A Primer on Action Research for the School Administrator

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> The reason everyone goes into education is to have a powerful influence on the educational lives of students. Action research helps reinforce and cement the belief that together (teachers and administrators) can make a difference.
>
> —Glickman 1995

The word *research* often conjures up images of a scientist conducting experiments in a distant, secluded laboratory. Mention *educational research,* and reactions may include recollections of one's master's thesis or uncomplimentary thoughts of an eccentric professor engaging in some abstract study unrelated to practice. To many educators—teachers and supervisors alike—the value of research is marginal at best. A fundamental premise of this article is that proper use of research by school leaders is not only beneficial, but also necessary and urgent if we are to renew our schools and empower our educational leaders.

What Is Research?

The word *research* is derived from the French word *rechercher*, meaning "to travel through" or "to survey." Thus, research can be thought of as an investigation "to discover or establish facts and relationships" (Charles 1995, 5); at its most basic level, research is a process of gathering information, something that all of us do in many ways. As teachers we gather information to assess our students' achievement and social development. Observing how a particular student interacts in a cooperative learning group, for example, gives us much information about how she cooperates with her peers. As educational leaders, we may informally observe a teacher working with a group of students during a reading lesson. As we observe, we collect information. We may note, for instance, that the teacher is asking her male students more thought-provoking questions than the female students. We also may note that she allows more wait time for boys than for girls. As we continue to observe, we begin to understand better the nature of the interaction between this teacher and her students.

Research is also a way of knowing. At times, we come to know something intuitively. Educational leaders, as specially trained observers, are often able to "see" aspects of a particular situation that go unseen by the "unenlightened eye" (Eisner 1991). It is insufficient, however, to rely on instinct alone to fully appreciate the complexity of a teaching/learning situation. I am reminded of the impressionistic and imprecise methods employed by supervisors of the past century. James M. Greenwood (1891), a prominent city school superintendent from Kansas, for example, described the skilled supervisor as someone who could simply walk into a classroom and "judge from a compound sensation of the disease at work among the inmates" (227). Not a very appealing metaphor!

Although there are different ways of knowing, research constitutes a highly disciplined approach. As an administrator, which approach would you take in the following scenario?

> *Situation*: Dr. Bea Williams, middle school principal, institutes a pilot literature-based reading program in selected classes in grades six through eight. After a six-month period, she wishes to assess the impact of this program on reading comprehension achievement.
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> *Analysis*: Dr. Williams wants to know whether this new program is successfully meeting the academic needs of students. She may "know" that the impact of the program is a positive one by
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> (a) informally observing classes and speaking with one or two teachers.
> (b) being informed by others of the program's success.
> (c) surmising that the program is very successful.
> (d) logically deducing that because instances of reports of misbehavior have declined dramatically since the implementation of the program it is likely that students are learning.
> (e) assessing posttest scores on a reading comprehension examination of two comparable classes per grade, one of which has participated in the literature-based reading program and the other of which has been taught by traditional basal readers.

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Obviously, a research-oriented mindset would favor selection *e*. We may very well be suspect of an approach that relies on informal, haphazard, and perhaps biased observations. Conclusions drawn from observations based only on information provided by others, or on intuition, or on presumed logical reasoning may be equally suspicious.

What Is Action Research?

Action research is a kind of research that has reemerged as a popular way of helping practitioners, teachers, and supervisors to better understand their work. In action research, we apply traditional research approaches (e.g., ethnographic, descriptive, quasi-experimental, and so forth) to real problems or issues faced by the practitioner. Action research can be as simple as raising a question about some educational practice and collecting information to answer the question, or as complicated as applying a *t* test to determine whether posttest results from an experimental group are statistically significant. Because action researchers usually use very small samples, results are almost never generalizable. Yet, action research, in its many forms, can help practitioners glean valuable insights about their work (Glanz 1998).

Steps in Action Research

The process of action research consists of four major steps:

1. Select a focus. This step includes three parts: know what you want to investigate; develop some questions about the area you've chosen; and establish a plan to answer these questions.

The action researcher first decides what aspect of the school program he or she would like to study. Here is when you ask, "What am I concerned about?" and "Why am I concerned?" Identify what is known and what needs to be known about this program or practice. Ask, "What do I know about this program?" and "What information should be known in order to improve the program?" Identify specific aspects of the program that might need scrutiny, such as

- student outcomes (e.g., achievement, attitudes);
- curriculum (e.g., effectiveness of instructional materials, alignment with state content standards);
- instruction (e.g., teaching strategies, use of technology);
- school climate (e.g., teacher morale, relationships between teachers and supervisors); or
- parental involvement (e.g., participation on committees, attendance at school events).

As you focus on a specific concern or problem, begin to pose some questions that will guide your research. If, for instance, low levels of parental involvement are a concern in your school, you might ask, "How can I document these low levels of parent involvement?" "What impact do these low levels of participation have on students' completion of science projects?" "Will increased levels of involvement yield higher student achievement levels?" "How might parental involvement in school affairs be increased?" Developing these guiding questions will eventually lead to specifying research questions and/or hypotheses.

2. Collect data. Once you have narrowed your focus—that is, you have established a specific area of concern, have developed some research questions, and know how you plan on answering them—you are ready to gather information to answer the research questions. Let us say that you are investigating the new science program adopted by the district. You have posed some research questions about achievement levels and students' attitudes toward science. You can now begin to collect data that will provide evidence for the effectiveness of this program in terms of achievement and attitudes. You may administer teacher-made and standardized tests, conduct surveys and interviews, and examine portfolios. Many other pieces of data may be collected as well to help you understand the impact of this new science program.

Sometimes, action researchers collect data but fail to organize them so that they can be shared with others. Raw data that just "sit around" in someone's file drawer are useless. Collected data must be transformed so that they can be used. Data that are counted, displayed, and organized by classroom, grade level, and school, for example, can then be used appropriately for data analysis and interpretation. To present action research in the most concise and usable way possible, data must be well organized.

3. Analyze and interpret data. Once you have collected relevant data, you begin the process of analysis and interpretation to arrive at some decision. The purpose of data analysis is threefold: to describe or summarize data clearly; to search for consistent patterns or themes among the data; and to enable you to answer your research questions and hypotheses. At this phase in the action research cycle, you lay out the data collected and interpret the data using prespecified standards. You chart expected results for each data collection instrument employed and note the extent to which the standard was met. Conclusions are then drawn and final decisions are made based on the conclusions.

4. Take action. Finally, you have reached the stage at which a decision can be made. You have answered your research questions about the effectiveness of the new science program. Now, three possibilities exist: to continue the science program as originally established, disband the program, or modify it in some way.

The process does not necessarily stop here. Information gained from previous research may open new avenues of research. In the role of educational-leader-as-action-researcher, you are continually involved in assessing instruction and seeking ways of improving your school. Action research affords you the opportunity and tools necessary to accomplish those lofty goals.

Evolution of Action Research

Kemmis (cited in Oja and Smulyan 1989) outlined four phases in the history of educational research. The earliest phase was characterized by attempts to "make sense of practice by developing educational theory 'on a grand scale'" (vii); developing theory to guide practice was a foremost concern of theorists such as John Dewey. In the second phase, educators who were dissatisfied with the application of theory to practice urged researchers to apply the techniques and principles of science to examine and improve practice directly. This phase was direct and practical; once problems were identified, solutions, through the application of the scientific method, could be attained. A third phase arose in opposition to this technical phase (which, to some, simplified educational theory and practice by trying to find ready-made solutions to complex problems). During this phase, which Kemmis calls the "pessimistic phase," tensions between practitioners and theoreticians were heightened. Research undertaken during this phase soon became seen as divorced from practice. Consequently, a fourth phase emerged, the self-reflective phase, which "recognized practitioners' rights and skills as professionals and encouraged their involvement in the examination of practice and the clarification of theory" (vii). Action research emerges from this self-reflective phase of educational research.

Although popularized in the 1940s by Kurt Lewin (Adelman 1993), action research was first systematically applied in education in the 1950s by Stephen Corey, a professor at Teachers College at Columbia University. Corey, a man ahead of his time, advocated that fundamental change could not occur without direct involvement of teachers and supervisors. Corey (1953) explained that

> studies must be undertaken by those who may have to change the way they do things . . . . Our schools cannot keep up with the life they are supposed to sustain and improve unless teachers, pupils, supervisors, administrators, and school patrons continuously examine what they are doing. Singly and in groups, they must use their imaginations creatively and constructively to identify the practices that must be changed to meet the needs and demands of modern life, courageously try out those practices that give better promise, and methodically and systematically gather evidence to test their worth . . . . This is the process I call action research. (viii)

Action research gained further legitimacy when distinguished educators such as Hilda Taba, a curriculum specialist and also a professor of education at Teachers College at Columbia University, advocated its use in the late 1950s. She believed that action research contributed much toward curriculum development and that it had two basic purposes:

> (a) to produce evidence needed to solve practical problems; and (b) to help those who are doing the action research to acquire more adequate perspective regarding their problems, to deepen their insights as to what is involved in their task and to extend their orientation toward children—toward methods of teaching them or toward what is significant in content of learning. (Taba and Noel 1957, 2)

Interest in action research waned in the 1960s, when it was questioned as a viable research method by the scientific establishment. Many educational researchers opposed action research, which was often reported merely in case study form, because "no attempt was made to see whether the examined population was representative of a larger population . . . [and] the data often were flawed. . . . The movement was ridiculed in the publications of the American Educational Research Association (AERA), and it did not spread" (Foshay 1994, 320). Yet, it emerged again in the late 1970s with the work of Lawrence Stenhouse and John Elliott in Europe (Kemmis, cited in Ojaand Smulyan 1989).

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Historically, action research served as a problem-solving strategy for improving the school organization (Corey 1953; Lewin 1948), as a process of individual reflection on practice (Elliott 1991), as a process to support staff development (Oja and Smulyan1989), as a collaborative process to support teachers' professional development (Sagor 1992), and as a strategy to guide site-based school improvement (Glickman 1993).

Calhoun, Allen, and Halliburton (1996) recently described the current fascination with and interest in action research. Whether undertaken by individuals or collaborative teams, "part of the promise inherent in action research is to build the capability of individuals and organizations to move beyond current cognitions and practice. Recognized in the past as a powerful tool for simultaneously improving practice and the health of the organization, such is its appeal today" (5).

Although few educators ever saw the role of administrators or supervisors in the action research process as more than overseeing or administering the process, thus enabling teachers to successfully complete a particular project, Taba and Corey were among the first to envision the supervisor as integral to the process. Taba believed that supervisors "needed to become learners along with the teachers. . . . Instead of acting as experts, they had to become helpers . . ." (Taba and Noel 1957, 50). Taba explained that supervisors needed expertise in action research not only to facilitate teachers' work, but to "act as a research technician, devising, adapting, and borrowing research techniques as needed" (50).

Unfortunately, the suggestion that supervisors themselves might benefit from action research, without involving teachers, has not been widely carried out. One of the major points of this article is that supervisors can and should become involved in action research for their own professional development.

Benefits of Action Research

Although some administrators think that research—given the exigencies and pressures of working in a school—is impractical, irrelevant, and simply not feasible, it can, when properly used, have immeasurable benefits for them. For example, it

- creates a systemwide mindset for school improvement, a professional problem-solving ethos;
- enhances decision making by promoting feelings of competence in solving problems and making instructional decisions;
- promotes reflection and self-assessment;
- instills a commitment to continuous improvement;
- creates a more positive school climate in which teaching and learning are foremost concerns;
- has a direct impact on practice; and
- empowers those who participate in the process. Educational leaders who undertake action research may no longer, for instance, uncritically accept theories, innovations, and programs at face value.

Action research should *not* be viewed as just another technique or innovation in a long list of reform measures. If we have learned anything from educational history, it is that we must be suspect of panaceas (see, e.g., Cuban 1984). Although often heralded as a one-shot solution to school reform, action research, more realistically, is a viable tool used by practitioners to improve schools (Sagor 1997).

Action Research Is Not Complicated

Equipped with technical knowledge and requisite skills, any educational leader can easily apply research methodology to almost any situation or problem area. Admittedly, there are areas of research and specific research strategies that are very sophisticated and require advanced knowledge. But, aren't there aspects of your automobile's operation that are beyond your comprehension? When was the last time you were able to dismantle a carburetor or replace your transmission? Yet, you still can drive a car! So, too, in this case. Understanding *how* a particular statistic, for instance, is able to consider disparate test scores from two groups and treat them comparably is immaterial as long as you know that it is the correct procedure to use. Anyone can use research without having to understand the minutiae or intricacies of advanced mathematical calculations.

Any competent administrator is capable of readily applying sound research strategies to solve real problems. Don't avoid research simply because it seems complicated. Action research is an invaluable asset that will not only lead to schoolwide improvement but will enhance your professional practice.

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CONTENTS

May/June 1999 Volume 72 Number 5