



1 What Is Action Research?

A succinct definition of action research appears in the workshop materials we use at the Institute for the Study of Inquiry in Education. That definition states that action research

is a disciplined process of inquiry conducted *by and for* those taking the action. The primary reason for engaging in action research is to assist the “actor” in improving and/or refining his or her actions.

Practitioners who engage in action research inevitably find it to be an empowering experience. Action research has this positive effect for many reasons. Obviously, the most important is that action research is always relevant to the participants. Relevance is guaranteed because the focus of each research project is determined by the researchers, who are also the primary consumers of the findings.

Perhaps even more important is the fact that action research helps educators be more effective at what they care most about—their teaching and the development of their students. Seeing students grow is probably the greatest joy educators can experience. When teachers have convincing evidence that their work has made a real difference in their students’ lives, the countless hours and endless efforts of teaching seem worthwhile.

The Action Research Process

Educational action research can be engaged in by a single teacher, by a group of colleagues who share an interest in a common problem, or by the entire faculty of a school. Whatever the scenario, action research always involves the same seven-step process. These seven steps, which become an endless cycle for the inquiring teacher, are the following:

1. Selecting a focus

2. Clarifying theories
3. Identifying research questions
4. Collecting data
5. Analyzing data
6. Reporting results
7. Taking informed action

Step 1—Selecting a Focus

The action research process begins with serious reflection directed toward identifying a topic or topics worthy of a busy teacher's time. Considering the incredible demands on today's classroom teachers, no activity is worth doing unless it promises to make the central part of a teacher's work more successful and satisfying. Thus, selecting a focus, the first step in the process, is vitally important. Selecting a focus begins with the teacher researcher or the team of action researchers asking:

What element(s) of our practice or what aspect of student learning do we wish to investigate?

Step 2—Clarifying Theories

The second step involves identifying the values, beliefs, and theoretical perspectives the researchers hold relating to their focus. For example, if teachers are concerned about increasing responsible classroom behavior, it will be helpful for them to begin by clarifying which approach—using punishments and rewards, allowing students to experience the natural consequences of their behaviors, or some other strategy—they feel will work best in helping students acquire responsible classroom behavior habits.

Step 3—Identifying Research Questions

Once a focus area has been selected and the researcher's perspectives and beliefs about that focus have been clarified, the next step is to generate a set of personally meaningful research questions to guide the inquiry.

Step 4—Collecting Data

Professional educators always want their instructional decisions to be based on the best possible data. Action researchers can accomplish this by making sure that the data used to justify their actions are *valid*

(meaning the information represents what the researchers say it does) and *reliable* (meaning the researchers are confident about the accuracy of their data). Lastly, before data are used to make teaching decisions, teachers must be confident that the lessons drawn from the data align with any unique characteristics of their classroom or school.

To ensure reasonable validity and reliability, action researchers should avoid relying on any single source of data. Most teacher researchers use a process called *triangulation* to enhance the validity and reliability of their findings. Basically, triangulation means using multiple independent sources of data to answer one's questions. Triangulation is like studying an object located inside a box by viewing it through various windows cut into the sides of the box. Observing a phenomenon through multiple "windows" can help a single researcher compare and contrast what is being seen through a variety of lenses.

When planning instruction, teachers want the techniques they choose to be appropriate for the unique qualities of their students. All teachers have had the experience of implementing a "research-proven" strategy only to have it fail with their students. The desire of teachers to use approaches that "fit" their particular students is not dissimilar to a doctor's concern that the specific medicine being prescribed be the correct one for the individual patient. The ability of the action research process to satisfy an educator's need for "fit" may be its most powerful attribute. Because the data being collected come from the very students and teachers who are engaged with the treatment, the relevance of the findings is assured.

For the harried and overworked teacher, "data collection" can appear to be the most intimidating aspect of the entire seven-step action research process. The question I am repeatedly asked, "Where will I find the time and expertise to develop valid and reliable instruments for data collection?", gives voice to a realistic fear regarding time management. Fortunately, classrooms and schools are, by their nature, data-rich environments. Each day a child is in class, he or she is producing or not producing work, is interacting productively with classmates or experiencing difficulties in social situations, and is completing assignments proficiently or poorly. Teachers not only see these events transpiring before their eyes, they generally record these events in their grade books. The key to managing triangulated data collection is, first, to be effective and efficient in collecting the material that is already swirling around the classroom, and, second, to identify other sources of data that might be effectively surfaced with tests, classroom discussions, or questionnaires.

Step 5—Analyzing Data

Although data analysis often brings to mind the use of complex statistical calculations, this is rarely the case for the action researcher. A number of relatively user-friendly procedures can help a practitioner identify the trends and patterns in action research data. During this portion of the seven-step process, teacher researchers will methodically sort, sift, rank, and examine their data to answer two generic questions:

- *What is the story told by these data?*
- *Why did the story play itself out this way?*

By answering these two questions, the teacher researcher can acquire a better understanding of the phenomenon under investigation and as a result can end up producing grounded theory regarding what might be done to improve the situation.

Step 6—Reporting Results

It is often said that teaching is a lonely endeavor. It is doubly sad that so many teachers are left alone in their classrooms to reinvent the wheel on a daily basis. The loneliness of teaching is unfortunate not only because of its inefficiency, but also because when dealing with complex problems the wisdom of several minds is inevitably better than one.

The sad history of teacher isolation may explain why the very act of reporting on their action research has proven so powerful for both the researchers and their colleagues. The reporting of action research most often occurs in informal settings that are far less intimidating than the venues where scholarly research has traditionally been shared. Faculty meetings, brown bag lunch seminars, and teacher conferences are among the most common venues for sharing action research with peers. However, each year more and more teacher researchers are writing up their work for publication or to help fulfill requirements in graduate programs. Regardless of which venue or technique educators select for reporting on research, the simple knowledge that they are making a contribution to a collective knowledge base regarding teaching and learning frequently proves to be among the most rewarding aspects of this work.

Step 7—Taking Informed Action

Taking informed action, or “action planning,” the last step in the action research process, is very familiar to most teachers. When teachers write lesson plans or develop academic programs, they are engaged in

the action planning process. What makes action planning particularly satisfying for the teacher researcher is that with each piece of data uncovered (about teaching or student learning) the educator will feel greater confidence in the wisdom of the next steps. Although all teaching can be classified as trial and error, action researchers find that the research process liberates them from continuously repeating their past mistakes. More important, with each refinement of practice, action researchers gain valid and reliable data on their developing virtuosity.

Three Purposes for Action Research

As stated earlier, action research can be engaged in by an individual teacher, a collaborative group of colleagues sharing a common concern, or an entire school faculty. These three different approaches to organizing for research serve three compatible, yet distinct, purposes:

- Building the reflective practitioner
- Making progress on schoolwide priorities
- Building professional cultures

Building the Reflective Practitioner

When individual teachers make a personal commitment to systematically collect data on their work, they are embarking on a process that will foster continuous growth and development. When each lesson is looked on as an empirical investigation into factors affecting teaching and learning and when reflections on the findings from each day's work inform the next day's instruction, teachers can't help but develop greater mastery of the art and science of teaching. In this way, the individual teachers conducting action research are making continuous progress in developing their strengths as reflective practitioners.

Making Progress on Schoolwide Priorities

Increasingly, schools are focusing on strengthening themselves and their programs through the development of common focuses and a strong sense of esprit de corps. Peters and Waterman (1982) in their landmark book, *In Search of Excellence*, called the achievement of focus "sticking to the knitting." When a faculty shares a commitment to achieving excellence with a specific focus—for example, the development of higher-order thinking, positive social behavior, or higher standardized test scores—then collaboratively studying their practice will

not only contribute to the achievement of the shared goal but would have a powerful impact on team building and program development. Focusing the combined time, energy, and creativity of a group of committed professionals on a single pedagogical issue will inevitably lead to program improvements, as well as to the school becoming a “center of excellence.” As a result, when a faculty chooses to focus on one issue and all the teachers elect to enthusiastically participate in action research on that issue, significant progress on the schoolwide priorities cannot help but occur.

Building Professional Cultures

Often an entire faculty will share a commitment to student development, yet the group finds itself unable to adopt a single common focus for action research. This should not be viewed as indicative of a problem. Just as the medical practitioners working at a “quality” medical center will hold a shared vision of a healthy adult, it is common for all the faculty members at a school to share a similar perspective on what constitutes a well-educated student. However, like the doctors at the medical center, the teachers in a “quality” school may well differ on which specific aspects of the shared vision they are most motivated to pursue at any point in time.

Schools whose faculties cannot agree on a single research focus can still use action research as a tool to help transform themselves into a learning organization. They accomplish this in the same manner as do the physicians at the medical center. It is common practice in a quality medical center for physicians to engage in independent, even idiosyncratic, research agendas. However, it is also common for medical researchers to share the findings obtained from their research with colleagues (even those engaged in other specialties).

School faculties who wish to transform themselves into “communities of learners” often empower teams of colleagues who share a passion about one aspect of teaching and learning to conduct investigations into that area of interest and then share what they’ve learned with the rest of the school community. This strategy allows an entire faculty to develop and practice the discipline that Peter Senge (1990) labeled “team learning.” In these schools, multiple action research inquiries occur simultaneously, and no one is held captive to another’s priority, yet everyone knows that all the work ultimately will be shared and will consequently contribute to organizational learning.

Why Action Research Now?

If ever there were a time and a strategy that were right for each other, the time is now and the strategy is action research! This is true for a host of reasons, with none more important than the need to accomplish the following:

- Professionalize teaching.
- Enhance the motivation and efficacy of a weary faculty.
- Meet the needs of an increasingly diverse student body.
- Achieve success with “standards-based” reforms.

Professionalizing Teaching

Teaching in North America has evolved in a manner that makes it more like blue-collar work than a professional undertaking. Although blue-collar workers are expected to do their jobs with vigilance and vigor, it is also assumed that their tasks will be routine, straightforward, and, therefore, easily handled by an isolated worker with only the occasional support of a supervisor.

Professional work, on the other hand, is expected to be complex and nonroutine, and will generally require collaboration among practitioners to produce satisfactory results. With the exploding knowledge base on teaching and learning and the heightened demands on teachers to help all children achieve mastery of meaningful objectives, the inadequacy of the blue-collar model for teaching is becoming much clearer.

When the teachers in a school begin conducting action research, their workplace begins to take on more of the flavor of the workplaces of other professionals. The wisdom that informs practice starts coming from those doing the work, not from supervisors who oftentimes are less in touch with and less sensitive to the issues of teaching and learning than the teachers doing the work. Furthermore, when teachers begin engaging their colleagues in discussions of classroom issues, the multiple perspectives that emerge and thus frame the dialogue tend to produce wiser professional decisions.

Enhancing Teacher Motivation and Efficacy

The work of teaching has always been difficult. But now it isn't just the demands of the classroom that are wearing teachers down. Students increasingly bring more problems into the classroom; parental and societal expectations keep increasing; and financial cutbacks make it clear

that today's teachers are being asked to do more with less. Worse still, the respect that society had traditionally placed upon public school teachers is eroding, as teacher bashing and attacks on the very value of a public education are becoming a regular part of the political landscape. Consequently, teacher burnout has become the plague of the modern schoolhouse.

Many teachers now ask, "Am I making any difference?" Regardless of all the negative pressures on teachers, the sheer nobility of the work keeps many dedicated educators on the job, but only so long as they can get credible answers to the "efficacy" question. However, without credible evidence that the work of teaching is making a difference, it is hard to imagine the best and brightest sticking with such a difficult and poorly compensated line of work. Fortunately, evidence has shown that teachers who elect to integrate the use of data into their work start exhibiting the compulsive behavior of fitness enthusiasts who regularly weigh themselves, check their heart rate, and graph data on their improving physical development. For both teachers and athletes, the continuous presence of compelling data that their hard work is paying off becomes, in itself, a vitally energizing force.

Meeting the Needs of a Diverse Student Body

In a homogeneous society in which all students come to school looking alike, it might be wise to seek the one right answer to questions of pedagogy. But, as anyone who has recently visited an American classroom can attest, it is rare to find any two children for whom the same intervention could ever be "right on target." The days are gone when it was possible to believe that all a teacher had to do was master and deliver the grade-level curriculum. It is now imperative that classroom teachers have strong content background in each of the subjects they teach, be familiar with the range of student differences in their classrooms, and be capable of diagnosing and prescribing appropriate instructional modifications based upon a knowledge of each child's uniqueness.

Crafting solutions to these dynamic and ever changing classroom issues can be an exciting undertaking, especially when one acknowledges that newer and better answers are evolving all the time. Nevertheless, great personal satisfaction comes from playing a role in creating successful solutions to continually changing puzzles. Conversely, if teachers are expected to robotically implement outdated approaches, especially when countless new challenges are arriving at their door, the frustration can become unbearable.

Achieving Success in a Standards-Based System

In most jurisdictions standards-driven accountability systems have become the norm. Although they differ somewhat from state to state and province to province, fundamentally these standards-based systems have certain things in common. Specifically, most education departments and ministries have declared that they expect the standards to be rigorous and meaningful, and that they expect all students to meet the standards at the mastery level.

The stakes in the standards movement are high. Students face consequences regarding promotion and graduation. Teachers and schools face ridicule and loss of funding if they fail to meet community expectations. Of course, none of that would be problematic if we as a society knew with certainty how to achieve universal student success. However, the reality is that no large system anywhere in the world has ever been successful in getting *every* student to master a set of meaningful objectives. If we accept the truth of that statement, then we need to acknowledge the fact that achieving the goal of universal student mastery will not be easy. That said, most people will agree it is a most noble endeavor in which to invest energy and a worthy goal for any faculty to pursue.

The reality is that our public schools will not prevail with the challenges inherent in the standards movement unless they encourage experimentation, inquiry, and dialogue by those pioneers (the teachers) who are working toward meeting those challenges. For this reason, it is imperative that these 21st century pioneers, our classroom teachers, conduct the research on "standards attainment" themselves.

So the time is right for action research. The teachers, schools, and school systems that seize this opportunity and begin investing in the power of inquiry will find that they are re-creating the professional practice of education in their locale as a meaningful and rewarding pursuit. Conversely, school systems that enter the 21st century unwilling to invest in the "wisdom of practice" will likely find it increasingly hard to fill their classrooms with enough teachers who are both capable of and willing to tackle the challenges that lie ahead.