used to help improve professional practice (McNiff et al., 1996, p. 7). More important,

professional practice emphasises the action but does not always question the motives for the action. To be action research, there must be praxis rather than practice. Praxis is informed, committed action that gives rise to knowledge rather than just successful action. (p. 8, emphasis added)

The vital point to be drawn from this definition is that, while practice is perhaps central or the starting point, it is secondary. Instead, learning takes precedence over procedural concerns; however, the linkage between learning and action is explicit. In this sense, action research is emancipatory in that it generates not only new practical knowledge but also the development of "new abilities to create knowledge" (Reason & Bradbury, 2001, p. 2). The issue arises, however, as to building rigor and integrity into the action research process.

The question of rigor is perhaps the most serious criticism of action research. Indeed, this perception plagued and perplexed Revans (1982), who lamented "Thirty-five years after the appearance of the first paper . . . to many in the educational field, action learning is seen as lacking any theoretical foundations" (p. 772). This criticism persists: "We would not consider any organizational intervention project to be necessarily action research, unless it satisfies characteristics which make it rigorous research" (Eden & Huxham, 1996, p. 526). The dilemma may not be so straightforward, though. Underlying this accusation are paradigmatic assumptions grounded in traditional views of management (McLaughlin & Thorpe, 1994). Because "action research bases its legitimacy as science on different philosophical traditions than positivism" (de Cock, 1994, p. 796), its veracity cannot be judged by positivist tenets. To that end, Susman and Evered (1978) argued the following:

What appears at first to be a crisis of relevancy or usefulness of organizational science is, we feel, really a crisis of epistemology. The crisis has risen, in our judgment, because organizational researchers have taken the positivist model of science which has had great heuristic value for the physical and biological

sciences and some fields of the social sciences, and have adopted it as the ultimate model of what is best for organizational science. By limiting its methods to what it claims is value-free, logical, and empirical, the positivist model of science when applied to organizations produces a knowledge that may only inadvertently serve and sometimes undermine the values of organizational members. (pp. 582-583; emphasis added)

Others have expressed similar sentiments concerning epistemology (e.g., Coghlan, 2003; Schon, 1995). In fact, McNiff (2000) began her treatise on action research with this point. She contrasted traditional forms of scholarship that present knowledge as a "body of facts rather than lived experience" (p. 2) with learning from experience that is reinforced by intellectual study. She suggested that practical theorizing, while "not yet highly valued by the academy," is a mechanism to reduce the theory-practice gap (p. 2) because it generates practical theory. Locating action research within a conceptual framework becomes important and is addressed next.

FRAMEWORKS FOR ACTION RESEARCH

Three action research frameworks that have been put forth demonstrate thematic consistency. Zuber-Skerritt's (1992, p. 12) framework proposed that action research could be conducted in terms of technical, practical, and emancipatory aims. Later, Marsick and O'Neil (1999) advanced a typology of the theoretical underpinnings of action research that distinguished three schools: scientific, experiential, and critical reflection. And McNiff's (2000) more recent conceptualization specifies a three-paradigm view: the empirical, interpretive, and critical theoretic. Although the frameworks' similar pattern is apparent, it is the latter framework that serves as the foundation for the discussion in this article because it is a more comprehensive and integrative treatment than the others, and is arguably more rigorous.

Guided by McNiff (2000), the action research process has three main components for students. First, the empirical is captured through students' description of their work experience. This is an intentionally objectified account, albeit explicitly filtered through students' schemata. Second, interpretation is a sense-making process whereby experience is contextualized through explanation within each student's unique knowledge base and personal reflection. Finally, the critical theoretic is invoked through the process of critical reflection.² These are elaborated on in the section on the course project.

Action Research and Course Development

Designing a course that employs action research has two main purposes. First, students are introduced to the process of action research itself. They discover that action research is a methodology that can be used as a practical action mechanism within the conduct of their work—with the express purpose of improving their own practice. Second, it raises to a conscious level the relationship of programmatic learning to practice; that is, the point of learning is to prepare students for informed action in undertaking their work rather than for the sake of passing a course.

PEDAGOGICAL OBJECTIVES AND PROCESS

The underlying pedagogical strategy for the course relies on a constructivist approach (e.g., Brooks & Brooks, 1993; Gergen, 1995; von Glasersfeld, 1995) whereby students undertake the action research project in a way that meets their individual learning needs, particularly with respect to disciplinary knowledge. A constructivist view suggests that students derive value from self-guided engagement with content. This approach seeks to avoid the mere transmission of knowledge, instead creating a learning opportunity whereby students seek out information relevant to the situation, learning through the experience of organizing and synthesizing material. In essence, learning is contextualized and professional development becomes more process oriented rather than content driven (Gregory, 1994).

The overarching objective is to provide students with a pedagogical mechanism that raises content and process learning to the level of action. Rather than pose the challenge as a division between learning foundational material (theory), followed by practice in which (hoped for) classroom learning is invoked, the intention of action research is the explicit connection of practice as it is currently being conducted (experience) with a more rigorous knowledge base (the curriculum). In other words, where the traditional teachingcentered approach privileges textbook learning for use later, that is, toward practice, action research begins with practice and works the other way, that is, toward knowledge. Common disciplinary content is not utilized by all students; rather students must determine what knowledge is required and then seek it out. Students are then learning with a purpose-in essence just-intime-learning. While that objective poses instrumentality concerns related to relevance (different from the instrumentality of "learning for the test"), the real learning is grounded in the process of inquiry itself. Developing skills at knowledge finding and assessment, followed by converting knowledge into action within context, represent the true desired outcomes rather than collecting a notebook filled with information for future use. The following discussion is intended as a guiding framework for management educators to create their own version of an action research course but is preceded by some insight into the role of the management professor, student evaluation, and course resources.

FACULTY ROLE: A COACHING PARTNERSHIP IN LEARNING PROCESS

The role of the management educator in this action research course is more closely associated with coaching, where the instructor keeps the learner at the center of the process (Hunt & Weintraub, 2004). As each student defines and deals with an idiosyncratic project, the instructor works with students individually-in essence a partnership model based more on an attitude or philosophy than a set of pedagogical techniques per se (Ramsey & Couch, 1994). There are three key elements to this role (O'Neil & Hopkins, 2002); relationship building, increasing students' self-discovery and selfknowledge, and connecting theory with practice via a pragmatic orientation, all of which are vital to the action research project. As a result, the professor and student act as "co-inquirers whose thinking contributes to generating ideas, exploring knowledge, and drawing conclusions from their experiences" (O'Neil & Hopkins, 2002, p. 405). Where these authors deal with questions of translation from theory to practice, though, the action research coach helps students make sense via practice to theory. This role places students in control of their own learning process, and the faculty role is "transformed from judge to coach" (Kunkel, 2002, p. 125).

STUDENT EVALUATION

The system in which we work, of course, imposes an evaluation imperative. Cunliffe (2004) articulated the difficulties of determining grades on projects such as these. Furthermore, Ebel (cited in Cross, Frary, & Weber, 1993) articulated the problematic nature of the task:

The more confident teachers are that they are doing a good job of marking, the less likely they are to be aware of the difficulties of marking, the fallibility of their judgments, and the personal biases they may be reflecting in their marks. (p. 143)

Without question, this is cause for constant reflection with respect to standards, fairness, consistency, and self-monitoring.

As a result, my guiding framework for evaluating student projects emerges from Bilimoria's (1995) outline of postmodern grading practices

(see Table 1, p. 446)—highlighting in particular the potential for all students to learn and excel, that is, all students can earn an A if their work fulfills the learning aims of the project. In this case, I look for (a) the extent to which students articulate and define the research dilemma in a complicated manner, that is, identifying causes below the presenting symptoms (Burke, 2002, pp. 40-41); (b) the relevance and connection of management and organization content to illuminate the problem and point toward a potential solution; and finally (c) their ability to identify and articulate their learning via reflection and explore their own assumptions via critical reflection. As we see, these coincide with the design of the three phases of the project.

COURSE RESOURCES

There is an array of books on the market delineating the action research process (e.g., Marquardt, 1999), some linking action research to leadership development (e.g., Marquardt, 2004; Torbert & Associates, 2004). Recognizing instructor preferences will vary, my own preference is Coghlan and Brannick (2005) because it is readable and scholarly without being simplistic and prescriptive, provides students with sufficient guidance to conduct an action research project, and sets the stage briefly so students can move on to their project without being bogged down in background reading. Because most of students' classroom lives have been oriented toward connecting theory to practice, to help clarify the potentially confusing expectation of working in the opposite way, that is, connecting practice to theory—the practical to the conceptual-students' accounts of projects are provided as models (see Deane, 2004; Parkinson, 2004). Background concepts pertaining to ontology and epistemology are collected from a variety of sources (e.g., Burrell & Morgan, 1979; Thomas, 2004; although Johnson & Duberley, 2000 would serve as a good single source) and discussed.

COURSE DESIGN

This course on action research is delivered in a one-semester format to students enrolled in a graduate program within Arts and Sciences that leads to a master's degree in organization management. (See appendix for course description and learning objectives.) The course is certainly applicable to students in other programs in business school curricula, for example, master's of business administration (MBA), where action research is gaining currency—particularly in executive programs. Perhaps the critical requirement is that students are employed in some manner, preferably in a career-based position.

Experience indicates it is unlikely that most students will actually complete their projects in the semester time frame. Because the problems stu-

dents identify are work based and significant to their organizations, implementation of a workable solution frequently cannot realistically occur within a semester's time horizon. (After the course concludes, students often update me on the progress of their projects.) This is not a fatal obstacle. Recalling that the main objective of action research is learning rather than problem solution, the three phases (described below) of the student project create the learning opportunity while setting in motion the ultimate pursuit of problem resolution in their respective organizations.

Precourse setup. Prior to the first class session, an e-mail message to students outlines the basics of the course. In particular, they are prompted to begin thinking about a problem occurring in their work setting. Students may consider talking with their coworkers and superior, supervisor, or manager to solicit input and buy-in for the basic course objective: learning from working on a so-called real problem, one that has a meaningful impact in their work-place. Some background materials on action research, work-based learning, and scope of the project are also distributed so students arrive at the first session with a sense of project expectations. Periodic messages to class members (via e-mail) throughout the semester elaborate on any issues that arise in discussion.

Class meetings. Class meetings take on three formats: introductory and direction setting, interactive critique, and wrap-up with feedback. The initial meeting sets the stage for the project, providing explanation of syllabus details and painting a picture of what students need to do in undertaking this endeavor. Furthermore, some time is spent addressing the topic of knowledge itself, that is, ontology and epistemology, and how researchers acquire knowledge via methodology. As to the former, most students have not been formally exposed to any approach other than objective views of reality, for example, reality is "out there," the same for everyone, to be captured by empirical research. (In many cases, their only exposure occurs in statistics, usually presented from a distinctly positivist orientation.)

Discussion of the social aspect of constructing reality leads to recognizing how lived and/or experienced reality is not the same for everyone, thereby legitimizing a wide variety of interpretations of the same experience. In addition, they explore "how we know"—what constitutes meaningful (and relevant) knowledge, what it means to make claims to knowledge (e.g., McNiff, 2000), and the biases we bring to building our own knowledge structures. This evolves into a dialog on filtered media (e.g., academic, peer-reviewed outlets) and unfiltered media (e.g., Internet), and who constitutes expert sources of knowledge and why. (See Dehler, Welsh, & Lewis, 2001 for a crit-

ical analysis of textbooks.) Ultimately, students surface hidden assumptions about their own values and how they influence decisions related to the veracity of knowledge—a particularly important judgmental skill in a world characterized by information overload. (These topics are enhanced by drawing on Burrell and Morgan [1979] in particular. Additional discussion on addressing issues of thinking critically is elaborated below.) The final class meeting provides an opportunity for students to report on their progress, share their key learnings with the entire class, and submit feedback to the instructor.

In the center of the course, class sessions are designed to provide students with an opportunity to work collaboratively, that is, making work public (McNiff, 2000; Raelin, 2001). Through groups of five to seven members (groups should remain intact throughout the semester), students describe their projects and solicit input, while fellow students ask questions and identify relevant literature that might be helpful. At least two benefits occur in this process. First, students must articulate their organizational problem within the context of the curriculum; that is, discourse reveals initial muddled thinking, fosters clarity of logic, and begins to identify content and topic areas that inform their project.

Second, students assist each other in getting past superficial surface symptoms to pursue deeper understanding of the root issues. Peers thus engage their own knowledge bases and offer diverse viewpoints, prompting further inquiry into each other's projects. In this way, these tutorial groups or learning teams form a critical community (Griffiths, 1990, p. 43), provide feedback and create the potential for "constant questioning about one's values and theories" (Raelin, 1997b, p. 369). The result, then, is that students "derive knowledge not *about* management but rather about their own capacities to take action" (Raelin, 1997b, p. 369).

Ideally, each group would have a competent (outside) facilitator to assist with group process (J. Raelin, personal communication, January 17, 2002). In addition, students need not meet every week; the number of meetings can vary depending on an instructor's judgment and student progress. Holding at least four to six sessions in addition to the initial and final meetings seems most constructive.

The Action Research Project: Instructor and Student Voice

THE STUDENT VOICE

Reason and Bradbury (2001) contended that "a primary purpose of action research... is to liberate the human body, mind and spirit in a search for a better, freer world" (p. 2), and furthermore, that we adopt a "participatory

worldview" (p. 6) that fosters the cocreation of relationships with students. For example, the following discussion includes a coauthoring relationship with a student who completed the action research course described in this article. Too often in our accounts of pedagogical explorations the student voice is treated as a byproduct, that is, students as subjects, or incorporated as an afterthought in our elaboration of management pedagogies. With rare exception (e.g., McNiff, 2000; Van Seters & Field, 1988-1989; Whitehead, 1994), direct student commentary on pedagogy is missing from our learning discourse. In her account of action research, McNiff (2000) bridged topical exploration with her own personal journey, describing life itself as "an ongoing action research project, a constant action-reflection process which consistently aims for self-renewal with social intent" (p. 20). Integral to this process is the inclusion of narratives—her own and those of her students—that provide insight into the generation of practice-based knowledge. Therefore, students who participated in the action research course described in this article were asked to provide their own reflections on action research as a learning opportunity. Their perspective, collected and synthesized by spring 2003 class member Rosemary Edmonds, are interspersed with the instructor's narrative in the remainder of this article.

THE ACTION RESEARCH PROJECT

The course project is organized into three phases: (a) project overview and problem identification (empirical: description), (b) problem elaboration and solution (interpretation: explanation), and (c) personal development (critical: reflection). Although these have the appearance of temporal linearity, in reality they are not. Students discover the iterative nature of writing and thinking by circling back to revise earlier work as their knowledge and understanding increases as they progress. Thus the first two phases are highly reflexive while the final component, reflections on learning outcomes, needs to be a conscious aspect from beginning to end. This is explained below.

Rosemary Comments:

OPENING THOUGHTS

Students learn most avidly and have their best ideas when they get to choose which questions to explore.

-Kohn (1999, p. 150)

Action research was uncharted territory for everyone in our class. It was briefly referenced in our organizational behavior textbook; however, beyond that, only minimal understanding existed. When we received our packet of articles before the start of class, it was clear there was more to action research than just applying so-called book knowledge to problems at work. Certainly none of us knew what was in store and could not imagine that the course would take us on a challenging journey that would lead us to question what we thought we knew—both about our subjects and ourselves.

Phase 1: Project overview. One purpose of this phase is to set the context. Students provide a brief overview of the organization itself and their role. This is followed by a pragmatic description of the organization problem that the student observes. Surface indicators and symptoms are usually highlighted, for example, information is not getting to the right people, the manager seems too controlling, project work is not allocated efficiently. Students offer preliminary speculation as to the problem's origin or the central issue, and a first take on defining the problem. The objective of this phase is to arrive at a starting point for more in-depth problem exploration and preliminary solution creation.

For instructors, there are four salient issues at this point. First, because students come from a variety of organizations, the project is undertaken individually and idiosyncratically. When necessary, working students are paired with international students or students not currently in a career-oriented job. In these cases, each pair works collaboratively on Phases 1 and 2; however, Phase 3 is completed individually because learning and reflection are personal. Pairing is not necessarily straightforward—many of my students are in the military or work in organizations where security clearances are at issue. My strategy is to pose the dilemma to students ahead of time so that they can negotiate the inclusion of students who are nonworking in their project where possible.

The second concern, related to that above, has to do with those students who are working on sensitive projects. While being aware of such circumstances, students can fulfill the requirements of the project without incorporating proprietary or classified information into their project. For example, an Air Force pilot's project on unmanned aerial vehicles (i.e., UAVs, pilotless aircraft, drones) provided minimal but sufficient description to move on to his problem: the challenge posed by interservice decision-making processes. The point is that, for the purposes of the projects (which are treated with strict confidentiality with the instructor), there is no need to delve into sensitive details. Students can do that later within the confines of their workplace as the project unfolds beyond the scope of the course project.

Third, because Phase 1 is critical to a successful project, students are asked to submit drafts of this phase so that they can receive critical feedback, suggestions, direction, and prompting to increase the likelihood of their keeping the project on track. In particular, it offers an opportunity to suggest sources and point students in a research direction that uses their time more efficiently. This is not a so-called research project in the traditional sense. So, because time is limited and it is important that students get into their projects quickly, this provides early guidance and welcome direction in searching for academic literature that expands their horizons.

A word of caution is in order here. Faculty need to closely monitor the extent of control they exert. Because our feel for the inquiry process is more informed, the temptation to provide excessive guidance is very real. If it were our project, we might perhaps proceed differently. It is, therefore, imperative that students retain ownership of their own work, even if it ultimately turns out to be less than ideal. While the most overt instructor input occurs in Phase 1, I willingly read Phase 2 drafts—however, my feedback is centered on substantive issues while resisting evaluative comments, such as, "It would be better if you did such and such." The typical comment to students is to make them aware of possibilities, offering alternative perspectives and sources but ensuring that they make their own choices—thereby retaining responsibility and accountability for their work.

Finally, as a pragmatic concern and based on experience, students are limited to 5 (single-spaced) pages on each phase. This forces students to make decisions about what to include and to write more parsimoniously. In addition, obviously, it helps the instructor manage workload—however, this is open to individual instructor preferences. The initial offering of the course generated an interesting, if predictable, dynamic: On receiving a wide-eyed reaction to suggesting a 5-page-per-phase guideline, students became so immersed in their project that some submitted up to 30-page papers (single-spaced). Virtually all exceeded the revised 15-page suggestion.

Rosemary Comments:

PHASE 1: EXPECTATIONS AND BEGINNINGS

The hardest part of beginning an action research project is developing the discipline to keep a written account of what's happening, particularly when you have no idea what you're looking for.

—Newman (cited in Zeichner, 2001, p. 273)

When it came to identifying a viable problem to tackle at work, many of us found that, similar to many things in life, doing it yourself is a lot harder than watching others. Even though we were warned about falling into the trap of accepting the surface diagnosis of our problems, initially many of us found it difficult to unearth the real causes of our selected issues. For instance, on the first pass many students identified what they observed empirically on the surface; however, on digging deeper they realized that their first diagnosis was merely the manifestation of the symptom; there was a deeper underlying cause. Carl, a telecommunications executive, said he "felt (the problem) was poor management and poor execution. However, after delving deeper you really see it's much more complex and complicated than just poor management and execution." After more reflection, he and his project collaborator concluded the problem revolved around power and politics.

Other students found their problem intertwined with institutional problems. Kathy, a college basketball coach, first attributed her problem to people's unwillingness to change or experiment with new ideas in her department. However, as she explored the issue, she realized that "the implications of change were on a wider scope. It wasn't just the athletic department that was influencing the problem; it was tied to the rest of the institution." Completing the first stage of the action research process taught Michelle to "look at a problem from several different angles before coming to a conclusion."

Phase 2: Problem elaboration. This phase has several purposes. First, students begin to explore the problem in more depth and with greater sophistication. Frequently, Phase 1 attributions are quite general and superficial. Problems are construed vaguely as communication breakdowns, poor organization, or personality differences. Phase 2 aims to get below the surface into organizational and managerial attributions. In other words, why do communication problems occur, what specifically does poor organization mean, and what's at the root of apparent personality differences? Second, students begin to understand, interpret and frame the problem in terms of what they have been learning in their curriculum. This entails identifying codified knowledge in which to locate the problem, for example, structure and/or design, leadership, decision-making processes, communication processes or mechanisms—and to begin recognizing that problems are complex, that is, involve circles and causal links rather than "linear reality" (King, Down, & Bella, 2002). It is important at this point to counsel students to separate personality attributions from organizational concerns. Although some students believe that simply replacing a manager or coworkers will solve their problem, reminding them to depersonalize problems stimulates utilization of new frames and knowledge. Part of the learning is recognizing that

solutions have a greater likelihood of being implemented with the cooperation of a manager and coworkers.

When a general topic area within the literature is identified, students are prompted to conduct additional research to expand their knowledge within that domain. For example, a problem pertaining to decision-making processes would lead students, as a starting point, to references in the decision-making chapter of a basic text. The ultimate aim is for students to appreciate the depth and complexity of organizational topics with sufficient exploration to shed light on a real organizational problem and its solution. This process encourages an explicit connection between classroom learning and action, that is, development of an implementable solution. Students also gain an appreciation for pursuing additional knowledge with a purpose.

As students progress in this phase, they recognize the need to revisit Phase 1 to revise their problem discussion to connect with the more concise description illuminated by Phase 2 research. They recognize that writing is not linear (Locke & Brazelton, 1997, p. 45) and, similarly, that thinking becomes more reflexive. It also turns thinking and writing into an iterative process where later learning alters the substance of what came earlier. This phase is particularly important for two reasons. First, it leads students to better understand how to draw from and employ a knowledge base to build an argument. They begin to see how what we do can be informed by what we know, that is, knowledge-based action-a more explicit connection between programmatic learning and action than simply acquiring content independent of context. Second, it draws attention to rhetorical and substantive issues. Rhetorical problems are addressed in ways that require substantive changes, that is, alterations in belief or knowledge, whereby the resulting tension "leads to the deepening of reflective thought through writing" (Scardamalia & Bereiter, 1985, p. 327).

Rosemary Comments:

PHASE 2: DEEPER LEARNING

The human species is distinguished by its capacity to learn, to make meaning from experience.

-Boyatzis, Cowen, Kolb, & Associates (1995, p. 230)

As the so-called real problems emerged, the second stage of action research called for us to delve into the research process. Information came from several sources: traditional reference and literature searches,

consultations with our professor, and group sessions where fellow students offered their insights on each group member's project. This swirl of information and varied points of view prompted us to see our workplace problems in a different light. As we reconsidered what we thought about our individual situations, new avenues for solutions were opened, and many returned to the books for more research.

Carl chose to study why a big project was stalled. His initial diagnosis was poor management; however, when he studied issues of effectiveness and communication, he realized that the senior management team's attitudes were rooted in past company cultures. The current company resulted from a merger, and the executive team hailed from the two organizations. Now working together in the combined company, the executives from the folded-in company were against the proposed project while those from the original company were for it. Carl viewed the proposal as a proactive solution, whereas those opposed came from a culture that favored reactive actions. Buying into the current project would mean accepting a new way of doing things, which for those executives may have meant renouncing their old ways. "There was a high personal cost; it would have meant validating that the way they were working was wrong," Carl said.

Unlike typical book learning, where information is consumed in easy-to-digest bullet points, action learning seemed to make things harder. Kathy said her problem became more complex, "It grew more limbs. I couldn't attack all of the things that were affecting the student athlete's socialization issues. It was attached to so many things." Marisa and her project collaborator Catalina also found their research took them to multiple areas. "We started by trying to study efficiency. Then we moved into values, culture, mission, vision and everything." As they dug deeper and started exchanging ideas about launching a new service with employees of Marisa's company in Italy, they realized a serious issue was that workers were not committed enough. "They were working because you have to work," she said. When Marisa and Catalina helped workers realize they were part of the solution, they found that "people came up with new ideas, and the ideas were so wonderful that we immediately implemented them."

Similarly, Kim noted that

upon surveying the literature, I found that the main reason [for the problem] was not a lack of communication (her initial attribution), but a disconnect between headquarters culture and the field office subculture. In addition, the division's organization and power structure formed an antagonistic relationship between the two offices. Underlying causes were numerous, however, power and culture issues stemming from the core structure are critical in learning about how to manage the differences between the two offices. These

underlying causes led to ineffective business strategies, poor quality contract proposals with rushed deliverables, and growing frustration at the corporate, division, and field level.

Also key in forming her perceptions was recognizing how her predispositions affected her interpretation of the situation.

As we unraveled our tangle of issues, I don't think we realized the depth of learning we were experiencing. Boyatzis et al. (1995) pointed out, "Deep learning refers to the fact that sometimes learning creates profound transformation in the life of the learner" (p. 232). We were learning more about ourselves and the impact of our perceptions as we dug deeper into the circumstances surrounding our research problems. Stripping away preconceptions and writing a new truth is not an easy process. We often felt lost, discouraged and uncertain.

One sign that we were learning was the so-called pain many students associated with working on their projects. Kim said, "I found the process painful, yet exhilarating at the same time. It was disconcerting to get to a point where you didn't know what the next step would be; however, as you uncover more information, the path becomes clearer." McNiff (2000, citing MacLure) supported this notion that too often "victory narratives conceal the pain and struggle behind the triumph" (pp. 19-20).

Marisa recounted her own personal struggle as feeling lost in the midst of the project: "There was a moment when both of us felt really stuck, and after talking with the professor we were totally confused." Yet, that confusion led to their breakthrough. When Catalina started asking questions while trying to follow some of the professor's suggestions, Marisa was at first taken aback—after 2 months working together, Catalina still had all these questions! Marisa acknowledged how much she knew (about the company business) but took for granted that everyone else knew as well. At that moment she realized that the newer employees were probably just as confused as Catalina, and they needed to devise a method to provide those people with the opportunity to learn and absorb all the necessary information. "I learned the importance of looking at things through new eyes, even if they are 'old' things," Marisa said.

INSEAD Professor Herminia Ibarra suggests that if you find you are not confused, then you are not "engaging the problem" (Tischler, 2003, p. 112). The conversations allowed Marisa and Catalina to go beyond their original thinking, and forced a new set of considerations before they could reach a new potential solution.

LEARNING FROM (WRITING ABOUT) ACTION

As suggested at the conclusion of the Phase 2 discussion, a basic tenet of good instruction is to employ writing as a mechanism to help students learn to clarify and communicate their thinking (Lowman, 1995, p. 246). Thus, the act of writing itself prompts students to reflect on what they write as well as how they present it. McNiff (1990) and others have argued that writing represents product and process, thought and thinking—"the thought as the product of thinking, and thinking as the transformative element of thought" (p. 55). Furthermore, writing is "the symbolic expression of thought (this is what I mean) and the critical reflection on that thought (do I really mean this?). My writing is both reflection-on-action (what I have written) and reflection-in-action (what I am writing)" (p. 56). Expository activities engage students "in a new way of thinking through writing about a new way of thinking" (McNiff, 2000, p. 211).

Writing, then, is certainly essential to the process of learning, particularly when employed as a means to enhance the development of student thinking. When invoking written composition as problem solving and knowledge transformation (Dehler, 1996), competent writing reflects clarity of thinking (Locke & Brazelton, 1997) and making learning intentional, that is, learning beyond the minimal instrumental objectives of an activity (Bereiter & Scardamalia, 1987). Knowledge is not something to be accessed, rather it is created (Dehler, 1996). In an action research context, students "develop their own understandings (in order) to transform their practices through those understandings" (McNiff, 1990, p. 52). One of the primary procedures invoked to make sense of experience is reflection, which has been operationalized as writing competency (Locke & Brazelton, 1997) and journal writing (e.g., Allen & Enz, 1987; Ramsey, 2002; Varner & Peck, 2003).

If the objective of reflection is to turn experience into learning (Boud, Keogh, & Walker, 1985), journaling is one means of accomplishing this. In terms of action research, however, it does not go far enough. While reflection provides a mechanism to articulate learning derived from project-based learning, it is distinctly uncritical (Garrick & Clegg, 2001; Welsh & Dehler, 2004). For example, developing students' skills at creative expression and "conscious analysis of their own experiences" (Allen & Enz, 1987, pp. 1-2), "ordered thinking" (Locke & Brazelton, 1997, p. 46), providing feedback to the instructor about learning (Ramsey, 2002), and "comprehension and retention of course material" or "making a topic personally meaningful" (Varner & Peck, 2003, pp. 55-56) are all understandably admirable and desirable objectives.

However, these activities fall short of being critical because they do not turn the process back on itself, that is, they are not reflexive. Reynolds (1998,

1999a) in particular favored critical reflection as a vital process. He explicitly contrasted critical thinking, "which usually implies thoughtful analysis and selection between available options" (Burgoyne & Reynolds, 1997, p. 105; Reynolds, 1999b) with thinking critically, that is, to engage in critical treatment of their experience (Dehler et al., 2001, p. 501). Critical reflection requires revealing heretofore unexplicated, taken-for-granted assumptions.

Reflective writing assumes a central place in developing thought processes and enhancing learning. While action research is about working toward practical outcomes, mere "action without reflection and understanding is blind, just as theory without action is meaningless" (Reason & Bradbury, 2001, p. 2). Reflection, then, serves as the primary mechanism for leveraging experience and translating knowledge into action.

Phase 3: Personal development. From an instructional standpoint, this is the most important part of the project because it causes students to reflect consciously to identify what they have learned. Raelin (1997b) pointed out that cognitive psychologists consider the reflection process to be as valuable as experience. The reflective process also considers that there is a cognitive component and an emotional component to learning. There are two aspects to the personal development phase of the student project. First, students reflect on their own learning within the conduct of the project itself. Second, they then reflect critically on their own learning processes. These two steps are addressed briefly below. (See Welsh & Dehler, 2004, for more extensive treatment of reflection and critical reflection.)

Reflection has been defined as "analysing, interpreting, synthesizing, explaining and drawing conclusions" (Sanguinetti, 2000, p. 235), that is, uncovering and making explicit what was "planned, observed, or achieved in practice" (Raelin, 1997c, p. 567). Weick (1979) contended that "understanding originates in reflection and looking backward" (p. 194). Schon's (1983) reflective practitioner spoke directly to the embeddedness of action within reflection. Reflection on action generates propositional knowledge, that is, "knowledge that" (McNiff, 2000, pp. 39-42). Propositional knowing is usually employed to replicate effective practice (Raelin, 2001).

Reflection also transcends the space between propositional and interpretive knowledge, which incorporates experience. Propositional knowledge evolves into "knowledge how," that is, procedural and personal knowledge (McNiff, 2000), or practical knowing (Raelin, 2001). Here, propositional knowledge is transformed into learning by contextualizing experience through reflection. Reflection, then, serves as the mechanism for students to consolidate their learning. However, while reflection has been utilized in

workplace settings (e.g., Rigano & Edwards, 1998) and is constructive in helping students identify what they have learned through the conduct of their project, it is incomplete in the action research model because neither propositional nor interpretive learning is distinctly critical. In light of this shortcoming, the reflection process also needs to incorporate Mezirow's (1991) notion of "premise reflection"—the necessity to "reexamine and challenge our presuppositions and premises" (p. 110).

Therefore, the second component of the personal development phase requires students to engage in critical reflection (e.g., Burgoyne & Reynolds, 1997; Marsick & O'Neil, 1999; O'Neil & Marsick, 1994; Reynolds, 1998, 1999a). Critique engages students beyond the focus of Phases 1 and 2 (descriptive and interpretive) by prompting them to begin to make their own operating assumptions more transparent. Assumptions might include institutionalized beliefs and values, accepted commonsense conventions, and other taken for granteds that become a normal part of organizational life. An example of this might be the student's recognition of how much of their prior training, and even their workplace context, is built on rational assumptions without consideration of political or cultural-symbolic perspectives. One possible outcome of this process might be the generation of new insights, and reformulating their interpretation and understanding of the underlying problem.

The culmination of critical reflection is emancipatory—developing the student as a change agent. Gregory (1994) suggested that adopting a critical attitude toward their own practice raises students above the ranks of technician. Engaging learners at a different level of experience, for example, critically reflective and emancipatory, leads to a transformation of perspectives—a two-way bond between theory and practice rather than theory-led practice (Gregory, 1994, pp. 46-47). These ideas are consistent with the aims of critical pedagogy (e.g., Cunliffe et al., 2002; Dehler et al., 2001; Reynolds, 1997). An interesting example of this process is offered by Nason (2000), who related his critical reflections on the values and hegemonic ideology embedded in his own organization's managerialist control tactics.

Rosemary Comments:

PHASE 3: "LIGHT BULB MOMENTS"—LOOKING THROUGH A NEW LENS

There can be no substitute for practice in the very midst of real live experience. Only then will participants know whether they can change their assumptions and behaviors on-line.

-Raelin (2000, p. 173)

People attempting to master a new language often experience a breakthrough—"light bulb moments." Suddenly the words begin to flow, and they are speaking the new tongue. In action research, there were moments when suddenly the fog cleared and a new idea or understanding emerged. Balancing the so-called pain were often exhilarating light bulb moments when suddenly a new angle would emerge or information suddenly would be cast in a new light. Marquardt (1999) said "We all have mind-sets that we are not even aware of, and these mind-sets limit the scope of ideas we can generate to solve problems with a fresh perspective" (p. 27). Burrell and Morgan (1979) argued that from an antipositivist stance "one has to understand from the inside rather than the outside" (p. 5). Kohn (1999) said "confusion drives us to understand more deeply" (p. 137) and that through deep understanding one seeks integration—to bring together skills, topics and discipline in a meaningful context (p. 131).

Carl related the following:

I had light bulbs—not bright; they had a little glimmer. It opened my eyes to not take everything at face value, delve a little deeper. If people are involved, the situation is probably going to be much more complex than it appears on the surface.

Kim's light bulb occurred when she

took a moment to reflect on conversations I had with two field locations. During the visit, I didn't realize the different cultures. After a follow-up conversation with a field office employee, I finally realized that culture plays a very prominent role in each of the locations. One field office was family oriented and very "by the rules," but the other was extremely entrepreneurial in spirit and did not follow any rules. It wasn't the communication within the offices; it was the lack of understanding between offices.

Marcela added that her light bulb moment reflected a new understanding of her responsibility within the family business in Colombia. This led her to reexamine the opinions she held about the situation, which then led to new ideas about how to approach old issues.

The light bulb moments served as a turning point for many of us. We crossed the bridge from uncertainty to understanding. We learned. Burrell and Morgan (1979) wrote, "Growth of knowledge is essentially a cumulative process in which new insights are added to the existing stock of knowledge and false hypotheses eliminated" (p. 5). While these illuminating moments

were critical to our understanding of the work-based problems we were coping with, the reflective component was similarly enlightening to us personally as we came to grips with exploring our own self knowledge. Most of my classmates realized that the key to unlocking problems and ensuing solutions was getting to the true core of self. Until they uncovered their personal biases, issues and perceptions, it was often impossible to see the true circumstance and find the so-called right solution.

Kim realized

I like to have control over situations in the workplace and admit that I tend to think that my way is best. I realized my viewpoint was biased toward the traditional, hierarchical structure and when [the field office] did not abide by corporate procedures and policies, I became frustrated. It was the middle of this project when I realized that I did not frame my observations from a neutral point. It is important for me to stay open to other ideas.

"Personally, I never tested assumptions in my life as I did in this process," Carl said.

I kept asking myself could it be this, could it be that?—digging a little deeper. One of the comments I made to my boss was it's been a very interesting journey; it opens your mind to other concepts; it opens you up to looking at other actions through a different lens.

Marcela added

I saw it as a good opportunity to rehearse and learn primarily from me, as I did not have anything to lose and many things to gain... I felt supported with freedom and new literature and fluid conversations that helped me to have a vision of new colors and lights on the picture that I was creating in my head.

By taking the time to question our understanding of the situation and the underlying causes, we discovered a whole new set of answers that might have otherwise been missed.

PROJECT PROBLEMATICS

The adult education tradition stresses that students' experience should be recognized and valued. Brookfield (1995) emphasized "honoring, while at the same time critically analyzing, people's experiences" and contended "that adult education's unique purpose is to help people understand and learn from their life experience" (p. 222). Thus, the instructional approach is distinctly hands-off in the spirit of self-directed learning (e.g., Rhee, 2003) in

the belief that confronting the messiness of the organizational milieu is a significant aspect of the learning process, for example, making sense by coping with uncertainty and ambiguity. One student, an Air Force officer with extensive middle-management experience, related that he'd never had to actually define a problem before because they were always handed down to him by superiors.

Students' end-of-course feedback can be relegated to three categories: structure, motivation, and class meetings. First, regarding the parameters of the project, the instructor provides basic structure by developing a foundation in action research, and ongoing monitoring of progress. However, instructor intervention and especially control is resisted unless specifically requested. In such cases, support via consultation is provided without making decisions for the student. The intent is to prevent any student getting stuck on some aspect of the project. Nonetheless, some students are "too busy" to solicit instructor assistance, fall behind, do not keep the instructor apprised, and occasionally require extra time following the semester to finish. Although not encouraged, of course, this is tolerated. Students must accept responsibility and its consequences and typically do so good naturedly.

As can be imagined, reaction to this approach varies as it requires students to rely primarily on self-initiative. Many remark how much they appreciate the freedom to pursue inquiry in a way that they control, for example, one student said she or he "liked having an opportunity to study a problem that is real to me." Others lament the absence of the traditional trappings to push them, sometimes accusing the instructor for not motivating them sufficiently, for example, "the course was too incumbent on me to do the learning." If there is a pattern to such dilemmas, it would be that students with less work experience tend to demonstrate more problematic behavior (but that is emphatically not uniformly the case).

Finally, the most common request is for more class sessions. This is up to students rather than the instructor, albeit affected by systemic constraints—although many (often more experienced students) prefer fewer meetings. Perhaps the critical issue for the instructor throughout the process is to attempt to monitor the pulse of the class as well as individual students. This is not always easy without being intrusive; however, abdicating responsibility, that is, a complete laissez-faire approach, would be irresponsible and unprofessional. Thus, it is a classic instructional paradox: one needs to stay out of students' way and allow them to find a path, that is, resist a tendency to control with the desire to be helpful and provide counsel when it might be constructive!

Conclusion

Learning in the context of work has been proposed as a response to the "changing articulation of the knowledge-based economy" (Rhodes & Garrick, 2003, p. 447). It follows that a cornerstone for acquiring meaningful skills for managing is Whitehead's (1994) central question: "How do I improve my management practices and processes?" (p. 140). His underlying premise for action research stems from the convergence of practitioner and researcher within the context of a meaningful organizational problem. The challenge for management educators and learners appears deceptively straightforward: "How is it that competence is turned into performance?" (McNiff, 1990, p. 54). Yet this seemingly simple question presents a conundrum that defies simplistic solution and continues to perplex management educators. One response calls for ways to enrich students' learning by raising their level of "complicatedness" (e.g., Cunha, Cunha, & Cabral-Cardosa, 2004; Cunliffe, 2002; Dehler et al., 2001).

Action research provides a pedagogical mechanism for management educators to do this—by engaging students more directly into "the messy real world of practice" (Griffiths, 1990, p. 43). Part of the challenge has to do with the ultimate aims of pedagogical practice in management, that is, how we define learning. This means challenging (not dismissing) the traditions and taken-for-granted assumptions of positivism, and the aims of so-called neat closure or happy endings. This was the concern expressed by an MBA student in this journal 16 years ago—that management curricula were too rational and, therefore, inadequate in developing managerial skills (Van Seters & Field, 1988-89) as are efforts at curriculum reform (Boyatzis et al., 1995).

It is revealing that, in the conduct of the action research course described in this article, often (good) students are quite stumped and frustrated by the project. They express fear in trusting their own competence absent someone checking on their work or receiving specific guidelines on how to complete tasks. For them, learning has been defined and experienced as performance related to propositional knowledge. Action research provides the opportunity to directly relate curricular learning to actual workplace context, and to translate programmatic learning into workplace action. This creates a situation whereby students experience the struggle of coping with turmoil, tension, and the social embeddedness of real organizational problems, enhancing their competencies as a result. However, learning is incomplete if "the focus of management education on managerialist practice alone is at the expense of increasingly marginalized critical and reflective practices" (Rhodes & Garrick, 2003, p. 449).

This underscores the importance of integrating the critical-theoretic component of action research. While universities and business endeavor to foster closer linkages between "contemporary management learning and formal education," Rhodes and Garrick (2003, p. 463), caution that it would not be "completely healthy to uncritically remove all aspects of the distance" between them. If the distance is completely collapsed, resulting in "instrumental outcomes in which learning no longer requires critical distance, dialogue, and critique—knowledge is only valued insofar as it produces economically legitimated results" (p. 464). Thus, action research is designed to privilege student learning above other organizational ends.

To this end, McNiff (2000) emphasized that the conduct of research is always a social practice, and she invoked an interesting analogy. In Ireland, people say "I do be here" because in Irish Gaelic be is an active verb. Consequently, she contended, "Knowledge is an active process, something we do rather than something we acquire" (p. 129). In her view, learning is a "relational process between people that enhances their understanding of their practice with a view toward improving it" (p. 204). She called for a new form of scholarship—action research—whereby managers "regard themselves as researchers who are studying their practice in order to improve it" (p. 16). From this standpoint, the study of management practice asks such questions as: What is the nature of my management practice? How do I learn it? How do I use my learning? What are the implications for me and others? (p. 16). Action research projects, as described in this article, provide an opportunity for students to integrate management learning with their own "living realities" (Whitehead, 1994, p. 140) as managers.

Rosemary Comments:

REFLECTIONS ON ACTION RESEARCH

Questioning and reflection, necessary to a holistic overview, make the critical difference in the quality of problem solving.

-Marquardt (1999, pp. 29-30)

As learning occurred, we began to look back at the process hoping to figure out how this method worked and differed from the way we learned traditionally. Action research was a unique experience for most of us. It was a reverse way of learning. Instead of jumping to answers, first we sought out questions. "Questioning, unlike most of the programmed knowledge, not

only enables us to add to the sum of knowledge but also (and more important) provides us with the spur for reorganizing that knowledge" (Marquardt, 1999, p. 30).

Action research exposed us to a whole new way to learn. Most of us listed reading and class discussions as our preferred learning methods. However, after experiencing the action research process, it makes me ask "are you really learning" when you're passively reading? Or are you simply gathering information for future use in the context of a more complex whole? Kohn (1999) said that "learning isn't a matter of acquiring new information and storing it on top of the information we already have. It's a matter of coming across something unexpected, something that can't be easily explained by those theories we've already developed" (pp. 132-133).

Action research is a classroom without walls. Gone was the structure of traditional learning where you take notes from a lecture, then spit that information back in the form of a test or traditional paper. Being cast about in a vast place where every piece of information can potentially send you in a whole new direction is hard. As we learned more about our topics and began to question our initial conclusions, suddenly even the most seemingly simple problem was no longer so basic. As our knowledge base increased so did our understanding about the complexity of the issue at hand. Confronted with this new information, we were forced to rethink much of what we had concluded up to that point. "If I would not have learned it on my own and taken the time to dig into the material, it would have taken me longer to recognize what was really going on," Kim realized.

Most members of our two classes left with a positive view of action research. Freedom and depth of learning were two of the reasons cited. Although initially difficult, removing "the walls" was satisfying. "There weren't really any parameters, very limited parameters. I loved it. I don't like a lot of parameters, I like to be able to venture out," Carl said. "Action research is about individual learning. As you dig deeper into the material, it is up to the individual to decide the path... and is an invaluable resource for learning more about yourself," Kim added. Having a path without boundaries and predefined limitations serves as the basis for accelerated growth and learning.

Epilogue

Rosemary Edmonds and 27 action research classmates were each awarded master's degree in organization management in May 2003 from the Organi-

zational Sciences Program in the Columbian College of Arts and Sciences at The George Washington University. Gordon Dehler is now in the School of Business and Economics at the College of Charleston.

Appendix Action Research Course Overview and Learning Objectives

Department of Organizational Sciences
The George Washington University
Organization Management Master's Degree Program

Course Overview

How do we learn about organizations and management? One approach that has been gaining favor during the past decade, particularly in the realms of education (teacher training) and management, is action research. Action research is a broad label that we are using because this course is designed around the ideas of McNiff (2000) and Coghlan and Brannick (2005), who used that term. It is sometimes used loosely (Eden & Huxham, 1996) to encompass approaches to management learning known as action science and action learning (see Raelin, 1997a). Action research is (explicitly) not divorced from theory—but it privileges neither experience nor theory, per se. It is reflexive; that is, one informs the other—however, in our case, the starting point is practice, and we work toward theory (whereas most traditional content-based courses start with theory and work toward practice). Thus, we make sense out of a particular situation—"the messy business of real life" (Griffiths, 1990, p. 43)—by connecting practice to theory. How does theory (or codified knowledge) offer insight into our sense making? How does our experience inform (reflect back on) theory? This action research experience gives you the opportunity to demonstrate knowledge transformation and engage in intentional learning, that is, explicitly utilize knowledge for a purpose and accomplish learning beyond the parameters of the project itself (Dehler, 1996). The central process by which this occurs is reflection, punctuated by critical reflection, that is, identifying and challenging your own underlying assumptions.

Course Project

The action research project constitutes the sole learning assignment for the course. It is designed for you to demonstrate your learning about organizations and management and should involve you in concrete action within your organization. Hence, it is not intended as a "term paper for the teacher" or as a planning document. In fact, the project should have some strategic value to the organization in which you are working. Most critical, the project should have impact on the direction of the sponsoring unit and even, perhaps, systemically across the entire organization. It should provide

an opportunity for you to exhibit your ever-expanding learning about organizations and management—hopefully in a way in which you might not have felt confident prior to undertaking your program of study.

Learning Objectives

In the conduct of this course and the action research project, students should be able to

- demonstrate the ability to analyze a complex situation in their own organization and define an ill-structured workplace problem that is affecting the student, their work group, or their organization, that if solved, would elicit some form of constructive outcome.
- make sense of the problem situation by relating, framing, or embedding the
 problem in concepts that have been explored in the student's curriculum; build
 on core ideas by engaging in targeted research that enhances the student's
 knowledge base in that area.
- be able to articulate the learning and knowledge derived from the conduct of the
 project by reflecting on your personal growth; engage in critical reflection to
 identify, illuminate, and critique your underlying assumptions and how they
 have, or have not, been affected.

Notes

1. The dearth of attention—at least in JME—is reflected by a search by article title and abstracts (which were initiated in 1991 with the evolution to JME) through the journal's archives. It revealed only five articles that employed the terms action research, action learning, or action science. (For those interested, the journal's historical evolution is The Teaching of Organizational Behavior: Vol. 1 and 2 [1975-1976]; Exchange: The Organizational Behavior Teaching Journal: Vol. 3 through 8 [1977-1983, Winter]; Organizational Behavior Teaching Review: Vol. 9 through 14 [1984 to 1985 and 1989 to 1990]; Journal of Management Education: 1991 to present.) The reason for this apparent lack of attention to action research and its variants as a pedagogy is unclear—although certainly many of the attributes associated with the action research process have been addressed in articles published in the journal.

Three explanations for this apparent void seem plausible. First, as argued in this manuscript, action research encompasses a shift in epistemological orientation. Generally speaking, (U.S.-based) training in doctoral programs has systemically incorporated a paradigmatic bias toward positivism. Although the implications extend beyond action research, this bias may subordinate students' exposure to methodologies such as action research to so-called traditional positivist (especially quantitative) approaches. In their critique of university education, Levin and Greenwood (2001) contended that nothing short of a paradigmatic shift toward a more pragmatist position, which includes pedagogies such as action research, is necessary to remedy the larger instructional dilemma. Second, more specifically, there seems an implicit if not explicit belief that action-based approaches are inherently practitioner-oriented and thereby lack academic rigor, that is, training and technique rather than scholarship and education. Third, it could be argued that management scholars have not paid sufficient attention to pedagogical developments in

- other disciplines. For example, in education action research has long played an integral role in the development of teachers (e.g., Lomax, 1990; Zeichner, 2001).
- 2. For more extensive grounding in critical perspectives, readers are directed to two *JME* special issues relating management education to: 1) *Critical Theory* edited by Prasad and Caproni (1997), especially Frost (1997); and 2) *Critical Management Studies*, edited by Cunliffe, Forray and Knights (2002). Foundational works by Alvesson and Willmott (1992), and Alvesson and Deetz (1996) are helpful. Insightful but less accessible sources include the work of Hancock and Tyler (2001) and Casey (2002).

References

- Akin, G. (1987, Autumn). Varieties of managerial learning. Organizational Dynamics, 16, 36-48
- Allen, B., & Enz, C. (1987). Journal writing: Exercises in creative thought and expression. Organizational Behavior Teaching Review, 11, 1-14.
- Alvesson, M., & Deetz, S. (1996). Critical theory and postmodern approaches to organizational studies. In S. R. Clegg, C. Hardy, & W. R. Nord (Eds.), Handbook of organization studies (pp. 191-217). London: Sage.
- Alvesson, M., & Willmott, H. (Eds.). (1992). Critical management studies. London: Sage.
- Bereiter, C., & Scardamalia, M. (1987). The psychology of written composition. Hillsdale, NJ: Lawrence Erlbaum.
- Bilimoria, D. (1995). Modernism, postmodernism, and contemporary grading policies. *Journal of Management Education*, 19, 440-457.
- Bilimoria, D. (1998). Editor's corner: From classroom learning to real-world learning: A diasporic shift in management education. Journal of Management Education, 22, 265-268.
- Boud, D., Keogh, R., & Walker, D. (1985). What is reflection in learning? In D. Boud, R. Keogh, & D. Walker (Eds.), Reflection: Turning experience into learning (pp. 7-17). London: Kogan Page.
- Boyatzis, R. E., Cowen, S. S., Kolb, D. A., & Associates. (1995). Innovation in professional education: Steps on a journey from teaching to learning. San Francisco: Jossey-Bass.
- Brookfield, S. D. (1995). Becoming a critically reflective teacher. San Francisco: Jossey-Bass.
- Brooks, J. G., & Brooks, M. G. (1993). The case for constructivist classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.
- Burgoyne, J., & Reynolds, M. (Eds.). (1997). Management learning: Integrating perspectives in theory and practice. London: Sage.
- Burke, W. W. (2002). Organization change: Theory and practice. Thousand Oaks, CA: Sage.
- Burrell, G., & Morgan, G. (1979). Sociological paradigms and organizational analysis. London: Heineman.
- Casey, C. (2002). Critical analysis of organizations: Theory, practice, revitalization. London: Sage.
- Chisholm, R. F., & Elden, M. (1993). Features of emerging action research. Human Relations, 46, 275-298.
- Coghlan, D. (2001). Insider action research projects: Implications for practicing managers. Management Learning, 32, 49-60.
- Coghlan, D. (2003). Practitioner research for organizational knowledge: Mechanistic- and organistic-oriented approaches to insider action research. *Management Learning*, 34, 451-463.

- Coghlan, D., & Brannick, T. (2005). Doing action research in your own organization (2nd ed.). London: Sage.
- Coombs, G., & Elden, M. (2004). Introduction to the special issue: Problem-based learning as social inquiry—PBL and management education. *Journal of Management Education*, 28, 523-535.
- Cross, L. H., Frary, R. B., & Weber, L. J. (1993). College grading: Achievement, attitudes, and effort. College Teaching, 41, 143-148.
- Cunha, M. P., Cunha, J. V., & Cabral-Cardosa, C. (2004). Looking for complication: Four approaches to management education. *Journal of Management Education*, 28, 88-103.
- Cunliffe, A., Forray, J. M., & Knights, D. (2002). Considering management education: Insights from critical management studies. *Journal of Management Education*, 26, 489-495.
- Cunliffe, A. L. (2002). Social poetics as management inquiry: A dialogical approach. *Journal of Management Inquiry*, 11, 128-146.
- Cunliffe, A. L. (2004). On becoming a critically reflective practitioner. Journal of Management Education, 28, 407-426.
- Davies, J., & Easterby-Smith, M. (1984). Learning and developing from managerial work experience. Journal of Management Studies, 21, 169-183.
- Deane, C. (2004). Learning to change. In D. Coghlan, T. Dromgoole, P. Joynt, & P. Sorensen (Eds.), *Managers learning in action* (pp. 9-23). London: Routledge.
- de Cock, C. (1994). Action research: In search of a new epistemology? *International Journal of Management*, 11, 791-797.
- DeFillippi, R. J. (2001). Introduction: Project-based learning, reflective practices and learning outcomes. Management Learning, 32, 5-10.
- Dehler, G. E. (1996). Management education as intentional learning: A knowledge-transforming approach to written composition. *Journal of Management Education*, 20, 221-235.
- Dehler, G. E., Welsh, M. A., & Lewis, M. W. (2001). Critical pedagogy in the "new paradigm": Raising complicated understanding in management learning. *Management Learning*, 32, 493-511.
- Eden, C., & Huxham, C. (1996). Action research for the study of organizations. In S. R. Clegg, C. Hardy, & W. R. Nord (Eds.), Handbook of organization studies (pp. 526-542). London: Sage.
- Friedman, V. J. (2002). Extended review: Action research in organizations (McNiff, 2000). Management Learning, 33, 525-530.
- Frost, P. (1997). Building bridges between critical theory and management education. *Journal of Management Education*, 21, 361-367.
- Garrick, J., & Clegg, S. (2001). Stressed-out knowledge workers in performative times: A postmodern take on project-based learning. *Management Learning*, 32, 119-134.
- Gergen, K. J. (1995). Social construction and the educational process. In L. P. Steffe & J. Gale (Eds.), Constructivism in education (pp. 17-39). Hillsdale, NJ: Lawrence Erlbaum.
- Gregory, M. (1994). Accrediting work-based learning: Action learning—a model for empower-ment. *Journal of Management Development*, 13, 41-52.
- Griffiths, M. (1990). Action research: Grass roots practice or management tool? In P. Lomax (Ed.), Managing staff development in schools: An action research approach (pp. 37-51). Avon, UK: Multilingual Matters.
- Hancock, P., & Tyler, M. (2001). Work, postmodernism and organization: A critical introduction. London: Sage.
- Hunt, J. M., & Weintraub, J. R. (2004). Learning developmental coaching. *Journal of Management Education*, 28, 39-61.
- Johnson, P., & Duberley, J. (2000). Understanding management research. London: Sage.

- Kemmis, S. (1988). Action research. In J. P. Keeves (Ed.), Educational research, methodology and measurement: An international handbook (pp. 42-49). Oxford, UK: Pergamon.
- King, J., Down, J. T., & Bella, D. A. (2002). Learning to think in circles. Organization Science, 11, 161-170.
- Kohn, A. (1999). The schools our children deserve: Moving beyond traditional classrooms and "tougher standards." Boston: Houghton Mifflin.
- Kunkel, S. W. (2002). Consultant learning: A model for student-directed learning in management education. *Journal of Management Education*, 26, 121-138.
- Levin, M., & Greenwood, D. (2001). Pragmatic action research and the struggle to transform universities into learning communities. In P. Reason & H. Bradbury (Eds.), Handbook of action research (pp. 103-113). London: Sage.
- Limerick, D., & Moore, L. F. (1991). A winning relationship: Managing the student-company learning interface. *Journal of Management Education*, 15, 397-411.
- Locke, K., & Brazelton, J. K. (1997). Why do we ask them to write, or whose writing is it anyway? Journal of Management Education, 21, 44-57.
- Lomax, P. (1990). An action research approach to developing staff in schools. In P. Lomax (Ed.), Managing staff development in schools: An action research approach (pp. 7-19). Avon, UK: Multilingual Matters.
- Lowman, J. (1995). Mastering the techniques of teaching (2nd ed.). San Francisco: Jossey-Bass.
- Marquardt, M. J. (1999). Action learning in action: Transforming problems and people for world-class organizational learning. Palo Alto, CA: Davies-Black.
- Marquardt, M. J. (2004). Optimizing the power of action learning: Solving problems and building leaders in real time. Palo Alto, CA: Davies-Black.
- Marsick, V. J., & O'Neil, J. (1999). The many faces of action learning. *Management Learning*, 30, 159-176.
- McCarthy, A. M., & Tucker, M. L. (2002). Encouraging community service through service learning. Journal of Management Education, 26, 629-647.
- McCarthy, A. M., Tucker, M. L., & Dean, K. L. (2002). Service-learning: Creating community. In C. Wankel & R. DeFillippi (Eds.), Rethinking management education for the 21st century (pp. 63-86). Greenwich, CT: Information Age Publishing.
- McLaughlin, H., & Thorpe, R. (1993). Action learning—A paradigm in emergence: The problems facing a challenge to traditional management education and development. British Journal of Management, 4, 19-27.
- McNiff, J. (1990). Writing and the creation of educational knowledge. In P. Lomax (Ed.), Managing staff development in schools: An action research approach (pp. 52-60). Avon, UK: Multilingual Matters.
- McNiff, J. (2000). Action research in organizations. London: Routledge.
- McNiff, J., Lomax, P., & Whitehead, J. (1996). You and your action research project. London: Routledge.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass.
- Mintzberg, H., & Gosling, J. R. (2002). Reality programming for MBAs. strategy+business, 26. (Booz Allen & Hamilton reprint no. 02103).
- Nason, J. (2000). Treading treacle at parties and parapets: Excursions into managerial ideology. In D. Golding & D. Currie (Eds.), Thinking about management: A reflective practice approach (pp. 34-50). London: Routledge.
- O'Neil, D. A., & Hopkins, M. M. (2002). Facilitating transfer of skills between group projects and work teams. *Journal of Management Education*, 26, 402-414.

- O'Neil, J., & Marsick, V. J. (1994). Becoming critically reflective through action reflection learning. In A. Brooks & K. E. Watkins (Eds.), *The emerging power of action inquiry technologies* (pp. 17-30). San Francisco: Jossey-Bass.
- Parkinson, A. (2004). Whose life is it anyway? Managing the psychological contract. In D. Coghlan, T. Dromgoole, P. Joynt, & P. Sorensen (Eds.), Managers learning in action (pp. 60-78). London: Routledge.
- Payette, A. (1993). To teach experience! Journal of Management Education, 17, 440-453.
- Prasad, P., & Caproni, P. J. (1997). Critical theory in the management classroom: Engaging power, ideology, and praxis. *Journal of Management Education*, 21, 284-291.
- Raelin, J. (1999). Preface to special issue: The action dimension in management: Diverse approaches to research, teaching, and development. Management Learning, 30, 115-125.
- Raelin, J. (2001). Public reflection as the basis of learning. Management Learning, 32, 11-30.
- Raelin, J. A. (1997a, Summer). Action learning and action science: Are they different? Organizational Dynamics, 26, 21-34.
- Raelin, J. A. (1997b). Individual and situational precursors of successful action learning. *Journal of Management Education*, 21, 368-394.
- Raelin, J. A. (1997c). A model of work-based learning. Organization Science, 8, 563-578.
- Raelin, J. A. (2000). Work-based learning: The new frontier of management development. Upper Saddle, NJ: Prentice Hall.
- Ramsey, V. J. (2002). Learning journals and learning communities. *Journal of Management Education*, 26, 380-401.
- Ramsey, V. J., & Couch, P. D. (1994). Beyond self-directed learning: A partnership model of teaching and learning. *Journal of Management Education*, 18, 139-161.
- Reason, P., & Bradbury, H. (2001). Introduction: Inquiry and participation in search of a world worthy of human aspiration. In P. Reason & H. Bradbury (Eds.), Handbook of action research (pp. 1-14). London: Sage.
- Revans, R. W. (1982). The origins and growth of action learning. Lund, Sweden: Studentlitteratur.
- Revans, R. W. (1986, Fall). Action learning and the cowboys. Organization Development Journal, 4, 71-80.
- Reynolds, M. (1997). Towards a critical management pedagogy. In J. Burgoyne & M. Reynolds (Eds.), Management learning: Integrating perspectives in theory and practice (pp. 312-328). London: Sage.
- Reynolds, M. (1998). Reflection and critical reflection in management learning. Management Learning, 29, 183-200.
- Reynolds, M. (1999a). Critical reflection and management education: Rehabilitating less hierarchical approaches. *Journal of Management Education*, 23, 537-553.
- Reynolds, M. (1999b). Grasping the nettle: Possibilities and pitfalls of a critical management pedagogy. British Journal of Management, 9, 171-184.
- Rhee, K. S. (2003). Self-directed learning: To be aware or to be not aware. *Journal of Management Education*, 27, 568-589.
- Rhodes, C., & Garrick, J. (2003). Project-based learning and the limits of corporate knowledge. Journal of Management Education, 27, 447-471.
- Rigano, D., & Edwards, J. (1998). Incorporating reflection into work practice: A case study. Management Learning, 29, 431-446.
- Robinson, V. M. J. (1993). Current controversies in action research. Public Administration Quarterly, 17, 263-290.

- Sanguinetti, J. (2000). An adventure in "postmodern" action research: Performativity, professionalism and power. In J. Garrick & C. Rhodes (Eds.), Research and knowledge at work: Perspectives, case-studies and innovative strategies (pp. 232-249). London: Routledge.
- Scardamalia, M., & Bereiter, C. (1985). Development of dialectical processes in composition. In D. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language, and learning: The nature* and consequences of reading and writing (pp. 307-329). Cambridge, UK: Cambridge University Press.
- Schon, D. (1983). The reflective practitioner: How professionals think in action. New York: Basic Books.
- Schon, D. A. (1995). The new scholarship requires a new epistemology. Change, 27, 26-39.
- Susman, G. I., & Evered, R. D. (1978). An assessment of the scientific merits of action research. Administrative Science Quarterly, 23, 582-603.
- Thomas, A. B. (2004). Research skills for management studies. London: Routledge.
- Tischler, L. (2003, November). Identity shift. Fast Company, 109-112.
- Torbert, B., & Associates. (2004). Action inquiry: The secret of timely and transforming leadership. San Francisco: Berrett-Kohler.
- Van Seters, D., & Field, R. H. G. (1988-1989). The MBA program: Views from a student and a professor. Organizational Behavior Teaching Review, 13, 59-71.
- Varner, D., & Peck, S. R. (2003). Learning from learning journals: The benefits and challenges of using learning journal assignments. *Journal of Management Education*, 27, 52-77.
- von Glasersfeld, E. (1995). A constructivist approach to teaching. In L. P. Steffe & J. Gale (Eds.), Constructivism in education (pp. 3-15). Hillsdale, NJ: Lawrence Erlbaum.
- Watson, C., & Temkin, S. (2000). Just-in-time teaching: Balancing the competing demands of corporate America and academe in the delivery of management education. *Journal of Management Education*, 24, 763-778.
- Weick, K. E. (1979). The social psychology of organizing (2nd ed.). Reading, MA: Addison-Wesley.
- Welsh, M. A., & Dehler, G. E. (2004). P(l)aying attention: Communities of practice and organized reflection. In M. Reynolds & R. Vince (Eds.), Organizing reflection (pp. 15-29). Aldershot, UK: Ashgate.
- Whitehead, J. (1994). How do I improve the quality of my management? A participatory action research approach. *Management Learning*, 25, 137-153.
- Zeichner, K. (2001). Educational action research. In P. Reason & H. Bradbury (Eds.), *Handbook of action research* (pp. 273-283). London: Sage.
- Zuber-Skerritt, O. (1992). Action research in higher education: Examples and reflections. London: Kogan Page.
- Zuber-Skerritt, O. (Ed.). (1996). New directions in action research. London: Falmer.