The implications of reflective practices for educational leadership are examined in this publication, which contains three papers originally presented at the 1990 Convention of the University Council for Educational Administration. Ann Hart, Nancy Sorensen, and Kerri Naylor report on applications of reflective practice to educational administration. Their paper, "Learning to Lead: Reflective Practice in Preservice Education," is an investigation of the potential of reflection in a pilot study of aspiring administrators. Chapter 2, "Reflective Leadership: Restructuring the Research Curriculum and the Dissertation Process in Educational Administration," examines what changes might be made in graduate programs. Joan Shapiro and Donald Walters propose modifications of the Ed.D. dissertation and the research curriculum for practitioners. They encourage professors to listen to their students' voices for ideas regarding preparation programs. In chapter 3, Beverley Geltner describes the critical role of interpersonal relationships in school effectiveness in "As He Lives in Their World: Teachers' Perceptions of Their Principal's Leadership Behavior as Related to School Effectiveness," tells how teachers in a midwestern elementary school identified five behavioral characteristics of their principal—educational visionary, modeler, partner, supporter, and innovator. References accompany each chapter. (LMI)
APPLICATIONS OF REFLECTIVE PRACTICE
APPLICATIONS
OF
REFLECTIVE PRACTICE

UCEA MONOGRAPH SERIES

Frederick C. Wendel
Series Editor

University Council of Educational Administration
212 Rackley Building
The Pennsylvania State University
University Park, PA 16802-3200
CONTENTS

Chapter 1 ............................................................................................................................................ 7
Learning to Lead: Reflective Practice in PreService Preparation
Ann W. Hart, Nancy B. Sorensen, Kerrie Naylor

Chapter 2 ............................................................................................................................................ 27
Reflective Leadership: Restructuring the Research Curriculum
Joan Polinar Shapiro and Donald L. Walters

Chapter 3 ............................................................................................................................................ 53
As He Lives in their World: Teachers' Perceptions of their Principal's Behavior as Related to School Effectiveness
Beverley B. Geltner
FOREWORD

Leadership is the featured subject of the papers in this issue of the UCEA Monograph Series. These papers were originally presented at the 1990 Convention of the University Council for Educational Administration in Pittsburgh, Pennsylvania.

Ann Hart, Nancy Sorensen, and Kerri Naylor report on applications of reflective practice to educational administration. "Learning to Lead: Reflective Practice in Preservice Education" is an investigation of the power and potential of reflection in a pilot study of aspiring administrators. Not surprisingly, students and coaches in the pilot study benefited from the reflection-on-action approach. The authors' conclusions and recommendations make for good reflection.

"Reflective Leadership: Restructuring the Research Curriculum and the Dissertation Process in Educational Administration" provides a stimulus for examining what changes might be wrought in graduate programs. Joan Shapiro and Donald Walters propose modifications of the Ed.D. dissertation and the research curriculum for practitioners. They encourage professors to listen to the voices of their students for ideas regarding preparation programs.

Among practitioners, a key to success is interpersonal relationships. Beverley Geltner describes how critical such relationships can be in "As He Lives in Their World: Teachers' Perceptions of Their Principal's Leadership Behavior as Related to School Effectiveness." "Interactions, collegiality, joint efforts, partnership, participatory decision making" are descriptors of positive behaviors of principals. Not much is new, but the presence of positive leadership behaviors is potent. Why isn't every principal effective? What experiences can be provided to identify and develop leadership behaviors in aspiring administrators that have great significance on teachers' work lives?

Faculty members of the University of Nebraska-Lincoln contributed much to the publication Applications of Reflective Practice. Larry Dlugosh, Ron Joekel, John Prasch, and Ruth Randall worked diligently to prepare these papers for publication. They responded gallantly to my requests to meet deadline after deadline.

Frederick C. Wendel, Editor
Lincoln, Nebraska
September, 1991
Because the professions have suffered a crisis of confidence in the United States, new approaches to defining and solving professional problems are increasingly important (Metzger, 1987; Schön, 1983). As the knowledge professionals must master becomes more and more extensive, their ability to retain and apply it to the problems of practice comes increasingly under scrutiny and criticism. Professionals also need to acquire problem-solving skills that enable them to apply knowledge from many sources to the actions they take in practice. One approach to improving the problem-solving ability of professionals is known as "reflective practice." Interest in this approach to professional education is growing, but specific programs for nurturing these skills during the formal education process are just being developed (Hart, 1990; Hart & Sorensen, 1989; Murphy, 1990; Ramsey & Whitman, 1989).

In this paper, we report the results of a study of a pilot program exploring the applications of reflective practice to professional education in educational administration. The study investigated the power and potential of reflection as the principle around which a preservice course in a professional education program could be designed. The principle of reflection also provided an evaluation framework for procedures used to accomplish this task. Modeled after the design studio proposed by Schön (1987) and principles of reflective learning (Boud, Keogh, & Walker, 1985), this pilot program used expert practitioners to coach students through the process of thinking about problem definition and problem-solving as they developed plans for action. This process of cognitive coaching focused on problems of practice (problem-based) rather than traditional subjects of study (sub-
ject-based). The goal of the pilot program was to develop a seminar that could nurture reflective practice in students as part of their formal course of study. To accomplish this goal, the seminar provided explicit instruction and experience in applying theoretical, empirical, and experiential knowledge to the problems of practice.

The following sections of the paper include a brief overview of the background of reflective practice and a description of the components of the pilot seminar, research methods, findings, and conclusions.

**Reflection: A Background**

Over the last few years, educators in professional schools have explored a number of approaches to improving the application of research, theory, and experience to professional practice (Hart, 1990; Ramsey & Whitman, 1989; Townsend, 1989). While reflective practice has its detractors who caution that a move to an unproven approach to preparation may be unjustified, the use of reflection to turn experience into learning is not new (Boud, Keogh, & Walker, 1985b; Grundy, 1982; Jenks & Murphy, 1979). Only a few education programs in professional schools, however, have made a systematic attempt to implement such a change in teaching and to document its impacts.

Numerous exploratory approaches to integrating reflection with preservice education—one of which is problem-based, student-centered learning—draw on traditions of cognitive science to improve problem identification and the creativity of solutions. A gradual shift in graduate professional training toward more problem-based learning is underway in a number of fields. Architecture, psychotherapy, medicine, counseling, engineering, dentistry, management, musical performance, business, and other professional training programs have applied methods of reflection-in-action to preparation. Focusing on the thinking process of students, these methods of instruction produce subject mastery equivalent to that achieved in subject-based instruction. They also produce superior application, transfer, and problem-solving. Consequently, problem-based learning which is focused on students rather than subject-based instruction which is focused on the instructor is gaining increased attention in professional schools (Barrows, 1988; Leithwood & Stager, 1989; Prestine, in press; Ramsey & Whitman, 1989; Schön, 1983, 1987).

Reflection (as it is used here) is much more than quiet thinking over past events. It aims toward a goal such as a set of solutions to dilemmas or problems or the redefining and understanding of “the problem.” In pursuit of this goal, a person engaged in reflection creates a sequence of ideas, projecting possible consequences that likely will result in an outcome or in
a series of events (Dewey, 1933; Kolb, Rubin, & McIntyre, 1971). Because a knowledge base is required to form accurate projections, knowledge is a critical component of this process. This linkage between knowledge and potential outcomes—the progression of thought that links and expands complex parts of the whole—can lead to increased complexity, creativity, and surprise as new ideas emerge and actions lead to unexpected but productive conclusions.

In addition to its traditional part in the philosophy of thought and action, the use of reflection as a tool for learning constitutes a major focus of experiential learning research (Boud, Keogh, and Walker, 1985a). Reflective practice also capitalizes on the logic of deliberate, conscious thought rather than depending on serendipity for quality outcomes of problem solving. The major benefit of this level of consciousness may be increased creativity, imagination, and the ability to move from theory to practice and back again with ease (Mills, 1959).

The quality of future reflection and action is increased in three ways as skill and knowledge increase. First, as learning is assisted and inappropriate inferences reduced, skill improves. Second, as knowledge increases and a person learns to draw associations with past problems having some features in common with new situations encountered, the ability to draw appropriate inferences improves (Pearson, Hansen, & Gordon, 1979; Nickolson & Imlack, 1981). Each new set of observed outcomes results in some adjustments in assumptions and concepts which will be applied to problem solving the next time an experience with similar (and some unique) characteristics occurs. A third result of increased skill and knowledge acquired during reflection is an increase in awareness and sensitivity to one's own thinking. This awareness makes self-consciousness and improved thinking more and more likely. Mead (1934) proposed symbolic interactionism theory to explain this self-conditioning response during reflection. He pointed out that reflective thinking is more than a simple response to external stimuli. It is a self-awareness, a way of processing information from the environment and about oneself, and, in a sense, observing oneself respond.

Altered behavior and understanding are the final outcomes of reflection; the final step in reflective practice is action. Action follows after a concept is applied, adjustments are made when necessary, and inferences are drawn. When these steps are taken, the act is integrated with knowledge and thought. Outcomes of action may lead to further adjustments in existing concepts. Continuous repetitions of this process throughout a professional career lead to development as a reflective practitioner. The logic supporting a move toward the development and inclusion of experiences designed to
improve proficiency in using reflective processes in professional education is thus supported by cognition theory, social psychology, and research on the application of professional knowledge by practitioners who have been educated using traditional subject-based, instructor-focused methods and those who have been educated using more problem-based, student-focused methods.

Components of the Pilot Seminar (Design Studio)

Components of the seminar included: (a) problem-based stimulus materials for students; (b) professional coaches; (c) theoretical/empirical resources; (d) student action plans (written); (e) and a panel of professors, superintendents, and principals who reviewed written plans and oral arguments, questioned students, and prepared systematic feedback and assessment.

Stimulus materials were prepared by the faculty and a graduate student from a core of case problems collected over a four-year period in a seminar on the principalship, published cases, and faculty and graduate student experiences. Two sets of materials, one for elementary school and one for secondary school, were written. Five major problems were presented in both sets of materials. The problems included issues relevant to traditional courses and seminars in administration and leadership, philosophy and foundations, policy, personnel, finance, law, curriculum, and instruction. While drawn from field experiences, the cases were fictionalized to represent the range and depth of the administrative preparation curriculum (Ramsey & Whitman, 1989). Students chose to work from either the elementary or secondary school materials.

Coaches were selected from adjunct and clinical faculty of the department of educational administration. They were practicing professionals whose quality of teaching was known and who were willing to coach. Six coaches (three male, three female) agreed to participate, with the faculty member (instructor) responsible for the seminar serving as a seventh coach. Coaches met prior to the coaching sessions for orientation and training in reflective questioning, coaching, and problem-solving techniques.

The choice of background reading for participants (students and coaches) presented some challenge for the operation of the pilot seminar. A full problem-based course of study would move students systematically through problems designed to send students to a curriculum and to source materials necessary so that subject mastery would be complete. At this experimental stage, this was not possible. Because students were enrolled in a graduate seminar on the principalship, prerequisites could not be required for the pilot. While most of the students had completed a substantial proportion of their course work for a masters degree in educational administration, two of the five (three men and two women) who eventually completed the seminar had not. Two basic
texts were assigned as a common knowledge base from which students would draw (Bolman & Deal, 1984; Duke, 1987), although they were presented as neither the only nor the primary sources on which students should depend.

The goal of the pilot seminar was to test the potential and practicality of increasing the application of knowledge to practice. Consequently, for this pilot, alternative paradigms were not emphasized.1 Seminar activities covered a ten-week period, primarily because of the limitations imposed by the academic quarter at the university. In the first four weeks of the seminar, students systematized their notes and readings from previous course work and completed the core readings in school administration (Duke, 1987), organizational analysis (Bolman & Deal, 1984), and reflective practice (Hart, 1990). Students kept weekly journals of their readings and seminar discussions. During the next four weeks, students met for 1 1/2 hours with coaches in reflective questioning sessions. Coaches rotated by assignment among students during the coaching sessions.

Following the 1 1/2 hour coaching sessions, the instructor met with the students for 1 1/2 hour debriefing sessions. During these debriefing sessions, the students were involved in what Schön (1987) defines as reflection on reflection-in-action. The purpose was to have the students clearly describe what they had done and how they had reflected during the coaching sessions to become more skillful at defining the problems and selecting alternatives for action. The functions of debriefing in structured reflection experiences are four-fold: (a) to articulate what is being learned; (b) to evaluate the experience; (c) to contribute to group cohesion and identity; and (d) to summarize what has been achieved to that point (Pearson & Smith, 1985). The merits of reflection on reflection-in-action became apparent as students began to connect what they were doing with different understandings of the problems or invent better solutions for them. During the debriefing sessions, students also talked about issues arising in that session and addressed general questions about the reflective process such as:

1. What were the helpful forms of questions from coaches?
2. How did the students feel about the session?
3. What were possible structures for the action plans?
4. What might the students expect during the presentations and final evaluations?

After the first two coaching sessions, questioning structures used by the coaches were compiled and shared with coaches before the next session. During the second week of the debriefing session, students spontaneously formed study groups to work together on action options.

At the end of the four weeks with the coaches, each student prepared a written action plan whose components were chosen by them: (a) a
philosophy or vision statement that included a description of the hypothetical school under their leadership; (b) specific action recommendations for each of the five problems in the stimulus materials; and (c) an overall plan for the school which unified their action plans across problems. Written plans included specific references to empirical and theoretical knowledge acquired during their formal individual experiences and coaches' feedback and exemplary practice collected as part of their data gathering and problem-solving. Action plans were submitted to a panel of two professors, one superintendent, and one principal who read and evaluated them. The rationale for requiring an action plan was developed directly from reflection theory:

[The] benefits of reflection may be lost if they are not linked to action.... What is important is that the learner makes a commitment of some kind on the basis of his or her learning [emphasis added] . . . (Boud, Keogh, & Walker, 1985a, p. 35).

The panel sat as a review board for oral presentations and questions at the end of the tenth week of the quarter. The panel members and instructor provided feedback to students in written and oral form.

**Research Methods**

Three researchers, one faculty member and two graduate students, participated in the seminar design, writing of materials, orientation of coaches, data collection, and data analysis.

**Data Collection and Analysis**

Data included: student journals; participant observation notes (collected as systematic field notes by the instructor who also worked as a coach and a review panel member); systematic field notes of all coaching sessions collected by a second researcher; stimulus materials; orientation materials for participants; orientation materials for coaches; exit interviews of students and coaches; final action plans; and review panel assessments of action plans and field notes of feedback given by the review panel members to the students.

Data analysis followed established procedures of qualitative research. Conceptual categories were used to code data. Then the researchers prepared data summary sheets, analytical matrices, and text analysis summaries (Guba & Lincoln, 1983; Miles & Huberman, 1984). For this preliminary report, the observation notes, exit interviews, action plans, and action plan assessments provided the primary sources of data. The validity and reliability of the study were enhanced by triangulating the multiple sources of data collected and by analysis by multiple researchers.
First, deductive coding categories based on problem-based professional education, reflection, and cognition research were developed from the original research framework. These categories highlighted such factors as common problem-solving errors made by students, inferential and other questioning techniques, and framing and projecting processes.

Second, data were read by one of the researchers and a set of preliminary inductive categories were developed. These were then used in concert with the deductive categories to code the observation notes and exit interviews in a second reading. A second researcher then conducted a coding audit, noting differences or omissions from the first coding and suggesting additional categories that the preliminary coding neglected to encompass. A second coding audit was then conducted by a third researcher. Where disagreements remained, the two auditors met and agreed on the final coding. This process led to the development of the final categories discussed in the findings section of this paper.

Third, researchers created data summary sheets and matrices of the final coding. The summary sheets included coding totals, totals across time, and totals by participant. The matrices presented data for participants (coaches and students) by coding frequency, participants by session, and session totals (providing a view of the development of issues across time). This process provided a means to assess the prevalence of particular issues and their frequency in relation to individual participants over time.

Finally, the researchers compared summary sheets, matrices, and raw data coding to the assessments of the final action plans and presentations. This process provided a means of comparing process and outcome data.

**Findings**

**Coaches**

The coaches differed in their ability to stimulate students’ thinking and in the usefulness of their approaches from session one to session four. They also provided helpful suggestions for future seminar structures. The coach identified by students as least helpful overall was the most directive about what should be done, asked the fewest questions, and provided no conceptual or research guidance.

**Seminar processes: Coaches’ roles.** The conversation between coaches and students fell into two main categories—casual talk, either job-related or personal, and problem-focused talk. A third category of talk focused on the process of the coaching sessions.

**Casual talk.** The benefit of personal interaction, aside from the benefits of problem solving, surprised the instructor and seminar participants. Coaches told stories about their schools that were similar to the situations in the stimulus materials. While the coaches kept story telling to a minimum, the students said
it helped them get to know the coaches and gave them an increased sense of belonging in the profession of educational administration. Other forms of conversation were related to educational issues in the state and their communities.

Another form of casual conversation, often as the sessions were just getting started, was job talk. One coach referred a student to a specific job opening. Others talked in general about openings in their districts or about the major issues they saw facing those entering administrative careers.

Finally, the coaches used praise to direct students toward ideas they found promising. One coach said in session one, “You have had four very good ideas.” He then reflected back on the insights he felt the student had raised, reinforcing the early questioning.

Problem-focused talk. Coaches used three techniques most frequently to address the issues raised in the stimulus materials: (a) suggesting possible actions; (b) asking for information from the student related directly to the stimulus materials; and (c) conceptualizing or referring students directly to research or theory. All three techniques, when used appropriately, were effective in helping students question their ideas. Coaches offered suggestions with equal frequency across all four sessions. In contrast, their use of questions designed to solicit information, brainstorm, or press students to expand their thinking increased from session one to session two and then declined rapidly. References by coaches to research were equal across sessions.

Coaches offered suggestions in a number of ways. Useful suggestions guided students. For example, coaches said: “You might bring in a teacher you trust and observe together.” “You need to check the district evaluation policy,” “You protect yourself with due process,” and “If you get a policy from the faculty council, there will be more support.” When coaches told students what to do, their suggestions were less useful. For example, one coach told a student to bring in “concerned parents who you could work with, and consider the parent’s background and skills.”

By their own account, coaches found questioning more difficult than offering suggestions. Questions directed students toward district policy, challenged student categories, and probed the appropriateness of student problem-solving approaches. For example: “How are these items interrelated?” “What do you really know about what is being taught [in the classroom]?” “How would you approach this?” “Can you think of any other way to find out who is on duty?” “How can you get to the true feeling of teachers?” “What do you see as your role in this?” “Why not?” and “Where would you go for information?”

The third technique coaches relied on directed students toward research, particular disciplines (such as law, organizational theory, or political
science), and conceptualizations of school administration. For example, coaches said: “Think in terms of district policy and state law,” “Look into the research on school climate,” “Another problem is copyright law,” “What does the effective schools literature say about curricular offerings?” “Have you thought about the consistency of the program—the continuity?” “Have you thought about your philosophy?” “Have you checked her personnel file and made sure you understand all parts of the evaluation?” and “What does the state law say about evaluation procedures?”

Process-focused talk. Process talk between students and coaches focused on which issues in the stimulus materials students wished to take up during a session or took the form of negotiations about the process they would follow (“Let’s talk a little about the readings.”). At one point, an overwhelmed student said he was unsure what to say. Another said he was “realizing that the iceberg is bigger than I thought.” Process talk between students and coaches declined steadily from session one to session four. Students and coaches quickly became more proficient in the process as time passed.

Coaches’ perceptions. Overall, coaches reacted positively to the seminar experience, calling it a “unique approach to training.” They were “very enthusiastic,” “very positive” and saw it as “very practical” and a “great opportunity to blend theory with the practical.” Coaches agreed that its major advantage might be in the way the process “challenges preconceived ideas.” Coaches also identified a number of problems with the design of the pilot. They pointed out that the stimulus materials combined with initial readings presented students with an “overwhelming amount of material,” and that “students seemed overwhelmed.”

The structure of the seminar received some criticism. While the seminar required a “large time commitment,” the coaches said they probably should attend all four sessions rather than just two. To alleviate the pressure this would cause, they suggested that a stipend for the coaches would be justified.

According to student reports, coaches who were most effective argued that they took their cues for questioning from the students and “always had to come back to looking at the full picture,” asking “how does this fit into the plan of the school—the holistic approach.” They “tried to get students to see implications,” to “look at what they would need to check out.” Others reported that they felt “pressure from students to answer questions.”

When asked what kinds of questions yielded the “best” responses, coaches identified questions that directed students toward problem solving. They said: “What if?” “Have you thought about . . .?” “Where would you find this information?” “How would you feel if . . .?” They also referred back to the need to look at the “whole perspective” and to force students “to look at their own philosophies and beliefs.” They felt that they needed to remind students to “look at facts.”
The advantages and disadvantages of the seminar in the eyes of coaches focused on high quality outcomes and high costs in time and overload resulting from the complexity of its demands. The advantages that coaches saw were in "the mix of theory and textbook with the practical" under the guidance of the coaches, its "hands-on, experiential" nature, the variety of "mentors" the coaches represented and their varied perspectives, and the personal interaction between coaches and students. Coaches sometimes contradicted themselves when they listed disadvantages. Along with the "overwhelming" complexity of the materials and time restrictions, they mentioned that the seminar failed if it was meant to simulate the time frame under which decisions must be made in administrative work. One contended that "students don't feel the time pressure" and the seminar is "not real life." One coach pointed out that he had a "tendency to give students too much information rather than get them to reflect," an observation that the field notes confirmed.

The coaches had several suggestions for improving the structure of the seminar. They agreed that more than two sessions involving each coach would be helpful, that coaches should participate more in the entire process—meeting to discuss their work midway through the seminar, sitting in on the final action plan presentations, participating in short debriefing sessions like those held for students following each session, and meeting together at the end of the quarter for debriefing and planning. They also felt that the training and readings had not prepared them sufficiently and wanted more training, more work on questioning techniques, and more role playing and practice sessions.

Even though the coaches criticized and praised the stimulus materials for the same characteristics—complexity that was almost overwhelming and realism—they generally found them useful and well organized. Coaches felt the materials were well written, "dealt with important points," and "dealt with practical and realistic issues."

Students

Students, too, were observed and interviewed. Their action plans and debriefing sessions provided important data for interpreting possible connections between process and outcomes. Because this is the first data set comparing process and outcomes, however, and because the number of participants was small, data do not justify drawing causal inferences.

Seminar processes: Students' roles. Students talked with coaches about interaction processes and engaged in three main problem-solving processes: (a) they productively pursued problem definition and solutions; (b) they examined problem-solving errors; and (c) they sought information and answers.
Problem definition and solution. Students effectively used relevant diagnostic questioning, synthesis, and brainstorming or hypothesizing in their interactions with coaches during the coaching sessions. They also openly expressed concern and uncertainty. Students most often used coaches' new concepts and theories after the sessions were over and talked about them during the debriefing sessions.

Students used relevant diagnostic projection or questioning. The two most proficient problem-solvers (and those who produced the most highly rated action plans) were students who identified issues for future problem-solving. They identified “communication networks,” “problems between different groups of teachers,” district level involvement, questions about documentation, district services they could use (personnel, legal counsel), and research on discipline and reinforcement as means for pupil control. They questioned comparative criteria for reading programs, moved toward the examination of policy, asked “How specifically do you document?” and “When do you write a letter of reprimand?”

Students synthesized information less frequently, although incidents of synthesis increased with each session. Students used a variety of techniques to accomplish synthesis in their problem-solving, e.g., decision trees, summary sheets for issues and questions of policy, curriculum, instruction, participative decision making, and school climate.

Brainstorming, hypothesizing, or seizing on serendipity as new directions unfolded during conversations with coaches became by far the students’ most common approach to problem-solving. Participants seemed to be familiar with the brainstorming technique, and it elicited responses from coaches. Brainstorming dominated sessions one, two, and three as students began to define problems, got to know the coaches, and began to formulate preliminary conclusions. Students speculated about ways to “gather facts,” projected possible teacher and parent responses to actions they might take (“They might say they don’t have time; this might be an indication they have too many duties”), and “saw things from a whole different angle.” During these exchanges, students sometimes credited coaches with helping them with a breakthrough. “I felt I was stopped, and now someone has opened the door.”

Problem-solving errors. We examined five problem-solving errors: pseudodiagnositicity (seeking data that will not be helpful), incorrect synthesis (unwarranted conclusions), inadequate synthesis (not coming to a conclusion that is warranted), premature closure, and anchoring (selective lack of attention to important information inconsistent with earlier thinking or experience). Identifiable examples of these errors were most common during the first session, and no incidents of problem-solving errors ap-
peared in the observation notes from the last coaching session. These errors were hard to identify from verbatim records and paraphrased conversation in the field notes. They were more identifiable when students made their final recommendations in action plans.

Pseudodiagnositicity was an infrequent problem in the coaching sessions. In the action plans, this problem-solving error appeared as digressions from parsimonious solutions and as elaborate plans only tangentially related to core issues. Two of the five action plans failed to formulate a persuasive case for a school-wide initiative that unified their approach to the five problems within the stimulus materials.

Students more frequently suffered from unwarranted conclusions or incorrect synthesis. Students who committed these errors labeled a problem "simple" in the first session and moved on to other issues, made action decisions in the first session ("I would give parents the option to pull kids out [of a class]"), or reached conclusions that ignored other critical issues such as budget or policy ("Well, if all you need is an aide, couldn't the school just provide that?").

One student adopted a decision tree method for defining and attacking problems and always identified two branches at each level (either this or that). He prepared an elaborate chart of branching issues with bipolar extremes as the only options and persuaded another student to adopt this system during the third session. This system led to unwarranted conclusions, but it also encouraged the student to ignore information that conflicted with his early judgments about the nature of the problems he confronted. The second student later abandoned the decision trees he had developed for more divergent options before developing his plan. When final action plans were written and presented, one review panel member (a superintendent) labeled the first students' recommendations excessively authoritarian, lacking in creative team or group solutions, and arrogant. The action plans also revealed this error more vividly than did observations. As students sought research, theory, or exemplary practice to support their conclusions, several found themselves stymied.

Students also failed to reach warranted conclusions or adequate synthesis. This error showed up only in later sessions and in action plans. The two students who committed this error in their action plans were the two who had completed little course work in their administrative program. One of the students phrased conclusions tentatively and provided overly lengthy explanations and justifications for each action recommended. The other planned intrusive actions unsupportable under state law and contrary to research on effective practice, ignoring important actions warranted by the data.
Premature closure occurred early in the coaching sessions. The two students most likely to commit this error also suffered from incorrect and inadequate synthesis. Both had strong opinions about what “ought to be.” One laughed during one point in the first session and said, “I don’t see what the problem is. The principal should just tell the teacher she has to do what he says.” She didn’t think one of the issues was even appropriate in the stimulus material because a principal should be able to demand compliance.

Selective inattending or anchoring seemed to accompany premature closure. The two students who reached premature closure also failed to respond to information inconsistent with the thinking and experience they brought to the seminar. One remained steadfast in her surety. Another finally recognized that he had only tapped the “tip of the iceberg.” Coaches had difficulty helping students with this problem.

Information and answer searches by students. Students sometimes asked coaches directly what they would do. Often, coaches’ advice-giving followed these requests. One student openly asked, “What do you think about this problem?” Another student asked a coach, “How realistic is this?” Student insecurity led to other questions: “Have you had a problem like this? How did you respond to it?” At other times students asked for a summary judgment from the coaches, pressuring them to give an answer: “Is it best to go through the parents or work it out with the legal counsel?”

Students and coaches recognized this problem and talked about it in debriefing sessions and exit interviews. Lack of preparation for recognizing problem-solving errors led the coaches to recommend specific training.

Students’ perceptions. The general reaction of students to the seminar was positive. Students said they “really enjoyed it,” and found it to be a “wonderful experience” to which they “always looked forward to coming.” One student labeled it his “most exciting class so far.” Another called it the “most difficult class but equally rewarding.” The students argued that the seminar made “other classes meaningful.” The problem-based, interactive nature of the course formed the central feature on which students focused praise. They found they “liked mixing with other class members,” “reading the materials,” and interacting with the coaches. As a result, they argued that the seminar gave them a broader “perspective of what a principal does” and “helped [them] look at a range of possibilities.” The pressure caused by the need to address five complex factual situations in a school and make action recommendations in six weeks made one student feel “against a wall and unclear about what [he] was doing.” Another pointed out that they spent “a lot of time.”

Coaches helped students most “when they tried to get me away from my tunnel vision,” when the students made the effort to bring more ideas with them to sessions, and when they searched for knowledge. One said, “The
more ideas I had, the more they gave me," while another pointed out, "Questioning was more helpful as I did more reading." Students felt that questions that forced them to "go broader" in early sessions and "narrow down" in the last sessions helped them the most. They also admitted that "At first, questioning was hard to deal with."

Feedback, from coach to student, had the most positive impact on their problem-solving, according to students. They liked "what if" and "what about" questions and praised coaches who responded to their conclusions by asking, "If you did this, can you see that this might be a problem?" in later sessions.

The advantages students identified centered around the seminar's "absolutely practical" approach to administration, the "controlled situation," and "working with coaches" to develop a stronger sense of their own approach to administration. They said it provided "insight into what it is really like to be a principal" and let them see there are "multiple methods to solving problems." One student argued that the questioning and problem-solving would be "helpful for future interviews" for administrative jobs. Another commented that it provided "insight for future classes." Like the coaches, the students identified disadvantages that contradicted advantages they identified: While one student said the seminar made her more sure of herself, another said it made him less sure of himself. While one said it helped her see that multiple solutions are possible, another identified the fact that he "wondered if there is an ultimate solution" as a disadvantage. Students did, however, say that the complexity of problems—five situations, each with many issues—was overwhelming at times and felt the time pressures were not realistic.

Students most liked the realism, high interest, and challenge of confronting the issues in the stimulus materials. They least liked the complexity of overlapping problems, a lack of skills on their part for linking theory to the action plans, and the draining pressure to produce and defend an action plan.

The changes recommended by students also mirrored recommendations from coaches and illustrated the tension between the need to create a manageable problem and the need for enough complexity to convey reality in administrative work. Students wanted some time to work (perhaps a two-week break in the middle) without interacting with coaches so they could have more plans to present. They also wanted a more lengthy presentation and defense time for the action plans. All these requests place additional pressure on time available. Several students felt that assigned readings left them with too much to absorb prior to the coaching sessions.

Summary and Conclusions

The foregoing findings lead to a number of general conclusions. In addition to students, coaches grew, even wishing they had been able to have
a similar experience during their professional education. They praised the reflection-on-action the seminar provided them. Students praised the chance to engage one-on-one in problem-solving with thoughtful, expert practitioners, the direct application of knowledge to action, and the focus on their own responses to the problems of practice. They also identified forms of questioning they felt facilitated their own thinking and helped them move toward planning and justifying their actions. Areas that needed further development became apparent from the observations, exit interviews, and action plans: the writing and sequencing of the stimulus materials, training and experience of the cognitive coaches, structure of the coaching sessions, student response formats and action plans, and knowledge foundation of students and coaches. A number of more specific conclusions emerged from the analysis as well.

First, coaches require training and practice in reflective and inductive questioning. To help students define problems, assess what is known, survey possible actions, and make action plan decisions, coaches need personal experience and expertise in the cognitive processes on which the seminar depends. Consequently, a reflective professional seminar cannot function with new coaches for each seminar or without resources to support the coaches. By using technology such as interactive video disk, the human resource demand could be alleviated, but the personal nature of interactions between coaches and students provided a signature feature of the seminar. We believe it should not be abandoned completely.

Second, productive questioning techniques at the beginning of problem definition differ from the most effective questioning and interaction techniques near the end of a reflective seminar. When students begin to probe the stimulus cases, they often focus on issues familiar to them or apply inappropriate and limited personal experiences, reaching premature conclusions, or ignoring diverse possibilities. Questions at the beginning of problem definition that stimulate divergent thinking and highlight that students "do not know what they do not know" stimulate quick engagement and increase search for knowledge at the early problem-solving stages. Questions that help students reach closure by eliminating options and explaining rationales lead to more singular and concrete action plans toward the end of the seminar experience.

Third, serious issues require further examination. We question when a reflective seminar in preservice professional education might be most useful. While students near the end of their course work argued that they needed problem-based experiences earlier to become more skilled in problem-solving techniques that involve multiple issues and to develop explicit links between what they were learning and what they might do, those nearer the beginning of formal course work felt restricted by their limited subject-based knowledge. The
subject-based study of the readings completed in four weeks left students reeling over too much too fast and reporting significant cognitive overload. Yet, without these readings, students faced the problem situations from radically uneven knowledge bases. These findings support the argument that problem-based learning can be built into a number of subject-centered courses more systematically and advantageously. A student-focused reflective seminar, however, should have prerequisites to protect students.

A fourth conclusion follows naturally from the third. Problem-based, student-centered learning may deserve examination throughout professional education. The experiences of a few professional schools that have reorganized their curriculums and programs of instruction around problem-based, student-centered methods support this conclusion (see for example, the Southern Illinois and Harvard University medical schools and the Doctorate of Pharmacy program, University of Utah).

Fifth, the preparation of good stimulus materials requires more than the compilation of experiences from the field. Depending on the stage of a program of study and the learning goals of a course or field experience, a problem-based teaching case may need to be more or less complex and interactive, point students directly toward different reference materials or knowledge bases, and raise problems of varying familiarity. This need could be met by systematically collecting vivid cases arising from professional practice as part of the knowledge base (Osterman, 1989) and by developing cases designed to teach specific subjects as part of the formal curriculum for the professional school.

Sixth, students in professional schools experience problem-solving successes and errors similar to those encountered by people in other life situations. They learn to seek solutions through diagnostic questioning, synthesis, brainstorming, and the application of experience and knowledge. They make some common errors—seeking data that will not be helpful; reaching unwarranted conclusions; failing to reach conclusions warranted by the data; premature closure; and selective in-attending or failure to attend to new information which seems inconsistent with earlier thinking. In this study, these successes and errors occurred with different frequency at successive stages of the problem-solving process. Early in the process, the students were more likely to rely on more familiar problem-solving techniques, such as brainstorming and testing coaches' responses to their ideas. Early errors also differed from those common in the later stages. In the first two sessions, the students in our study were more likely to reach unwarranted conclusions, reach premature closure, and fail to attend to new information inconsistent with their earlier thinking. Later on, students more frequently failed to reach warranted conclusions but instead reached
unwarranted conclusions and had difficulty making explicit connections between their knowledge and experience and the actions they recommended. Certain kinds of errors were more common for some students than for others; thus students need careful diagnosis of their reflection and assistance with that process during the seminar.

Coaches, too, need assistance and training to function well in a seminar. They need to be prepared to recognize common errors and have strategies and techniques to point students away from them. The coaches also found errors difficult to differentiate in early stages of the coaching sessions, in part because no advance work with the specific combination of challenges in the stimulus materials was undertaken and no practice identifying problem-solving errors was provided. Coaches found that general reading and brief training in reflective practice techniques and cognition research were insufficient preparation; thus training for coaches, active engagement by coaches throughout the seminar with the instructor, and final assessment should be increased substantially. This will require more resources and more commitment from coaches who are already busy professionals.

In conclusion, while much talk abounds about the importance of problem solving for professionals, little systematic alteration of professional preparation programs occurs. This study reports results of an attempt to make such a change—an attempt grounded in cognitive theories of adult learning and action. The results present a complex, yet realistic view, of changes in professional preparation that can enhance parallel attempts to improve professional practice. It provides options for reform internally (within courses currently taught) and systemically (of entire cognitive structures underlying degree programs).

Footnotes

1In future seminars, we believe that basic readings should be varied and the effects of readings on outcomes and process be traced.

2Detailed information about the methodology (data and analysis) can be found in Hart and Sorensen (1989). A design studio for reflective leadership: What might it look like? A paper presented at the annual meeting of the University Council for Educational Administration, Phoenix, AZ.

3In the exit interviews, coaches were asked a series of questions: (a) Could you give me a general reaction to your experience with the seminar as part of an educational administration program? (b) What direction did your questioning seem to take most comfortably? (c) What kind of questions yielded the best responses from students in your assessment? (d) What would you say might be the major advantages and disadvantages of an approach such as the seminar in educational administration programs?
(e) What changes would you recommend? and (f) What did you like most and least about the stimulus materials? Would you recommend any changes?

4In the exit interviews, students were asked: (a) Could you give me a general reaction to your experience with the seminar as part of an educational administration program? (b) What direction did coaches’ questions take that was most helpful to you as a student? Did the most helpful type of questions change over the four sessions? (c) What kind of questions from coaches had the positive impact on your own problem-solving process? (d) What would you say might be the major advantages and disadvantages of an approach such as the seminar in educational administration programs? (e) What did you like most and least about the stimulus material? What changes would you recommend? and (f) What changes would you recommend for future seminars that would make it a better learning experience for students?

References


CHAPTER 2

REFLECTIVE LEADERSHIP: RESTRUCTURING THE RESEARCH CURRICULUM

Joan Poliner Shapiro and Donald L. Walters
Temple University

Unless we start listening to our own rhetoric about clinical, field-based training programs and move forcefully to design responsive programs that are not only meaningful to student-practitioners but also productive for their schools, all we will have is rhetoric—and precious little action and improvement in what we do (Muth, 1989, p. 16).

Introduction

This paper emerged as an outgrowth of curriculum development at Temple University, encouraged through a Danforth Foundation grant. Initially, department members focused on changing the first year curriculum by providing a modiﬁed cohort experience during a residency period. Although a beginning was made in revising the research preparation of students in the residency year through the inclusion of a new case study research course, there was still a need to continue the modiﬁcation of the research component. As we were the professors who taught a number of the research courses, we were asked by the department chair to recommend changes for this aspect of the program. We realized that suggesting changes in the research curriculum in a vacuum would not sufﬁce. To make worthwhile revisions in the research process, we felt a necessity to listen to the voices of our graduate students to determine what would make research a worthwhile experience for these individuals. We also had a few ideas of our own for curriculum modiﬁcations; however, before implementing these ideas, we wanted a sense of what students might think of such changes. We wanted to avoid a “top-down” approach to curriculum development in which professors imposed a course of study on students and instead make curriculum development a two-way or participatory process.
For our study, we solicited the diverse perspectives of former and current graduate students for revising the research portion of the program. Additionally, it is important to know that we also had differing views ourselves concerning research and curriculum development. One of us has background in finance and business and tends to pursue quantitative methods in research, while the other has experience in the liberal arts and tends toward qualitative approaches. Rather than seeing our differences as liabilities, we determined them to be strengths and built upon them. We took the suggestions of Guba and Lincoln (1981) seriously, as did Campbell et al. (1987), when they indicated that the two paradigms could be complementary and broadening:

There is no reason why both camps should not exploit both quantitative and qualitative techniques, should not be concerned with relevance and rigor... grounded theory as well as flashes of insight... verification and discovery... (Guba & Lincoln, 1981, p. 77). Instead of a paradigm shift, a paradigm enlargement appears to be emerging in educational administration (Campbell et al. 1987, p. 209).

In developing curriculum, we were aware of the criticisms by former students levelled at the dissertation, the research component and the research product.

Recent studies simply reinforce what we have all heard: graduate course work in educational administration does not provide the kind of experiences or knowledge that practitioners feel they need. Heller, Conway and Jacobson’s (1988) study reports that whereas central office administrators were more positive about the value of their training in research (perhaps because of their unique vantage point) principals at all levels were less enthusiastic about their research training. In general, the study found that administrators considered their graduate training impractical and ‘not well linked with the real world’ (Muth, 1989, p. 3).

We were also aware of the charges of the poor quality and uselessness of much of the research produced in educational administration. Black and English (1986), Campbell, et al. (1987), Cooper, et al. (1989), Dillon (1983), Haller (1979), Klausmeir (1982), Muth (1989), Shulman (1981), Yarger, Mertens and Howey (1985) and other critics have spoken negatively and urged changes. Hoy (1982) stated:

Fifteen years of work and still the research on school administrators is generally disjointed, atheoretical, non-cumulative, simplistic, and often trivial. Not only is most research theoretically barren, but it also has little or no practical utility (p. 5).

In the past, much of the research in educational administration was produced by graduate students rather than by professors or senior research-
ers. According to a number of critics, students tended to think of research as a rite of passage rather than a worthwhile and useful endeavor. Hoy wrote:

Most research on educational administration is done by students. Estimates of the number of dissertation studies completed each year range from 1,000 to 1,300 (Haller, 1979, p. 60); however, most of these student researchers do a dissertation because it is required, not because they believe that their work will contribute to the knowledge of the profession (Hoy, 1982, p. 4).

Because of the criticisms, we decided to explore and develop new models and/or recommendations for doctoral level preparation in research.

In the first section of this paper, literature will be reviewed that will provide the theoretical frameworks for this work; in the second section, two complementary studies will be presented—one of former and the other of current graduate students relating to selected aspects of their research preparation; in the third section, a discussion of the results of the two studies will be discussed; and finally, recommendations will be presented to strengthen doctoral research preparation, leading to the development of reflective school leaders.

Theoretical Frameworks

Underlying this section of the paper is knowledge from four diverse areas: (a) critiques of the research curriculum of educational leadership programs; (b) andragogy, or adult learning theory; (c) action research as a way to create a reflective school leader; and (d) a model of reporting developed by the National Council on Governmental Accounting (now the Governmental Accounting Standards Board).

Critiques of the Research Curriculum

Historically, views on the fundamental goals of the preparation of educational leaders have differed.

Graduate programs in educational administration have oscillated between 'preparing the person' and 'preparing for the role.' In the first case, the candidate is especially encouraged to develop his or her intellectual capacities, educational philosophy, and cultural awareness. Knowledge and self-understanding are primary. In the other case, the emphasis is on shaping the individual to fit the role or roles he or she is preparing to assume. Here the chief purpose is to help the student understand the job and the institution and to acquire the skills necessary to serve the institution and meet the requirements of the position. At no time in the history of preparation programs, and certainly in no specific program, has one of these views prevailed completely over the other. But the proportion of faculty and student effort devoted to these different ap-
proaches to graduate preparation has shifted over time, and various university programs in the mid-1980s attribute relatively different value to these two views (Campbell, 1987, p. 171).

In thinking about a new research curriculum, what approach should be taken in the 1990's?

Should graduate study emphasize the role or the person? practical skills or societal understandings? knowledge of 'what is' or some wisdom concerning 'what ought to be?' (Campbell, et al. 1987, p. 193).

In his study which reviewed research in educational administration from 1967-1980, Bridges (1982) noted a disturbing trend. He wrote:

Researchers who study school administrators manifest little interest in their practical problems. No investigator showed a concern for what Coladarei and Getzel (sic) termed the most pressing of practical problems, the identification and adequate definition of the practical problems themselves. Only two researchers studied the extent to which various administrative practices were effective in dealing with a practical problem facing school administrators. The few researchers who exhibited a problem orientation typically selected a particular problem (e.g., violence or vandalism) and surveyed administrators in an effort to ascertain the different ways in which the problem was being handled. This scholarly indifference toward issues of practical significance lends credibility to the reputations of academic researchers among practicing administrators as being 'ivory towerish' and 'out of touch with reality' (pp. 16-17).

Much of the research in educational administration is carried out by graduate students who have carried out the studies merely to fulfill requirements and often have felt inadequately prepared. Muth (1989) wrote:

Related conclusions were reached in a sample of elementary and secondary principals in exemplary schools (Brown et al. 1988). This study found that research was the only area in which more than half of the respondents indicated that their knowledge and competency were acquired primarily at the university. Unfortunately, research also was among those skills considered least useful and least well mastered. Methodology and applications of research results were ranked among the least needed competencies. Methodology, applications of research, and testing were ranked among competency areas least mastered by the respondents. One implication of this study may be that research skills are considered less useful to practitioners precisely because they do not feel competent as researchers. Notably, the areas in which these practitioners felt least competent are those on which graduate training supposedly focuses (pp. 5-6).

Criticism continues of the research preparation and the quality of the investigations undertaken in educational administration. The field is fraught with differences of opinion—on whether to emphasize develop-
ment of the person or preparation for a role. Differences also occur on whether to stress investigations into practical problems or into theoretical areas. One way to determine what is needed in the preparation of educational leaders might be to take into account the perceived needs of graduate students, who frequently hold demanding positions in schools.

**Andragogy**

Knowles (1980) reintroduced the mid-1880s European term of andragogy in 1980. He specified that andragogy is a concept which takes into account adult development.

(a) their self-concept moves from one of being a dependent personality toward being a self-directed human being; (b) they accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning; (c) their readiness to learn becomes oriented increasingly to the developmental tasks of their social (and professional) roles; and (d) their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance centeredness (p. 44).

Many scholars have written about the concept of andragogy and its importance in curriculum development (Brockett, 1989; Galbraith & Zelnak, 1989; Lindle, 1990; Merriam & Cunningham, 1989). How might awareness of andragogy modify the research curriculum? For adults, experiential learning needs to be stressed; the immediacy of application is appropriate; and practice leading to the development of theory becomes important. Based on the criticisms of the research curriculum in educational administration, few doctoral programs have apparently considered the foregoing aspects inherent in adult development.

Muth (1989) spoke of the importance of devicing programs appropriate to adults:

—so too should we develop expert novices among educators who may not be knowledgeable in an area but who ‘know how to go about gaining that knowledge’ (Glaser, 1987, p. 5), who think critically (Brookfield, 1987; Meyers, 1986), who not only question standard practices but question their mentors and themselves. To achieve such generalizable skills, we need to develop active, goal-oriented, data-based research programs (Argyris, Putnam, & Smith, 1985) that rely on close, collegial relationships among professors, students, and field personnel; use the latest computer technology; and have clear payoffs for all parties. Such mutually dependent relationships between universities and schools can provide needed sources of free expertise, counsel, and labor for schools as well as sources of students and laboratory settings for academe (pp. 11-12).
Action Research and the Role of Participant-Observer

Action research is one investigative approach which takes into account experiential learning, immediacy of application, and practice leading to theory development; in short, it contains many of the characteristics appropriate for adult learning. Halsey (1972) defined action research as "a small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention." This definition can be refined further by utilizing Cohen and Manion's (1984) explanation.

... action research is situational—it is concerned with diagnosing a problem in a specific context and attempting to solve it in that context; it is usually (though not inevitably) collaborative—teams of researchers and practitioners work together on a project; it is participatory—team members themselves take part directly or indirectly in implementing the research; and it is self-evaluative—modifications are continuously evaluated within the ongoing situation, the ultimate objective being to improve practice in some way or other ... (pp. 41-42).

The self-evaluative part of action research places an emphasis on reflection. It develops reflection further by self-evaluation and formative evaluation as well. According to Englert (1981), action research consists of "a continuous cycle of planning, action, evaluation, and analysis" (p. 12). Muth (1989) indicated the lack of an approach such as action research in educational administration preparation and its reliance on reflection:

Still needed, of course, are broad-based descriptions of actions-in-practice, in-depth analyses of small samples of these actions-in-practice, and hypothesis testing with more controlled examples or with larger samples or populations. These different levels of inquiry can and should be complementary, mutually informing and reinforcing. Through them, students should learn how to ask questions appropriate to the problems they are trying to resolve and to select methods appropriate to their resolution. Conceivably, a clinically-oriented, field-based, research-oriented, long-term 'practicum' which parallels a student-practitioner's graduate content courses might become the cornerstone of a truly professional program. Such training for educational administrators could combine technical rationality and competence with 'reflective practice' and make the methods of inquiry and problem solving explicit and visible (pp. 15-16).

Reflection can be fostered by placing students in the role of participant-observers. This role is an important aspect of action research. Considerable literature (Ericksen, 1986; Fetterman, 1989; Jorgensen, 1989; Marshall & Rossman, 1989; Spradley, 1980) exists which describes the centrality of this role. As a participant-observer, an educational leader, for example, would
be expected to explore and reflect upon possible decisions before making them. Inevitably, while acting as a participant-observer and by carrying out research, a school administrator would learn to be more reflective.

Because of the work of Schön (1983, 1987), the reflective practitioner is a concept currently held in high esteem. In teacher education, for example, there has been much enthusiasm for creating reflective practitioners through preparing teachers to be researchers within their own classrooms. Berthoff (1987), Bissex & Bullock (1987), Boomer, (1987), Goswami & Stillman (1987), Knoblauch & Brannon (1988), Lytle & Cochran-Smith (1990), and Mohr & Mclean (1987) are some advocating that teachers become case study workers or action researchers in their classrooms and schools. If teachers become reflective practitioners and action researchers, then what should the role of school leaders be? One possibility is that school administrators respond to the changing expectations for teachers by modifying their own leadership style to facilitate reflection. What better way to prepare school leaders for the process of reflection than by asking them to carry out a few action research studies during their own graduate training?

The Pyramidal Approach to Reporting

A model which has become the standard for school (and other governmental units) financial reporting offers an interesting approach for restructuring the dissertation to increase its usability and impact on educational practice. NCGA (National Council on Governmental Accounting) developed the "financial reporting pyramid" concept as a means to differentiate levels of detail reported to various audiences. The major distinction was drawn between a comprehensive report containing considerable detail and a general purpose statement containing the essential elements of the report (Miller, 1980; GASB, 1987). The general purpose statement is structured as a "liftable" portion of the comprehensive report. The applicability of this model to the dissertation is discussed.

Two Investigations of Former and Current Graduates' Research Needs: The Setting

Temple University, a large postsecondary institution, is located in Philadelphia. The overall enrollment in the fall of 1989 was 34,560 students. More than 150 students were engaged in pursuit of the Doctor of Education degree in educational administration, concentrating in school administration or higher education. The educational administration program is housed in the College of Education with degrees awarded through the Graduate School. Students may complete graduate courses on the main
campus or in graduate centers within a one-hundred-mile radius. Graduate centers are located primarily on the campuses of other universities. The university is a state-related institution but is not state-owned.

The great majority of students maintain their professional positions while engaged in study. Classes are ordinarily offered during evening hours; some classes are offered on weekends. Each student is required to fulfill a concentrated period of study during which nine credits are completed in each of two consecutive semesters. Beginning in the fall of 1989, new students entered a modified cohort to complete this period of concentrated study during their first academic year.

The doctoral program has a long tradition of preparing persons for leadership positions in schools and institutions of higher education. Most graduates tend to serve as school administrators within a three-state area.

In this section of the paper, we will present two studies conducted to obtain the comments and criticisms of former and current doctoral students about their research preparation. In the first study, we carried out a survey of recent doctoral recipients from Temple’s educational administration program. In the second investigation, we questioned current doctoral students from the same setting and program about their training.

Study I—Survey of Recent Graduates

Data Source and Methods

Counting backwards from January, 1990, a sample of 100 doctoral recipients was identified from graduation lists. Doctoral degrees are customarily awarded twice each year, January and May; a few degrees are awarded in August.

A two-page, open-ended questionnaire was sent to graduates during the summer of 1990. Respondents had the option to list their name and work address. Of the thirteen questions, ten requested factual information about their research-related activities. One question asked graduates’ perceptions about what had been helpful in their preparation for the dissertation, and one solicited suggestions for additional assistance that might have been helpful. The final question asked their opinion about preparing the last chapter in the dissertation in a form suitable for a presentation at a professional meeting and/or for publication. (For these graduates, the last chapter in their dissertations included primarily a summary of findings, conclusions, and recommendations.) The total usable returns numbered 62. Most respondents graduated from 1986 through 1989 (87.1%), worked in schools (72.6%), and were male (66.1%). See Table 1.

Data produced by the questionnaire were tabulated into frequency distributions. Differences between or among subgroups of respondents were tested for statistical significance with a t-test.
Table 1. Profile of Recent Graduates

<table>
<thead>
<tr>
<th>Year Ed.D. Received</th>
<th>f</th>
<th>%</th>
<th>Cum%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 (January)</td>
<td>6</td>
<td>9.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1989</td>
<td>18</td>
<td>29.0</td>
<td>90.3</td>
</tr>
<tr>
<td>1988</td>
<td>11</td>
<td>17.7</td>
<td>61.3</td>
</tr>
<tr>
<td>1987</td>
<td>13</td>
<td>21.0</td>
<td>43.6</td>
</tr>
<tr>
<td>1986</td>
<td>12</td>
<td>19.4</td>
<td>22.6</td>
</tr>
<tr>
<td>1985</td>
<td>2</td>
<td>.12</td>
<td>3.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work</th>
<th>f</th>
<th>%</th>
<th>Cum%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>45</td>
<td>72.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Higher Education</td>
<td>9</td>
<td>14.5</td>
<td>27.4</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>12.9</td>
<td>12.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>41</td>
<td>66.1</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>33.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results

Orientation to Research

When given a choice as to whether they saw themselves as consumers, producers, or administrators of research, the sample of recent doctoral graduates viewed themselves in their current positions primarily as consumers of research (78.7% of 61 respondents). About half (50.8%) saw themselves as producers while 41% saw themselves as administrators of research activities. At least half (50.8%) reported themselves to have engaged in two or all three roles. The emphasis on the consumer role may reflect the high proportion (72.6%) of the sample working in public or private school systems. Furthermore, those who reported the producer role often described it as producing research to guide decision making in their schools. See Table 2.

Table 2. Research Role Perceived by Graduates

<table>
<thead>
<tr>
<th>(N = 61)</th>
<th>f*</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer</td>
<td>48</td>
<td>78.7</td>
</tr>
<tr>
<td>Producer</td>
<td>31</td>
<td>50.8</td>
</tr>
<tr>
<td>Administrator</td>
<td>25</td>
<td>41.0</td>
</tr>
</tbody>
</table>

*Respondents may have listed more than one role.
Asked to list professional journals and publications read regularly and found useful, one-fifth or more of the graduates (N = 62) named the *Phi Delta Kappan* (53.2%), *Educational Leadership* (50.0%), and *NASSP Bulletin* (24.2%), and publications of the state school boards association (22.6%). The number of journals listed by respondents ranged from zero to nine; 58% named three or four; the mean was 3.94.

The graduates’ participation in regional, state, or national professional associations paralleled the findings for journals. Listed most frequently was the Association for Supervision and Curriculum Development (ASCD), 45.2%. Phi Delta Kappa was second, 32.2%; the National Association of Secondary School Principals (NASSP) was third, 27.4%. Also listed by one-fifth or more of the respondents were the American Association of School Administrators (AASA), 22.6%, and a state association of secondary school principals, 21.0%. The mean number of associations listed was 3.81; the range was 0-9. Women graduates tended to list more associations, 4.38 to 3.51, than did men (p = .058). See Table 3.

Table 3. Graduates’ Professional Reading and Association Participation

<table>
<thead>
<tr>
<th>Regularly Read Journals/Publications</th>
<th>f*</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phi Delta Kappan</td>
<td>33</td>
<td>53.2</td>
</tr>
<tr>
<td>Educational Leadership</td>
<td>31</td>
<td>50.0</td>
</tr>
<tr>
<td>NASSP Bulletin</td>
<td>15</td>
<td>24.2</td>
</tr>
<tr>
<td>State School Board Asso. Pubs</td>
<td>14</td>
<td>22.6</td>
</tr>
<tr>
<td>Education Week</td>
<td>8</td>
<td>12.9</td>
</tr>
<tr>
<td>Executive Educator</td>
<td>8</td>
<td>12.9</td>
</tr>
<tr>
<td>ASCD publications</td>
<td>8</td>
<td>12.9</td>
</tr>
<tr>
<td>The School Administrator</td>
<td>7</td>
<td>11.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participation in Professional Associations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCD</td>
<td>28</td>
<td>45.2</td>
</tr>
<tr>
<td>Phi Delta Kappa</td>
<td>20</td>
<td>32.2</td>
</tr>
<tr>
<td>NASSP</td>
<td>17</td>
<td>27.4</td>
</tr>
<tr>
<td>AASA</td>
<td>14</td>
<td>22.6</td>
</tr>
<tr>
<td>State Secondary Principals</td>
<td>13</td>
<td>21.0</td>
</tr>
<tr>
<td>State Administrators Association</td>
<td>11</td>
<td>17.7</td>
</tr>
</tbody>
</table>

*Items receiving three or more citations

Research Activity

The research and related activities of graduates are partially reflected in their presentations at state or national meetings of professional associations and in the papers
they have published or have in process. Nearly half (45.2%) reported having given one or more presentations. Slightly more than one-third (35.3%) indicated they had published a paper or had written some other professional publication. One-fourth (25.8%) had given both a presentation and had published. Graduates who had published were more likely to base their work on their dissertation (40.9%) than were those who gave presentations (32.1%). See Table 4.

Table 4. Research-Related Activity of Graduates

<table>
<thead>
<tr>
<th>Activity</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave a presentation at a professional meeting</td>
<td>28</td>
<td>45.2</td>
</tr>
<tr>
<td>Published or have in process a professional paper</td>
<td>22</td>
<td>35.5</td>
</tr>
<tr>
<td>Both of the above</td>
<td>16</td>
<td>25.8</td>
</tr>
</tbody>
</table>

Perceptions of the Dissertation

The research method most frequently used by graduates in their dissertations was survey research (75.8%). Other methods used were experimental, ex post facto, case study, legal, and other forms of qualitative research. Some of the survey research also incorporated ex post facto comparisons, but the overriding method was survey research.

In listing what had been helpful in their preparation for conducting a dissertation project, graduates cited their research courses most frequently (70%). These graduates typically had an introductory, consumer-oriented research course early in their study or as part of their masters degree study. The last course in the doctoral sequence prior to the major field examination was a research seminar leading to development of a preliminary dissertation proposal. Many students also completed a dissertation proposal design course after the major field examination. A statistics course was cited by 45% of the graduates, and 25% made special mention of their advisers. The overwhelming proportion of responses referred to a course or activity which addressed the "how-to-do-it" aspect of the dissertation.

In conclusion, graduates were asked if the last chapter in the dissertation should be written in a form suitable for publication in a journal or suitable for presentation at a professional meeting. The form of their own dissertations characteristically followed the standard, formal format of a summary of the findings, conclusions, and recommendations. The responses strongly endorsed both proposals (63.3%). Another 20% supported the proposal for a publication format, and 5% suggested the proposal for a presentation. The remainder (11.7%) recommended that the chapter be retained in its present form. See Table 5.
Table 5. Graduates' Recommendations for the Last Chapter of the Dissertation

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form suitable for publication in a journal and presentation at a professional meeting</td>
<td>38</td>
<td>63.3</td>
</tr>
<tr>
<td>Form suitable for publication in a journal</td>
<td>12</td>
<td>22.0</td>
</tr>
<tr>
<td>Form suitable for presentation at a professional meeting</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>Retain standard format</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Study II—Questions of Current Students

Data Source and Methods

Through an open-ended questionnaire, members of the first cohort of students in the revised doctoral program were asked to comment on their experiences with action research. The intent was to elicit students' responses concerning the focus on action research at the outset of their doctoral program. Did students feel more comfortable with the research process? Had action research offered them an approach for carrying out further investigative projects within their school district? Did any of them plan to continue with this research approach for their thesis?

Analysis of data, for this unstructured questionnaire, was carried out through the selection of salient patterns which emerged from the data (Erickson, 1986; Fetterman, 1989; Marshall & Rossman, 1989; Page, 1989; Stake, 1988; Wolcott, 1988). We utilized a form of inductive analyses in which grounded category generation involved noting commonalities or recurrent regularities (Lincoln & Guba, 1985; Patton, 1980). We also used convergent thinking to create categories or themes and later on divergent thinking which enabled us to broaden the categories and make them inclusive (Merriam, 1988, pp. 134-135).

Results

At the end of the first semester of their doctoral programs, students were asked to respond to a course which had focused on action research. Nineteen of the 20 students in the cohort group completed the questionnaire. Question 3 directly dealt with action research: What are your feelings about
the emphasis on action research throughout this course? (i.e., Has it made you think positively or negatively about research? Do you feel better prepared to conduct an investigation for your dissertation? Do you think action research is an appropriate or inappropriate investigative approach for an educational administrator?)

In responding to this question, all of the students felt that action research had made them feel more positive about research. Typical responses included:

- I feel great about action research. Positively. I do feel prepared for research and am looking forward to starting my dissertation.
- I like it and I feel better equipped to do research as a whole.
- I appreciate the concept of action research; I find it an appropriate method of investigating problems and projects.

From the responses to this item, a category emerged which we called, **Confidence About Carrying Out Research.** This confidence can be heard in the following statements:

- I feel more comfortable and confident in my outlook toward the dissertation.
- I feel much better prepared and even more comfortable with the idea of having to conduct research.
- I now feel like research is something which I can do. Yes, I feel better prepared to conduct an investigation.

Many responded that action research might help them with their dissertation. Under **Action Research and the Dissertation,** some said:

- In the past months I frequently tell my spouse that such and such would be a good dissertation topic. He responds that he can tell this course has helped me to become a 'real' doctoral student.
- I am seriously considering the structure for dissertation, but will feel more comfortable getting advice along the way.
- A quote in one of the readings said the purpose of research was to help tentatively identify the next step. I feel that's where I am in terms of learning for this course. It's prompted me to formulate more questions rather than to take things for granted. I believe that's what education is for. Whether I'm better prepared to do a dissertation? I have an idea that might lend itself to action research, but I'm not really sure it's doable.

Yet another category emerged which we called, the **Practical Nature of Action Research.** Students commented:

- I do believe action research is appropriate for the administrator. I enjoyed my project! It was so helpful in my college. I'm looking forward to doing more action research projects as I study more issues at our college!
- Action research is very appropriate for administrators who are seeking an Ed.D. since it is practically oriented. Excellent tool for educators/administrators to use/practical.
The emphasis on action research was a strength of the course. For practicing educators, the action research methodology has great practical usefulness. It ought to go on all the time.

Still another pattern emphasized the **Personal Aspects of Action Research**. Students stated:

When I first entered the course I knew nothing of action research. I was confused, at first, due to my functional illiteracy of the topic, but as I became involved in the process, I grew. Now, I believe that action research is a most important approach in the field of educational research, and—from the insight I developed through A.R. Project, I realize that one can find out much more from the personal involvement one has in A.R. than in a typical quantitative or less involved approach.

Action research enables administrators to examine more closely the areas of concern in a school or district. Interview methods more personal than questionnaire; teachers more likely (a) to believe their opinions and thoughts are desired; (b) to be honest in their responses; and (c) to appreciate attention by an administrator.

I am very enthused about action research. I've always felt that quantitative approaches lose the human essence.

Only one negative category was discovered. According to a couple of graduate students, the major drawback of action research seemed to be the Time Frame for Carrying Out a Project. Students said:

It was very difficult to complete significant action research in a semester's time. Difficulty with doing the research at work because of the demands of the job.

Despite these two negative comments related to the lack of time to carry out research, all other comments concerning the introduction of action research early on in the students’ preparation were positive. Generally, the students felt more positive about research; had more confidence in carrying out the dissertation; felt they might use the action research or case study approach for their dissertation; liked its practical nature and thought it appropriate for educational administrators; and favored its personal aspects.

**Discussion of Results**

**Recent Graduates' Orientation to Research**

Former students as researchers in schools. About half of the graduates saw themselves as producers and slightly fewer than half saw themselves as administrators of research activities. Clearly, after receiving the doctorate, research continued to play an important part in the lives of many of our recent graduates, the majority of whom are now educational administrators in schools. Contrary to the critics, research was perceived to be more than
a rite of passage for at least half of our graduates. In view of this finding, the doctoral experience continues to be useful. Doing away with the doctorate, as some authorities have suggested (Cooper, et al. 1989), does not seem to be warranted. Instead, we might ask: How can we enrich the doctoral experience to prepare graduates to continue to produce research or facilitate it in their educational institutions?

**Former students’ limited readings in educational research.** The journals and publications read regularly and found useful by our recent graduates may help our quest to enrich the doctoral experience. The journals most frequently mentioned were: *Phi Delta Kappan, Educational Leadership,* and the *NASSP Bulletin.* While these are worthwhile periodicals, there were a number of journals which were missing on this list. For example, where were the AERA periodicals or the *Educational Administration Quarterly?* Why is the list so restricted?

**Recent graduates’ perceptions of the dissertation.** “How-to-do-it” courses and activities were cited most often. In particular, statistics and advisers’ assistance were mentioned. Practice, rather than theory, seemed to be useful and meaningful to our students. This focus on practice mirrors what is known of andragogy or adult learning. Adult students tend to gain a great deal of information through practice and they value “hands-on” preparation.

**Current Students and Action Research**

Students felt positive about this type of research and most felt confident about carrying out research in the future. In particular, many liked the practical nature and the personal aspects of action research. Some even indicated that they would like to use action research as the investigative approach for their dissertation. The only drawback that emerged in their comments was the time-frame for carrying out a project. A few students would have preferred a longer period of time for conducting their investigations.

**The practical aspect of action research.** The practical aspect of action research seemed to stand out.

The emphasis on action research was a strength of the course. For practicing educators, the action research methodology has great practical usefulness. It ought to go on all the time.

Action research is very appropriate for the administrators who are seeking an Ed.D. since it is practically oriented.

The preparation of students in the use of action research may prove to be one way to answer the charges levelled by critics who have thought that investigations in educational research were not practical. It would meet Muth’s (1989) suggestion:
Further, we need to provide hands-on experiences with real problems so that student-practitioners can test their learning under rigorous guidance (p.3).

Halpin’s (1966) belief that problem solving of difficult, practical problems, longitudinally, is the only way to develop a body of knowledge could also be met through the use of action research.

The fact that a problem will certainly take a long time to solve, and that it will demand the attention of many minds for several generations, is no justification for postponing the study. And, in times of emergency, it may prove in the long run that the problems we have postponed or ignored, rather than those we have failed to attack successfully, will return to plague us. Our difficulties of the moment must always be dealt with somehow; but our permanent difficulties are difficulties of every moment (p. 72).

Action research may be one way for practitioners to begin to tackle difficult problems and, over time, build a knowledge base necessary to solve the troubling issues in schools.

Action research and adult learners. Because of action research’s focus on practical problems, it also tends to meet the needs of adult learners. As we now know, a mature student learns through immediacy of application and not through postponed gratification. Also, graduate students tend to want performance centeredness rather than subject centeredness learning. Hence, practical issues often become central to adult learners who enter the classroom with a wealth of experiences and are often preoccupied with the crucial, “nuts and bolts” problems of schooling. Adult students frequently ask hard questions for problems under consideration. If prepared properly, they would undertake action research projects in a thoughtful and effective way and not merely to complete a rite of passage toward a doctorate. They would be able to take on the difficult issues facing them daily as administrators in schools, i.e., children with AIDS; or inequities in learning for children of the lower classes.

The personal nature of action research. Another aspect of action research that students enjoyed was its personal nature. The use of interviews, observations, and the role of the participant-observer seemed very human ways to carry out research.

Action research and other approaches (i.e., ethnography, naturalistic evaluation) enable investigators to work with subjects in a close way. Through action research, the object/subject split between those being researched and those carrying out the research tends to disappear and more of a participatory investigative approach develops (Acker, Barry, & Esseveal, 1983; Bristow & Esper, 1984; Coyner, 1983; Duelli-Klein, 1983; Harding & Hintikka, 1983; Oakley, 1981; Shapiro, 1988). The student in our study who called this the “human essence" really was making this point. Such an approach lends itself well to the investigating of practical and sometimes emotional problems. Too often
these problems had been avoided because they are the hard ones and because they consist of "human essence" really was making this point. Such an approach lends itself well to the investigating of practical and sometimes emotional problems. Too often these problems had been avoided because they are the hard ones and because they consist of volatile issues. Action research and other forms of case study research can address important problems.

Recommendations

In light of the studies we carried out, we have some recommendations for modifying the Ed.D. dissertation and the research curriculum in educational administration.

Proposed Redesign of the Ed.D. Dissertation

The traditional format of the dissertation may well serve the purposes of scholarship. That point is not debated but the issue is whether a different format may be more effective when research is conducted by practitioners for use by practitioners. Writing about dissertations in general, Mauch and Birch (1983, p. 191) declared: "Great gaps yawn between where knowledge is located (i.e., in T/D pages) and where knowledge ought to be if it is to be located."

The proposal that follows does not accept any less rigor in the conduct of research nor any less emphasis on quality in research reporting than are characteristic of the best scholarship. There may, indeed, be instances when the traditional format is preferred. But, we believe that the following question raised by Madsen (1983) must not be ignored:

Why are so few dissertations converted into books? The question probably lies in the nature of dissertation work, which is an exhaustive scholarly treatment of a subject that may be highly technical, specialized, and even arcane, couched in technical terms or the jargon of a particular discipline. The writing may be abstruse, even pedantic, replete with words and phrases that betray its origin as an exercise in scholarship (pp. 93-94).

Although most researchers may be quick to say that reporting is not a matter of filling in the blanks, the structure of a dissertation is remarkably the same from discipline to discipline and from university to university. The typical structure is described by Mauch and Birch (1983):

Chapter 1. Purpose and Organization
Chapter 2. Review of Related Material
Chapter 3. The Investigative Procedures
Chapter 4. Results (or Findings)
Chapter 5. Conclusions and Implications
The pyramid approach to reporting that we recommend is designed to promote dissemination and to enhance the usability of the results of a study. The focus of this approach is the preparation of a general purpose report supplemented with sections which provide greater detail. The general purpose report is expected to be complete enough to stand alone, to be "liftable." The supplemental sections would elaborate or provide back-up material for the reader desiring greater detail, but they are not essential to understanding the general purpose report itself. When applied to the report of a dissertation project, the structure of the dissertation would be reorganized but the basic content of the standard format would be retained.

General purpose report. The structure of the general purpose report would follow that typical of research reports in journals or of formal research papers presented at professional meetings. "The results of much doctoral research can often be more appropriately presented as one or more journal articles" (Madsen, 1983, p. 96). "The annual meeting or convention of the scholar's professional association provides an ideal forum for sharing the thesis results with a receptive audience" (Madsen, 1983, p. 97).

The general purpose report would begin with an introductory section setting forth the problem, its context, and the need for or importance of the study. The context would include a succinct review of related research and literature.

The second section of the general purpose report would present an overview of the research methodology. Essentials about the research design, subjects, instruments, data gathering techniques, and methods of analysis would be described. Technical details and specific research steps would be reserved for a later supplemental section.

The next portion of the report would be the presentation of results. For example, in a quantitative study this section would include the major tables and reports of statistical analyses. Tables of back-up and supporting data and tables presenting the details of statistical analyses would be reserved for a later section. A qualitative study would report examples and narrative summaries of the study's database.

The concluding section of the general purpose report would contain a discussion of the results, conclusions drawn, and the implications and recommendations supported by the study. This section would parallel the contents of Chapter 5 in the standard dissertation but would be written in the style of a journal report or paper.

The general purpose report does not represent a radical departure from the structure of the standard dissertation. Ordinarily, the report would be shorter and in a style used by a professional journal or association. As observed by Mauch and Birch (1983), "Professional journals tend not to employ the conventional T/D format for articles" (p. 192).
The complete dissertation entered into University Microfilms (or similar service) and filed in the university's library would contain the general purpose report and all the supporting sections outlined below. A special a\'vantage of the general purpose report is that it would be available for immediate submission for publication in a journal or presentation at a professional meeting.

**Review of research and literature.** A major supporting section would be a more extensive review and discussion of the literature than that presented in the introductory section of the general purpose report. Ideally, this section would be prepared with the expectation that it, too, could stand alone and be published on its own merits. The preparation of this section could be the product of a doctoral seminar leading to the development of the dissertation proposal. As an alternative, this section could be an extensive annotated bibliography on the topic of the study which might or might not be suitable for publication by itself.

**Technical section.** A second major section supporting the general purpose report would present details on the methodology of the study. Those matters ordinarily addressed in Chapter 3 in the dissertation would be presented here. Technical aspects about the validity and reliability of the instruments or approaches would be provided. Details on the sampling procedure and rate of return, for example, would also be included. Procedures and results from a pilot study, if any, would be discussed. Data collection and follow-up procedures would be presented in detail. The method of analysis and rationale for using it would be described.

**Data section.** At yet a second level of support to the general purpose report would be a data section. Tables of raw data, observation reports, interview notes, lists of documents, lists of subjects, graphs, and charts, for example, would be presented here. Tables containing the complete results from statistical analyses (correlations, t-tests, ANOVAs, etc.) would also be included. If the data set or notes were too voluminous to report *in toto*, examples should be given with details about the location and access to the entire set stated.

**Instrument section.** Blank copies of questionnaires, interview guides, tests, protocols, observation schedules, and the like should be presented in an instrument section. Copyrighted material not available for presentation should be listed with access information.

**Correspondence.** Sample copies of letters seeking access to the participation of subjects should be presented. Consent forms and letters of permission should be included in the correspondence section. If a consent form was obtained from each subject, only a sample form would need to be presented. All consent forms would be retained on file.
Bibliography. Full bibliographic citations supporting the study should be provided.

As noted in the foregoing description, the sections listed are illustrative of the contents of the entire dissertation. Figure 1 gives a schematic of how these sections would relate to one another in the reporting pyramid.

Figure 1. Reporting Pyramid for the Ed.D. Dissertation

Proposed Revisions for the Research Curriculum

Journal Club. One way to help broaden the list of periodicals which graduate students read and may, in time, contribute to might be the Journal Club. The club has had a long tradition as an integral part of the training of natural and physical scientists. In laboratories throughout the U.S., Journal Club is an activity usually held each week, for approximately one hour, in which graduate students and faculty members read a current research article and come together to discuss it. The Journal Club is organized in such a way that usually the facilitator of the session rotates. Prior to a meeting, the appointed or volunteer facilitator, who may be a faculty member or student, selects an article, frequently from a list of outstanding papers found in appropriate journals. The facilitator copies and distributes the article and makes certain all members of the club receive the paper in advance. At the meeting, the facilitator provides background to the field or fields underlying the article; offers some information about the researchers of the work; summarizes the article; and provides a critique of the paper. Those attending the Journal Club ask questions and critique the reading. The Journal Club has the advantages of exposing students to a range of periodicals and to "cutting-edge" work in one field or related disciplines. Additionally, Journal Club provides intellectual stimulation for the faculty and offers a common language and framework for their research and for their curriculum development.

Seminar series. Another way to expand the journals read by students is to hold a seminar series. Prior to each session, students would be provided...
with a list of appropriate readings. In particular, the list would include works by a guest speaker. Through the series, both students and faculty could keep abreast with the changes in the field of educational administration. Additionally, presenters could be invited who are not in educational administration but are in related areas which might affect the discipline. The seminar series offers another opportunity to make certain that students think broadly and that they begin to reflect on diverse topics for their dissertations. In this way, they may begin to work on problems which ask the hard questions, and they may think about studying these problems in diverse ways.

Conclusions

In this section, we summarize the salient findings and ideas concerning the restructuring of the dissertation and of the research process. They are as follows:

1. Former students thought highly of the concept of modifying the last chapter of the dissertation for purposes of possible journal publications and/or presentations. We have endorsed this idea as well as a number of other changes leading to the concept of a General Purpose Report rather than a traditional dissertation. This approach to reporting is designed to promote dissemination and to enhance the usability of the results of the thesis.

2. Utilizing this new pyramid model, we have suggested that the literature review section be able to stand alone. In order to acquire skill development in the review of literature, students must read widely and critically. A Journal Club would be one way to strengthen students’ abilities to become reflective educators. Additionally, participation in a Journal Club would introduce them to high quality research in educational administration and in related areas.

3. Another way to encourage students to read widely and critically is through the organization of a seminar series for both students and faculty in educational administration. The speakers in this series could provide students with the opportunity for exposure to cutting-edge research and might enable them to think in an interdisciplinary way about topics for their dissertation. Seminars could also offer a forum in which critical discussion could occur.

4. Prior to the development of a dissertation proposal, students should have considerable experience in carrying out research; we have suggested that they conduct numerous studies in all or most of their doctoral courses. In particular, the studies should be of a useful nature for schools and should be meaningful to students. Action research, case studies, and naturalistic evaluation could be invaluable approaches for these investigations. Additionally, the concepts underlying andragogy or adult learning should be
taken into account. Based on what we know of adult learners, investigations which emphasize practical application and personal interactions between the subjects of the studies and researchers seem to be appropriate.

5. In action research and other case study approaches, the role of the participant-observer is significant. Such a role has the expectation that researchers will be reflective. By carrying out research using interviews, observations, journal-keeping, and field notes, graduate students, who are often in school leadership posts, have the opportunity to reflect before they act. Through case study methodologies, students of educational administration come to appreciate the importance of thought as well as action. With the current emphasis on teachers as researchers and with the stress on educational administrators as case study workers, there is the possibility that schools may eventually become "communities of thinkers" (Boomer, 1987).

6. Above all, we have indicated the importance of listening to current and former graduate students for their ideas to improve the research process in educational administration. We have found that adult graduate students cannot only provide information, but they can also offer insights and suggestions for curriculum change. We recommend that their voices continue to be heard.

References


CHAPTER 3

AS HE LIVES IN THEIR WORLD:
TEACHERS' PERCEPTIONS OF THEIR
PRINCIPAL'S LEADERSHIP BEHAVIOR
AS RELATED TO SCHOOL EFFECTIVENESS

Beverley B. Geltner
Oakland University
Rochester, Michigan

The center of the educational enterprise is the individual school, with its principal, teachers and students. All the rest of the district is super-structure (Goodlad, 1979, p. 101).

I chose to come here basically because of him. He treats you as a professional, and shows a lot of respect for teachers. He supports our competence and fosters our freedom to be adults, not to be children who have to have all the rules laid out... (5th grade teacher).

For more than a decade, a seemingly endless variety of “outside-of-school remedies” have been applied to “inside-of-school problems” (Barth, 1989, p. 17). Neither minimal competency mandates, nor legislative directives, nor widely publicized pronouncements by presidents of corporations or of the nation itself have demonstrated a capacity to move schools toward sustainable improvement.

Analysts of school reform (Barth, 1989; Sizer, 1990; Glickman, 1990) have focused attention on the insides of schools, on the interrelationships of the adults who live and work within those environments and who share responsibility to motivate students to learn. The uniqueness of each school has been acknowledged, and the impossibility of cloning formulative school improvement models from one site to another has also been demonstrated. As Glickman notes:

People need to understand that these (demonstration) programs work not because they are so meticulously crafted and engineered but because the faculty in these schools will not let them fail... (The programs) are to a large degree not exportable... (p. 72).

If external interventions offer only modest hope of influencing the basic culture of the schools, and if, as Barth (1989) argues, the problems and the most promising solutions reside within the ethos of the workplace, then the issue of the quality of interactions among those within the workplace must attract reformers' attention.
Analysis of schools as complex organisms, as social ecosystems (Sarason, 1971; Holman, 1980; Morgan, 1989), provides a framework within which school improvement can be considered. Among the interacting components within the school ecosystem—the principal, teachers, students and community—complex relationships operate, with discernible patterns and regularities. Like any living structure, a school may be alive and dynamic, or stagnant and decaying. It may foster and promote interconnectedness and growth in a nurturing life-enhancing environment, restrict, or constrain and extinguish creative and life-renewing forces through emotional and organizational dysfunction and toxicity (Smith & Scott, 1990). This ecological view of the school may be helpful in examining the specific factors or processes which enhance or inhibit school well-being and capacity for renewal.

One component of the school ecosystem—the principal—is of special significance. The principal, far more than any other person, "shapes and articulates the prevailing ambiance and creates a sense of mission" (Goodlad, 1979, p. 77). On the principal’s shoulders falls the burden of protecting the best interests of teachers and liberating the constructive power of which they are capable. Not only must the principal serve as the “instructional leader,” as defined in the Edmonds Effective Schools paradigm, but must also take the responsibility for deliberately seeking, modelling, shaping, developing, rewarding and institutionalizing the norms of collegiality, mutual respect, continuous professional conversation, and shared ownership (Barth, 1989).

In self-renewing schools, principals harness the energies of their staffs on behalf of a shared vision of school success. Their own sense of purpose for the school and the mutual support and trust shared with teachers are channelled and translated into a working reality.

Because teachers interact directly with students and are the ultimate “deliverers” of instruction, a critical focus of education reform must be on the engagement and commitment of teachers to foster high levels of student learning. Accordingly, educational leaders must attend to those administrative behaviors which are deemed of primary import by teachers as they go about their daily work.

To understand the interactions between teachers and their principal in a successful school environment, a case study was conducted in one midwestern suburban elementary school. The school was selected for its demonstrated and continued success according to several traditional criteria, including disaggregated standardized and criterion-referenced student achievement data, staff mobility and labor relations data, community survey data, and informal reputational data. Principal and staff had been together for at least four years and served approximately 350 students in an ethnically and economically diverse community.
The research was designed to examine teachers' perceptions of their interactions with their principal. The approach focused on perceptions and meanings and sought to understand human behavior as a function of those perceptions. How did the principal enter their world? What aspects of his behavior were significant to them? What motivated them and brought them together? What supported their willingness to risk? What sustained their commitment over time? What meaning did his presence have for their active participation and engagement?

To answer these questions, a phenomenological investigative research model was designed. The seventeen teachers in the selected school were engaged as active co-researchers. Understanding that new knowledge would emerge from experiences, they agreed to provide information through reflective papers, critical incident reports, and personal interviews.

The phenomenological investigative approach was used to get as close to original happenings as possible and to rely on primary data in a systematic and disciplined way. Giorgi et al. (1971) elaborated on the phenomenological approach by describing it as:

... a transcript of the surge of events, the sequential and meaningful record of human activity. This method aims to assess the meaning and to read the message of happenings in which men and events relate meaningfully to each other (p. 71).

Such a method offers an opportunity to conduct experiential, human-centered investigations in pursuit of subjective, qualitative dimensions of experience. When research involves a number of co-researchers, differences as well as similarities can be revealed, and a conception may be developed based on the understandings of multiple researchers confronting a common experience. "This is not a case of error variance, but rather like a complicated notion of echo . . ." (Rosenwald, 1979). Further, "As the researcher changes his informant . . . culture is . . . gradually and gropingly discovered" (Sapir, 1966, p. 195).

Special characteristics are required of such an investigator, including the ability to be open to patterns, to sense hidden patterns, and to bring to the interactions being studied knowledge and understanding of the behavior under examination and their possible meanings.

First, selected items of Likert's "Profile of a School" instrument (1977) relating to principal's leadership, school climate, and subordinates' perceptions were presented to all teacher-co-researchers. The instrument was used to focus participant's attention, to serve as a reference and focal point during interviews, and to serve as a generator of original and pertinent information. It was not used in any subsequent data analysis.

All data were gathered, transcribed, subject to reflective interpretation, tentatively grouped, and then holistically analyzed and synthesized to attain clear and deeper understanding of the subject under investigation.
Findings

Five critical behavioral characteristics of the principal were reported by the teachers, namely: the principal as educational visionary, modeler, partner, supporter, and innovator.

Principal As Educational Visionary

Effective schools are characterized by the collective internalization of a clear and coherent set of beliefs relating to children, teaching and learning by all the adults working in the school. The critical role of the principal in articulating the beliefs and a vision for the school and a clear sense of purpose to all members of the staff is a central tenet of the school improvement literature of the 1980s.

To the teachers in this study, the foundation for their efforts was their knowledge and sharing of the principal’s belief that they were all engaged in a task of special significance—the shaping of young lives—and that, through their joint efforts, they could have enormous influence. Through his interactions with them, they were reminded of their primary task and propelled to transform their shared vision into reality.

What I know without question is that he and I are here working together with a single purpose, and the children and their learning is that purpose. He wants every child to succeed, and every teacher to succeed. He recognizes that we all have different teaching styles, and values our diversity.

Their principal was clear that the children were at the heart of their efforts, and all activities were to contribute toward their development.

This is a child-oriented school. The rules in this school are made for the kids, not for the convenience of the adults.
I think the most important thing for him is that the children go out of here with as much good feeling about themselves and as much input and success as could have happened as if he were actually doing it himself. . . .
I think with him it is very important that children be allowed to grow, experiment, expand, if he were actually doing it himself.
I think with him it is very important that children be allowed to grow, experiment, expand.

Central to the vision articulated and shaped by their principal was his belief that parents were partners. Children did not function in a vacuum, in isolated segments, but rather in a world that extended beyond the walls of the school. Teachers described their experience of his vision of the school as an inclusive, extended learning community.
At one point in this building you couldn’t get a parent in if you roped them on the street and bodily dragged them in. The minute you cut the ropes, they would have disappeared. I was here. . . . I know this for a fact. He has turned that around. For him, the school is like the center of the community. Other principals don’t do what he does, and some of us weren’t sure at first. But we’ve come to see, of course we know, that children learn more from their parents than they are ever going to learn from their teacher, and if the parents are conveying . . . that the school isn’t worth their time, then it isn’t worth the child’s time either.

The coherence and congruence between the principal’s espoused values and beliefs and his actions served as a powerful message to his staff, pointing the way to their realization of the vision with him, invoking their participation even after initial reluctance.

**Principal As Modeler**

A frequent theme expressed by teachers was their awareness of the principal’s manner of interacting with children. He was often to be seen throughout the building, communicating directly with them, sharing with them his belief that achievement was important, and that he was proud of them for their success.

He spends a lot of time talking with children about good things, and things they’ve done. . . . He’s very conscious of his children. Today he was watching some children read a play in the office. They were practicing something for this afternoon. He was very interested, and praised them.

“Catch them being good” was not just another formula, but a reality that was enacted frequently before them. Praising students became an explicit, shared behavioral norm and “the way things are done here.”

Teachers also noted their experience of the principal’s treatment of the adults in the school—teachers, aides, parents—and the significance of this behavior on them. The data revealed repeated examples of the principal citing others’ accomplishments in a caring and respectful way, and of the teachers internalizing this as a model of how one could and should interact with others.

He treats me as a person. . . . This is very typical of him. We have a couple of different personalities on this staff, some free spirits, that he handles quite well. I think just in his manner of speaking, his acceptance of their point of view, in not being taken aback by them. He doesn’t squelch them. Most of us try to emulate this. We can respect your opinion even though you’re dead wrong. We’re emulating an abstract. Professional differences, issues can come out. Everyone is worth something to him, and he makes it quite clear just by his actions. You know, we’re all very worthy. . . . parents, kids, aides, not just the teachers.
This example of constant high regard and caring for all members of the school community—pupil, parent, custodian—was a powerful and uplifting model for teachers. The principal’s own behavior served to give teachers a sense of self respect and high self worth, and to point the way toward exemplary relations with others.

Teachers also experienced their principal serving as a consistent model of caring and respect toward them. As one stated, “I think some of the ways he handles people just rubs off on me.” They felt the impact of the emotional environment modelled and lived by him—calm, respectful, orderly and anxiety-free, and “caught” it as the way of being in that setting. For them, this model of care and respect had a powerful impact and helped shape an atmosphere than was calm and organized. One veteran teacher, new to the building after 13 years in another school, expressed with genuine awe her perception of the quiet atmosphere in the school, and the principal’s contribution to that.

He is consistent in his behavior with me, and with everybody. I have never seen him upset, that is yelling or anything. . . . It sets the tone for the building. I think you’ll find that if a teacher gets upset, she won’t really get upset in a room; she’ll go outside.

The issue of handling of student discipline was modelled by the principal in a manner that communicated responsibility but not punitiveness.

At first, I wondered how discipline problems were handled here, because I would never see any. Then I would see him quietly in the corner with a boy talking to him, and I thought, “That’s interesting!”

He has a gentle way with the children, even the children that he’s got nailed by the thumb—he’s still not ego-punitive with them. He is perfectly capable when they have done something that requires a strong hand, but he never damages a child’s ego.

Thus, one could correct children without destroying them; one could point out errors and provide the correct alternative. Teaching could operate outside of the classroom as well as within, and values could be expressed in all aspects of human interactions within the school.

Finally, teachers perceived that the principal conducted his professional life with freshness, vigor and enthusiasm. After a career of several decades, he was still young and fresh in spirit, as if in his “second year.”

You feel that as many years as he’s been principal he still takes it seriously. . . . If he were really blah, and gave the impression that ‘Here I am again today,’ I think it would make me feel that way too. Well, maybe not, but it would have an effect, and right now the effect that he has is positive.
In summary, analysis of the data revealed that teachers perceived the principal's behavior as a mode of both individual and organizational behavior. In him, teachers saw consistent patterns that demonstrated how one could act toward children, parents, colleagues, and one's own life's work.

**Principal As Supporter**

A third cluster of data grouped about the significance of the teachers' perceptions of their principal as a support person for them. The emotional detail and intensity with which critical incidents were reported and reflective narratives were written revealed the critical import of this factor. Analysis of supportive behavior revealed that such support expressed itself in acceptance; empathy; direct support, particularly in interactions with students, parents, and other members of the school organization; and support for and confidence in individuals' judgments and actions.

For several teachers in the building, their first experience with the principal caused them to accept a position in the school.

Why did I come here? We interviewed with different principals. At that point I was beginning to understand how differently each school operated. I chose to come here basically because of him. He treats you like a professional, shows a lot of respect for teachers. What a difference from my last principal—a 'straight-lines-down-the-hall' man. He didn’t even know my name. He never called me anything!

A veteran teacher expressed her gratitude to the principal as follows:

He has the ability to permit you to define yourself… Freedom to define yourself—this is very important for me. If I am not intact intellectually—in control of what I am trying to do—then I’m not really teaching.

Through acceptance and support came empowerment and the willingness to risk. The knowledge that the environment offered safety to dare fostered a spirit of creativity, exploration and self renewal.

I feel a lot of freedom here…. He lets you do the thing in your classroom that you can do best as long as you can justify that it is go for the kids.

Whether or not the principal’s support had actually been invoked by the individual staff member in the past was not the issue.

I don’t NEED him. I could teach tomorrow whether he was here or not, but it’s just a certain support—a support that is certain—that you have because of him.

Differences and disagreements occurred among teachers themselves, between them, and with their principal. What was noteworthy was not the
matter of the conflict itself, but its place in the scheme of things, as something that was part of their shared lives and that could be lived through while maintaining supportive and respectful relationships.

Other experiences related to the principal’s acting on their behalf with individuals outside of the school itself, such as Central Office personnel and parents. In these instances, he was more than the instructional leader of the building; he was an educational leader, interfacing with other elements that entered the world of the classroom teacher, facilitating and “translating” when needed, protecting and supporting when appropriate.

Principal as Partner

Analysis of the data revealed a wealth of references in which teachers expressed the significance of their principal’s interactions with them as an educational partner. The experience of collegiality, of joint effort in a difficult enterprise was a powerful motivator and source of strength. For them, the principal served as an important instructional partner, particularly in matters involving home contacts, assessment of student performance, student placement, and program development.

In relations with families, the principal was a valuable resource, able to draw upon his knowledge of a particular child and family. Reports of several critical incidents told of home visits by the principal and coordination by him of resources within the school and the larger community to resolve difficult home situations and support a child’s progress in school.

Partnership was also evident in reviewing student achievement. In many other schools in the state, the issue of student assessment had become a source of threat and anxiety of teachers since they were initially targeted as the single accountable component of the whole enterprise. In this school, the matter operated differently.

We sit down together as a group—the principal, the reading specialist, all grade level teachers, the psychologist, resource room teachers. We go over all the results together, identify weak areas in our school, and talk about how we should concentrate on this. State assessment is not a negative thing for me.

Similarly, the principal was actively involved concerning matters of student placement, whether in the district’s gifted, bilingual, or special education programs. Where structure and curriculum guidelines were lacking, as was the case with the new program for the gifted, he met with staff on a regular basis, helping to develop an I.E.P. for each child.

The principal also served as an educational partner to staff by knowing how to “work the system” to obtain resources. His capacity to exercise his influence and power permitted them to obtain the materials needed to carry
out their responsibilities. Such interventions were particularly meaningful to teachers as they related directly to the basic necessities essential for their core activities, and served as a potent opportunity for collegial bonding and encouragement.

Finally, professional partnership was lived through the process of participation in shared decision making. While there was acknowledgment of the responsibilities and authority of his office, teachers confirmed their own opportunity to influence the world in which they lived and worked.

How do decisions get made here? Lots of discussion. . . We talk a lot about this whole process, and it’s changing. But it’s not as if he’s the boss. . . . He’s somebody we work with.

The experiences of collegiality and partnership helped sustain teachers in difficult situations and permitted them to carry on as well as possible.

There are limitations to my job and to his, and when we hit those limits . . . something we just can’t change or handle the way we want it to be, we say, ‘Here’s the ideal, what we want? . . . But it isn’t going to happen. Now, what is possible? How do we keep the ship running?’

The swirling world of the reality of the school, with its conflicting demands, contradictory imperatives, limited resources and seemingly unresolvable problems . . . this was their environment. For teachers living in that world, the knowledge that they were not alone, but were supported by a partner who shared responsibility and used power on their behalf, this awareness sustained will and helped “keep the ship running.”

Principal as Innovator

The final cluster of phenomena which emerged from an analysis of the data related to the principal’s support for educational innovation and improvement, including his support for his staff’s professional growth; his encouragement and support of curriculum innovations introduced by them; and his own introduction of instructional innovations.

There was certainty among all teachers that the principal valued and supported their professional development at workshops, meetings, and courses. Not only did he respond to their requests for inservice training, but he assumed the responsibilities of serving as a model by engaging in his own continued learning; of serving as a conduit by informing them of professional development opportunities available; and of serving as a prod and stimulus to their continuing growth.
He’s constantly on my case to do something about getting that next degree....
Oh, take this course.... Let’s go for it, like a coach, so I do think he encourages
you to look about you.

The principal’s active role as a disseminator of information relating to
teachers professional growth was particularly valued. Perhaps they, as well
as he, could retain the freshness “of their second year,” by renewing
themselves through new knowledge or enrichment of their craft.

While not all teachers had participated in building-wide projects of
curriculum development or innovation, all confirmed that their environment,
and, in particular, their principal were supportive of such innovation. The
principal’s perceptions of the educational process were dynamic, and he
welcomed their innovative and creative efforts.

Summary

As national efforts turn to educational administration programs as a key
variable in school reform, professors and program planners must identify
those learnings and skills essential to future school leaders. Focusing on
schools as human institutions, whose reform and restructuring are directly
dependent on its participants, can illuminate the quality and nature of
interrelationships.

School leaders need to know what behaviors have significant impact on
teachers as they operate in classrooms, day after day, and in particular, what
behaviors sustain and revitalize energy, commitment and creativity. This
aspect of school leadership will be increasingly significant as principals are
called upon to alter their traditional role as the singular, hierarchical
manager and decision maker, toward a more complex one of facilitator,
orchestrator of teacher engagement in site-based management, and
implementer of shared decision making on behalf of greater school effec-
tiveness.

By relating how their principal interacts with them, how their principal
“enters their world,” teachers can guide both administrative preparation and
action. Their narratives of experiences can help identify leadership behav-
iors which have the greatest significance on their work lives, in particular
those which provoke their commitment toward the collaborative shaping of
high performing schools. Planners of administrator preparation programs
can consider this information as they design models whose ultimate goal is
the development of effective leaders of schools.
References


