CHAPTER

1 Understanding Action Research

This chapter introduces action research by providing an example of an action research project from a real teacher researcher, an exploration of the historical and theoretical foundations of action research, a discussion of the goals and justification for action research, and an explanation of the action research process.

After reading this chapter you should be able to:

1. Define action research.
2. Describe the historical foundations of action research.
3. Identify the similarities and differences between critical/postmodern and practical theories of action research.
4. Describe the goals of and justification for action research.
5. List the four stages of the action research process.

What Motivates Unmotivated Students?

DEBORAH SOUTH

Deborah South, a teacher in a rural Oregon high school, was a participant in an action research class. She shares the challenges she faced when, owing to a last-minute teaching assignment, she found herself working with a group of "unmotivated" students. Deborah's story illustrates the wide variety of factors that can influence students' learning and a teacher's willingness to critically examine her teaching methods and how they affected the children in her classroom. Although Deborah's interpretation of the results of her study did not validate her practice, it did provide data that Deborah and the school's principal could use to make changes to the existing curriculum for unmotivated students.

Teaching students who are unmotivated and apathetic can be a difficult challenge for any teacher to overcome. These students typically can be disruptive and negative and often require an extraordinary amount of teacher time to manage their behavior. My concern with teaching unmotivated students has existed almost since I began teaching 5 years ago. As an educator, one tries all kinds of possible strategies to encourage students to be successful. However, these strategies do not work with unmotivated students who are apathetic and exhibit unacceptable behavior. Eventually the patience runs out and, as ashamed as I am to admit it, I stop trying to find ways to reach these particular students. It soon becomes enough that they stay in their seats, be quiet, and do not disturb anyone.

However, last term my attitude was forced to change. I was given a study skills group of 20 of the lowest achieving eighth graders in the school. This new class consisted of 16 boys and 4 girls. My task was to somehow take these students and miraculously make them motivated, achieving students. I was trained in a study skills program before the term started and I thought that I was prepared: I had the students, I had the curriculum, and I had the help of an outstanding aide.

Within a week, I sensed we were in trouble. My 20 students often showed up with no supplies. Their behavior was atrocious. They called each other names, threw various items around the room, and walked around the classroom when they felt like it. Their attitudes toward me were negative. I became concerned about teaching these students. In part, I felt bad that they were so disillusioned with school and their future; I also felt bad because the thought of teaching in this environment every day for another 14 weeks made me wish summer vacation were here.

Given this situation, I decided to do some reading about how other teachers motivate unmotivated students and to formulate some ideas about the variables that contribute to a student's success in school. Variables I investigated included adult approval, peer influence, and success in such subjects as math, science, language arts, and social studies, as well as self-esteem and students' views of their academic abilities.

I collected the majority of the data through surveys, interviews, and report card/attendance records in an effort to answer the following questions:

- How does attendance affect student performance?
- How are students influenced by their friends in completing schoolwork?
- How do adults (parents, teachers) affect the success of students?
- What levels of self-esteem do these students have?

As a result of this investigation, I learned many things. For example, for this group of students attendance does not appear to be a factor—with the exception of one student, their school attendance was regular. Not surprisingly, peer groups did affect student performance. Seventy-three percent of my students reported that their friends never encouraged doing homework or putting any effort into homework.

Another surprising result was the lack of impact of a teacher's approval on student achievement. Ninety-four percent of my students indicated that they never or seldom do their homework to receive teacher approval. Alternatively, 57 percent indicated that they often or always do their homework so that their families will be proud of them.

One of the most interesting findings of this study was the realization that most of my students misbehave out of frustration at their own lack of abilities. They are not being obnoxious to gain attention, but to divert attention from the fact that they do not know how to complete the assigned work.

When I looked at report cards and compared grades over three quarters, I noticed a trend. Between the first and second quarter, student performance had increased. That is, most students were doing better than they had during the first quarter. Between the second and third quarters, however, grades dropped dramatically. I tried to determine why that drop would occur, and the only common experience shared by these 20 students was the fact that they had been moved into my class at the beginning of the third quarter.

When I presented my project to the action research class during our end-of-term "celebration," I was convinced that the "cause" of the students' unmotivated behavior was my teaching. I had concluded through my data analysis and interpretation that the one experience these 20 children had in common was participation in my study skills class. This conclusion, however, was not readily accepted by my critical friends and colleagues in the action research class who urged me to consider other interpretations of the data. For example, perhaps the critical mass of negativity present in one classroom provided the children with a catalyst to act out against the teacher. After all, this was the only class shared exclusively by these 20 students. Afterward, I shared the findings of my study with my school principal. As a result, she decided not to group these students together homogeneously for a study skills class the following year.

As you can see, action research is a "wonderfully uncomfortable" (Lytle, 1997) place to be—once we start our journey of investigation, we have no way of knowing in advance where we will end up. Action research, like any other problem-solving process, is an ongoing creative activity that exposes us to surprises along the way. What appeared to matter in the planning stages of an action research investigation may provide us with only a hint, a scratching of the surface, of what is really the focus for our investigations. How we deal with the uncertainty of the journey positions us as learners of our own craft, an attitude that is critical to our success. This book attempts to foster an openness in the spirit of inquiry guided by action research.

A Brief Overview of Educational Research

When you hear the words *scientific research*, you probably think of a scientist in a white lab coat (usually a balding, middle-aged man with a pocket full of pens!) mixing chemicals or doing experiments involving white mice. Traditional scientists, like the one pictured in this rather trite image, proceed with their research under the assumption that "all behaviors and events are orderly" and that all events "have

discoverable causes" (Gay, Mills, & Airasian, 2006, pp. 5–6). This traditional belief that natural phenomena can be explained in an orderly way using empirical sciences is sometimes called **positivism**.

Human beings, however, are very complicated organisms, and compared with chemicals—and mice, for that matter—their behavior can be disorderly and fairly unpredictable. This presents a challenge to educational researchers, who are concerned with gaining insight into human behavior in educational environments such as schools and classrooms.

The goal of traditional educational research is "to explain, predict, and/or control educational phenomena" (Gay et al., 2006, p. 5). To do this, researchers try to manipulate and control certain **variables** (the factors that might affect the outcomes of a particular study) to test a **hypothesis** (a statement the researcher makes that predicts what will happen or explains what the outcome of the study will be).

For example, researchers might be interested in studying the effects of a certain phonics program (the independent variable) on the rate at which children learn to read (the dependent variable). The researchers may hypothesize that the use of this phonics program will shorten the time it takes for students to learn to read. To confirm or reject this hypothesis, they might study the reading progress of one group of children who were taught using the phonics program (the **experimental group**) and compare it with the reading progress of another group of children (called the **control group**) who were taught reading without the phonics program. Children would be **randomly** assigned to either the experimental or the control group as a way to reduce the differences that might exist in naturally occurring groups. At the end of the **experiment**, the researchers would compare the progress of each group and decide whether the hypothesis could be accepted or rejected with a predetermined level of **statistical significance** (for example, that the difference between the mean for the control group and the mean for the experimental group is large, compared with the standard error). Finally, the researchers would present the findings of the study at a conference and perhaps publish the results.

This process may sound very straightforward. In classroom and school settings, however, controlling all the factors that affect the outcomes of our teaching without disrupting the natural classroom environment can be difficult. For example, how do we know that the phonics program is the only variable affecting the rate at which students learn to read? Perhaps some students are being read to at home by their parents; perhaps one teacher is more effective than another; perhaps one group of students gets to read more exciting books than the other; perhaps one group of children has difficulty concentrating on their reading because they all skipped breakfast!

Action researchers acknowledge and embrace these complications rather than try to control them. In addition, action researchers differ from traditional researchers because they are committed to *taking action* and *effecting positive educational change* based on their findings, rather than being satisfied with reporting their conclusions to others. Another difference is that whereas educational research has historically been done by university professors, scholars, and graduate students on children, teachers, and principals, action researchers are often the schoolteachers and principals who were formerly the subjects of educational research. As such, they participate in their own inquiries, acting as both teacher and researcher at the same time. Teacher research is gaining a high priority in the United States as part of the George W. Bush education agenda No Child Left Behind. According to

Imig (2001), this legislation is "profound," "sweeping," "intrusive," "far reaching," and "unprecedented." As part of this legislation, states will be required to test students in reading and math every year in grades 3 through 8, with sanctions for schools that fail to make "adequate yearly progress" (Imig, 2001, p. 2). The link between this kind of legislation in America and action research is clear: How can teachers show that they are making a difference with their teaching for all students? Action research provides teachers with a philosophy and practice that allows them to systematically study the effects of their teaching on student learning.

Finally, research is also categorized by the methods the researchers use. Simply put, different research problems require different research approaches. These approaches to educational research are often classified as either quantitative or qualitative research. **Quantitative research** focuses on controlling a small number of variables to determine cause-effect relationships and/or the strength of those relationships. This type of research uses numbers to quantify the cause-effect relationship. Quantitative researchers generally have little personal interaction with the participants they study, since most data are gathered using paper-and-pencil, noninteractive instruments. **Qualitative research** uses narrative, descriptive approaches to data collection to understand the way things are and what it means from the perspectives of the research participants. Qualitative approaches might include, for example, conducting face-to-face interviews, making observations, and recording interactions on videotape. Key Concepts Box 1–1 compares traditional research and action research.

Although different, the two approaches need not be considered mutually exclusive; a study might incorporate both quantitative *and* qualitative techniques. Studies that combine the collection of quantitative and qualitative data in a single study are called **mixed-methods research designs**. For example, researchers interested in the relationship between student achievement and self-esteem might

KEY CONCEPTS BOX 1–1

A Comparison of Traditional Research and Action Research		
WHAT?	TRADITIONAL RESEARCH	ACTION RESEARCH
Who?	Conducted by university professors, scholars, and graduate students on experimental and control groups.	Conducted by teachers and principals on children in their care.
Where?	In environments where variables can be controlled.	In schools and classrooms.
How?	Using quantitative methods to show, to some predetermined degree of statistical significance, a cause-effect relationship between variables.	Using qualitative methods to describe what is happening and to understand the effects of some educational intervention.
Why?	To report and publish conclusions that can be generalized to larger populations.	To take action and effect positive educational change in the specific school environment that was studied.

begin their inquiry by comparing the grade point averages of high school students with the students' numerical scores on a multiple-choice questionnaire designed to measure their self-esteem. To gain a broader understanding of this complicated relationship, researchers might also interview and observe a number of students to gather additional data.

The area of focus or **research question** identified by the researcher will determine the most appropriate approach (quantitative and/or qualitative) to use. Because most action researchers use narrative, descriptive methods, the emphasis in this book will be on the use of qualitative research, although Chapter 3 includes a section on "Quantitative Data Collection Techniques."

Defining Action Research

Over the past decade, the typical "required" research course in many schools, colleges, and departments of teacher education has changed from a traditional survey class on research methods to a more practical research course that either focuses on or includes the topic of action research. But what is action research, and why is it capturing the attention of teachers, administrators, and policy makers?

Action research is any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn. This information is gathered with the goals of gaining insight, developing reflective practice, effecting positive changes in the school environment (and on educational practices in general), and improving student outcomes and the lives of those involved.

Action research is research done *by* teachers *for* themselves; it is not imposed on them by someone else. Action research engages teachers in a four-step process:

1. Identify an area of focus.
2. Collect data.
3. Analyze and interpret data.
4. Develop an action plan.

Before we elaborate on these four steps, however, we will explore the historical antecedents of action research and the theoretical foundations of current action research practices. As you read these descriptions, consider which philosophy best fits your beliefs about action research, teaching, and learning. Then consider how you might incorporate action research into your professional life.

Origins of Action Research

The history of action research has been well-documented and debated (c.f. Adelman, 1993; Gunz, 1996; Kemmis, 1988; Noffke, 1994). Kurt Lewin (1890–1947) is often credited with coining the term *action research* around 1934. After a series of practical experiences in the early 1940s, he came to view action research as a process that "gives credence to the development of powers of reflective thought, discussion, decision and action by ordinary people participating in collective research on 'private troubles' that they have in common" (Adelman, 1993, p. 8).

The many "descendants" of early action researchers follow different schools of action research thought, including the American action research group, with its roots in the progressive education movement, particularly in the work of John Dewey (Noffke, 1994); the efforts in the United Kingdom toward curriculum reform and greater professionalism in teaching (Elliott, 1991); and Australian efforts located within a broad-ranging movement toward collaborative curriculum planning (Kemmis, 1988).

As is evident, the geographical locations and sociopolitical contexts in which action research efforts continue to evolve vary greatly. However, the primary focus of all these efforts, regardless of the context, is on enhancing the lives of students. As Noffke (1994) reminds us, reading the accounts of action research written by people housed in universities does little to illuminate the classroom experiences of teachers and what they hope to gain from participating in action research activities. Therefore, this book focuses on teachers examining issues related to the education of children and on partnering with teachers, administrators, counselors, and parents in the action research process.

Theoretical Foundations of Action Research

The theoretical perspectives and philosophies that inform the practices of today's teacher researchers are as varied as the historical roots for action research. The following sections briefly review the two main theories of action research: critical (or theory-based) and practical.

Critical Action Research

Critical action research is also known as emancipatory action research because of its goal of liberation through knowledge gathering. The term *critical action research* derives its name from the body of critical theory on which it is based, not because this type of action research is critical, as in "faultfinding" or "important," although it may certainly be both! The rationale for critical action research is provided by critical theory in the social sciences and humanities and by theories of postmodernism.

Critical theory in action research and the social sciences and humanities shares several fundamental purposes (Kemmis, 1988). These similar interests or "commonalities of intent" include:

1. A shared interest in processes for enlightenment.
2. A shared interest in liberating individuals from the dictates of tradition, habit, and bureaucracy.
3. A commitment to participatory democratic processes for reform.

In addition to its roots in the critical theory of the social sciences and humanities, critical action research also draws heavily from a body of theory called **postmodernism**, which challenges the notions of truth and objectivity on which the traditional scientific method relies. Instead of claiming the incontrovertibility of fact, postmodernists argue that truth is relative, conditional, and situational, and that knowledge is always an outgrowth of previous experience. For example, historically there has been little or no connection between research and practice in education—an apparent failure of research to affect teaching. This is not news for teachers! Research has been viewed as something done *on* them, not *for* them.

According to Kennedy (1997), the lack of influence of research on practice has been attributed to the following qualities of educational research:

- It is not persuasive and has lacked the qualities of being compelling to teachers.
- It has not been relevant to teachers' daily practices—it has lacked practicality.
- It has not been expressed in ways that are accessible to teachers.

The postmodern perspective addresses many of these concerns by advocating for research that challenges the *taken-for-granted assumptions* of daily classroom life and presenting *truths* that are relative, conditional, situational, and based on previous experience. So although research may provide insights into promising practices (from research conducted in *other* teachers' classrooms and schools), action research conducted in one's *own* classroom/school is more likely to be persuasive and relevant and the findings expressed in ways that are meaningful for teachers themselves.

Postmodern theory dissects and examines the mechanisms of knowledge production and questions many of the basic assumptions on which modern life is based. Thus, it inspires us "to examine the ordinary, everyday, taken-for-granted ways in which we organize and carry out our private, social, and professional activities" (Stringer, 1996, p. 156). Action research gives us a means by which we can undertake this examination and represent the classroom teachers' experiences that are contextually and politically constructed.

The values of critical action research dictate that all educational research should be socially responsive as well as:

1. Democratic—Enabling participation of people.
2. Participatory—Building a community of learners.
3. Empowering—Providing freedom from oppressive, debilitating conditions.
4. Life-enhancing—Enabling the expression of people's full human potential. (Stringer, 2004, p. 31)

Although this critical theory-based approach has been criticized by some for lack of practical feasibility (Hammersley, 1993), it is nonetheless important to consider because it provides a helpful heuristic, or problem-solving, approach for teachers who are committed to investigate through action research the taken-for-granted relationships and practices in their professional lives. Key Concepts Box 1–2 summarizes the most important components of a critical perspective of action research.

Practical Action Research

Practical action research places more emphasis on the "how-to" approach to the processes of action research and has a less "philosophical" bent. It assumes, to some degree, that individual teachers or teams of teachers are autonomous and can determine the nature of the investigation to be undertaken. It also assumes that teacher researchers are committed to continued professional development and school improvement and that teacher researchers want to systematically reflect on their practices. Finally, the practical action research perspective assumes that as decision makers, teacher researchers will choose their own areas of focus, determine their data collection techniques, analyze and interpret their data, and develop action plans based on their findings. These beliefs are summarized in Key Concepts Box 1–3.

KEY CONCEPTS BOX 1–2

Components of a Critical Perspective of Action Research	
KEY CONCEPT	EXAMPLE
Action research is participatory and democratic.	You have identified an area in your teaching that you believe can be improved (based on data from your students). You decide to investigate the impact of your intervention and to monitor whether it makes a difference.
Action research is socially responsive and takes place in context.	You are concerned that minority children (for example ESL [English as a Second Language] students) in your classroom are not being presented with curriculum and teaching strategies that are culturally sensitive. You decide to learn more about how best to teach ESL children and to implement some of these strategies.
Action research helps teacher researchers examine the everyday, taken-for-granted ways in which they carry out professional practice.	You have adopted a new mathematics problem-solving curriculum and decide to monitor its impact on student performance on open-ended problem-solving questions and students' attitudes toward mathematics in general.
Knowledge gained through action research can liberate students, teachers, and administrators and enhance learning, teaching, and policy making.	Your school has a high incidence of student absenteeism in spite of a newly adopted district-wide policy on absenteeism. You investigate the perceptions of colleagues, children, and parents toward absenteeism to more fully understand why the existing policy is not having the desired outcome. Based on what you learn, you implement a new policy and systematically monitor its impact on absenteeism levels and students' attitudes toward school.

Goals and Rationale for Action Research

Although the critical/postmodern and practical theories of action research draw on vastly different worldviews, these two distinctly different philosophies are united by common goals that go a long way toward bridging whatever philosophical, historical, social, and regional variations exist.

Action research carried out according to both philosophies creates opportunities for all involved to improve the lives of children and to learn about the craft of teaching. All action researchers, regardless of their particular school of thought or theoretical position, are committed to a critical examination of classroom teaching principles and the effects teachers' actions have on the children in their care.

KEY CONCEPTS BOX 1–3

Components of a Practical Perspective of Action Research	
KEY CONCEPT	EXAMPLE
Teacher researchers have decision-making authority.	Your school has adopted a school-based decision-making approach that provides teachers with the authority to make decisions that most directly impact teaching and learning. Given this decision-making authority, you decide as part of your continued professional development to investigate the effectiveness of a newly adopted science curriculum on students' process skills and attitudes.
Teacher researchers are committed to continued professional development and school improvement.	Based on the results of statewide assessment tests and classroom observations, the teachers and principal at your school determine that reading comprehension skills are weak. Collaboratively, the staff determines the focus for a school improvement effort and identifies the necessary professional development that will be offered to change the ways teachers teach reading.
Teacher researchers want to reflect on their practices.	You are a successful classroom teacher who regularly reflects on your daily teaching and what areas could be improved. You believe that part of being a professional teacher is the willingness to continually examine your teaching effectiveness.
Teacher researchers will use a systematic approach for reflecting on their practice.	Given a schoolwide reading comprehension focus, you have decided to monitor the effectiveness of a new reading curriculum and teaching strategies by videotaping a reading lesson (once per month), administering reading comprehension "probes" (once per week), interviewing children in your classroom (once per term), and administering statewide assessment tests (at the end of the school year).
Teacher researchers will choose an area of focus, determine data collection techniques, analyze and interpret data, and develop action plans.	To continue the example above, you have focused on the effectiveness of a new reading curriculum and teaching strategies. You have decided to collect data using videotapes of lessons, regular "probes," interviews, and statewide assessment tests. During the year you try to interpret the data you are collecting and decide what these data suggest about the effectiveness of the new curriculum and teaching strategies. When all of the data have been collected and analyzed, you decide what action needs to be taken to refine, improve, or maintain the reading comprehension curriculum and teaching strategies.

By now it should be evident that educational change that *enhances the lives of children* is a main goal of action research. But action research can also *enhance the lives of professionals*.

Osterman and Kottkamp (1993) provide a wonderful rationale for action research as a professional growth opportunity in their "credo for reflective practice":

1. Everyone needs professional growth opportunities.
2. All professionals want to improve.
3. All professionals can learn.
4. All professionals are capable of assuming responsibility for their own professional growth and development.
5. People need and want information about their own performance.
6. Collaboration enriches professional development. (p. 46)

Action research is largely about developing the *professional disposition* of teachers, that is, encouraging teachers to be continuous learners—in their classrooms and in their practice. Although action research is not a universal panacea for the intractability of educational reform, it is an important component of the professional disposition of teachers because it provides teachers with the opportunity to model for their students how knowledge is created.

Action research is also about incorporating into the daily teaching routine a *reflective stance*—the willingness to critically examine one's teaching in order to improve or enhance it. It is about a commitment to the principle that as a teacher one is always distanced from the ideal but is striving toward it anyway—it's the very nature of education! Action research significantly contributes to the professional stance that teachers adopt because it encourages them to examine the dynamics of their classrooms, ponder the actions and interactions of students, validate and challenge existing practices, and take risks in the process. When teachers gain new understandings about both their own and their students' behaviors through action research, they are empowered to:

- Make informed decisions about what to change and what not to change.
- Link prior knowledge to new information.
- Learn from experience (even failures).
- Ask questions and systematically find answers. (Fueyo & Koorland, 1997)

This goal of teachers to be professional problem solvers who are committed to improving both their own practice and student outcomes provides a powerful reason to practice action research.

Justifying Action Research: The Impact of Action Research on Practice

At the beginning of a course on action research, I often ask teachers to reflect on what they do in their schools and classrooms; that is, what are the assumptions they take for granted in their schools and what are the origins of those practices? Often the responses include the following:

> In elementary grades, it is important to do the "skill" subjects in the morning and the "social" subjects in the afternoon because that is when young children can concentrate better and learn more.

> The best way to do whole-group instruction with young children (grades K–3) is to have them sit on the "mat" in a circle. That way they are close to the teacher and pay more attention to what is being said.
>
> In high schools the optimal time for a learning period is 43 minutes. Anything longer than that and the students get restless and lose concentration. Therefore, I think that the proposal for "block scheduling" is just an attempt to make us more like elementary school teachers.
>
> If you simply share scoring guides with children, they will automatically do better on the test. There's no need to change instructional approaches.
>
> In a science laboratory if children spend less time collecting data, they will develop a deeper understanding of the science concepts being taught.

Although these are real examples of just a few of the naïve theories about teaching and learning that I have heard, they also indicate the gap that has existed between research and practice in the field of education. To what extent has teaching practice been informed by research? Is teaching informed by folklore? Do teachers acquire the culture of teaching through years of participation and observation, first as students and then as neophyte teachers? How did teachers get to be the way they are? Are some of the derogatory Hollywood portrayals of teachers and teaching (for example, as characterized in *Ferris Bueller's Day Off, Mr. Holland's Opus*, etc.) really warranted? What is it about research that makes teachers, in general, snicker at the thought that it can in some way improve practice? What is the potential for this discussion to put action into action research efforts?

According to Kennedy (1997), studies of the connection between research and practice and the apparent failure of research to affect teaching has provided the following insights:

- Teachers do not find research persuasive or authoritative.
- Research has not been relevant to practice and has not addressed teachers' questions.
- Research findings have not been expressed in ways that are comprehensible to teachers.
- The education system itself is unable to change or, conversely, it is inherently unstable and susceptible to fads.

Many teacher researchers may consider Kennedy's hypotheses to be statements of the obvious; however, these statements provide yet another rationale for why many teachers have chosen to be reflective practitioners: to address the intractability of the educational system. These hypotheses also speak to the desire to put action into ongoing action research efforts.

Action Research Is Persuasive and Authoritative

Research done by teachers for teachers involves collection of persuasive data. These data are persuasive because teachers are invested in the legitimacy of the data collection, that is, they have identified data sources that provide persuasive insights into the impact of an intervention on student outcomes. Similarly, the findings of

action research and the actions recommended by these findings are authoritative for teacher researchers. In doing action research, teacher researchers have developed solutions to their own problems. Teachers—not outside "experts"—are the authorities on what works in their classrooms.

Action Research Is Relevant

The relevance of published research to the real world of teachers is perhaps the most common concern raised by teachers when asked about the practical applications of educational research—either the problems investigated by researchers are not the problems teachers really have or the schools or classrooms in which the research was conducted are vastly different from their own school environment. In reviewing the last two decades of research on schools and teaching, however, Kennedy (1997) cites the seminal works of Jackson's (1968) *Life in Classrooms* and Lortie's (1975) *Schoolteacher* as ways to illustrate the relevance of the findings of these studies. Kennedy's review (1997) found that classroom life was characterized by crowds, power, praise, and uncertainty:

- Crowds—Students are always grouped with 20 or 30 others, which means that they must wait in line, wait to be called on, and wait for help.
- Power—Teachers control most actions and events and decide what the group will do.
- Praise—Teachers give and withhold praise, so students know which of their classmates are favored by the teacher.
- Uncertainty—The presence of 20 to 30 children in a single classroom means there are many possibilities for an interruption in one's work.

Kennedy (1997) argues that one of the aims of research is to increase certainty by creating **predictability** within the classroom, because "Routines increase predictability and decrease anxiety for both teachers and students" (p. 6).

One of the outcomes of action research is that it satisfies the desire of all teachers to increase the predictability of what happens in their classrooms—in particular, to increase the likelihood that a given curriculum, instructional strategy, or use of technology will positively affect student outcomes. And although these desirable outcomes come at the initial expense of predictability—that is, they have emerged from the implementation of a *new* intervention or innovation—the findings of your action research inquiries will, over time, contribute to the predictability of your teaching environments.

Action Research Allows Teachers Access to Research Findings

Kennedy (1997) also hypothesizes that the apparent lack of connection between research and practice is due to teachers' poor access to research findings. This apparent lack of impact of research on teaching is, in part, credited to teachers' prior beliefs and values and the realization that teachers' practices cannot be changed simply by informing them of the results of a study. After all, if we reflect

on how we currently teach and what we hold as sacred teaching practices, we are likely to find that our beliefs and values stem from how we were taught as children ("It worked for me and I'm successful. I'm a teacher.") and how we have had teaching modeled for us through our teaching apprenticeships (student teaching).

Simply informing teachers about research is unlikely to bring about change. Therein lies the beauty, power, and potential of action research to positively affect practice. As a teacher researcher, you challenge your taken-for-granted assumptions about teaching and learning. Your research findings are meaningful to you because *you* have identified the area of focus. *You* have been willing to challenge the conventional craft culture. In short, *your* willingness to reflect on and change your thinking about your teaching practices has led you to become a successful and productive member of the professional community.

Action Research Challenges the Intractability of Reform of the Educational System

Kennedy's (1997) final hypothesis is that the lack of connection between research and practice can be attributed to the educational system itself, not the research. Kennedy (1997) characterizes the American educational system as a system that:

- Has no consensus on goals and guiding principles.
- Has no central authority to settle disputes.
- Is continually bombarded with new fads and fancies.
- Provides limited evidence to support or refute any particular idea.
- Encourages reforms that run at cross-purposes to each other.
- Gives teachers less time than most other countries do to develop curricula and daily lessons.

Given this characterization, it is little wonder that the more things change, the more they stay the same! Again, action research gives teacher researchers the opportunity to embrace a problem-solving philosophy and practice as an integral part of the culture of their schools and their professional disposition, and to challenge the intractability of educational reform by making action research a part of the system, rather than just another fad.

Action Research Is Not a Fad

One insight that Kennedy does not address when discussing the apparent failure of research to affect teachers' practices is the belief of many classroom teachers that researchers tend to investigate trendy fads and are interested only in the curricular approach or instructional method *du jour*. Therefore, it is not surprising to hear critics of action research say: "Why bother? This is just another fad that, like other fads in education, will eventually pass if I can wait it out!" But action research is decidedly not a fad for one simple reason: *Good teachers have always systematically looked at the effects of their teaching on student learning.* They may not have called this practice action research, and they may not have thought their reflection was formal enough to be labeled research, but action research it was!

Making Action Research a Part of Daily Teaching Practices

The first step in making action research a part of daily teaching practices is to become familiar with the process and recognize how much action research is already a part of daily life as a classroom teacher. Consider this analogy that reveals how similar the act of teaching is to the act of doing action research. In any individual lesson, you plan, implement, and evaluate your teaching, just as a teacher researcher does when undertaking action research. You develop a list of objectives (a focus area), implement the lesson, reflect on whether the children achieved the objectives through summative evaluation statements (data collection), spend time at the end of a lesson reflecting on what happened (data analysis and interpretation), and spend time at the end of the day considering how today's lesson will affect tomorrow's lesson (action planning). Like action research, the act of teaching is largely an intuitive process carried out idiosyncratically by both experienced and novice teachers.

I was recently reminded by a teacher enrolled in one of my action research classes that in my fervor and enthusiasm to illustrate data analysis and interpretation in practice (based on some of my own research), I had unwittingly made her feel that research was something that could realistically be done only by a full-time researcher who did not have a "real" job to contend with—namely, teaching 28 very lively first graders! The teacher felt that action research was so difficult and time consuming that it was unreasonable to expect a mere mortal to undertake the activity. She felt as if she needed "Super Teacher" to burst into the classroom and take over business! Not so. If the process of action research cannot be done without adversely affecting the fundamental work of teaching, then it ought not to be done at all.

Throughout this text, we will explore practical, realistic ways that action research can become a normative part of the teaching-learning process. There will be an initial commitment of time and energy as one learns the process but that time is an investment in enriching the education of students. If one is to realistically incorporate the process of action research into daily teaching practices, a few things need to happen:

- *Try the process and be convinced that the investment of time and energy is worth the outcomes.* First, undertake an action research project that is meaningful to you and addresses the needs of your students. Once the project is completed, you will see the contribution your new understanding of the subject will make to your teaching or your students' learning (or ideally, both!). Only then will you be fully confident that action research is a worthwhile investment of your time and energy. Your beliefs and attitudes about action research will be changed after you have tried it for yourself.
- *Know that action research is a process that can be undertaken without having a negative impact on your personal and professional life.* For example, action research, as it is described in this book, is not intended to be just "one more thing" for you to do. Teachers already have too much to do and not enough time in which to do it! The action research process advocated in this book is intended to provide you with a systematic framework that can be applied to

RESEARCH IN ACTION CHECKLIST 1–1

Making Action Research a Part of Your Daily Teaching Practice

___ Actually *try* the process to convince yourself that the investments of time and energy are worth the outcomes.
___ Recognize that action research is a process that can be undertaken without negatively affecting your personal and professional life.
___ Seek support from your professional colleagues.

your daily teaching routines. The investment of time as you learn how to do action research will be worth the outcomes. The process may also produce unexpected positive outcomes by providing opportunities for collaborative efforts with colleagues who share a common area of focus. This book provides strategies you can use to develop your *reflective practice* utilizing many of the existing data sources in your classroom and school. It will provide you with a model that can be shared with like-minded colleagues who also are committed to improving the teaching-learning process in their classrooms.

- *Ask for support from your professional colleagues with implementation.* Although such strategies as studying theory, observing demonstrations, and practicing with feedback enable most teachers to develop their skills to the point that they can use a model fluidly, skills development by itself does not ensure skills transfer. Relatively few persons who learn new approaches to teaching will integrate their skills into regular practice unless they receive coaching (Joyce, Hersh, & McKibben, 1983). That is why seeking support and guidance from other teacher researchers is critical to your success as an action researcher. These suggestions are summarized in Research in Action Checklist 1–1.

The Process of Action Research

Now that we have defined action research, described its historical and theoretical foundations, and explained why teachers do it, let's explore the process of action research. Many guidelines and models have been provided over the years for teacher researchers to follow, for example:

- Kurt Lewin (1952) described a "spiraling" cyclical process that included planning, execution, and reconnaissance.
- Stephen Kemmis (1988) created a well-known representation of the action research "spiral" (see Figure 1–1) that includes the essential characteristics of Lewin's model. Kemmis's model includes reconnaissance, planning, first action step, monitoring, reflecting, rethinking, and evaluation.
- Emily Calhoun (1994) described an Action Research Cycle (see Figure 1–2) that includes selecting an area or problem of collective interest, collecting data, organizing data, analyzing and interpreting data, and taking action.

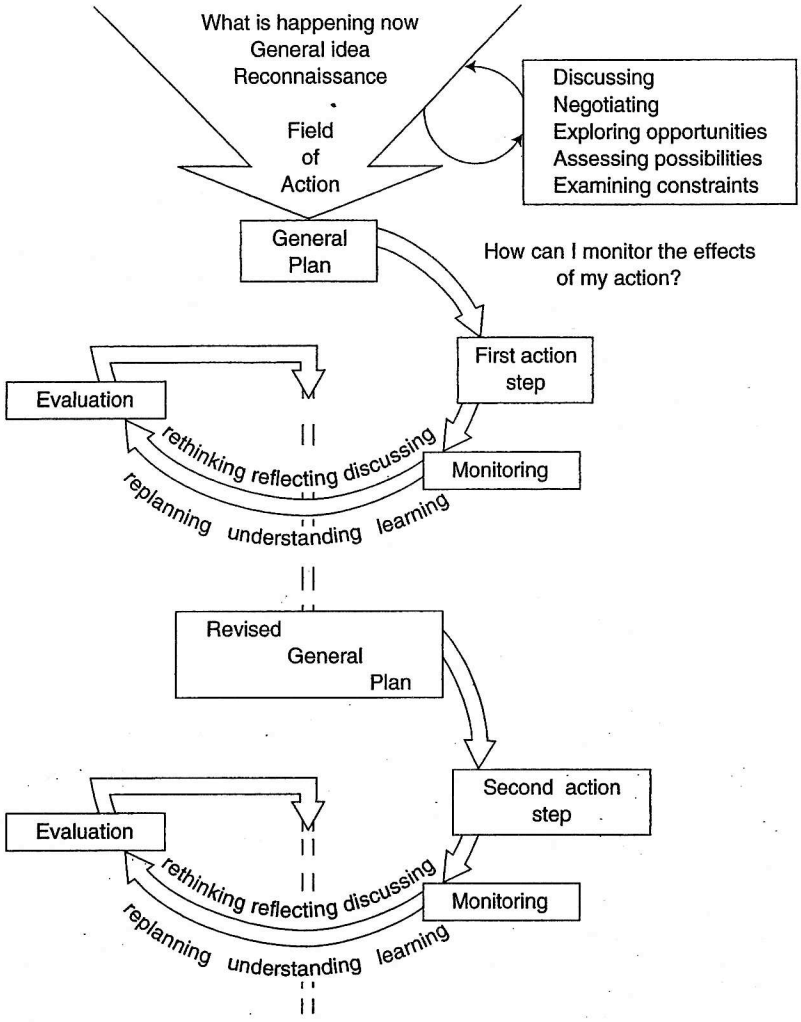

FIGURE 1–1 A Representation of Lewin's Action Research Cycle
Source: *Action Research in Retrospect and Prospect* (p. 29), by Stephen Kemmis, 1988. Victoria, Australia: Deakin University Press, distributor. Copyright 1988 Deakin University. Reprinted with permission. All rights reserved.

- Gordon Wells (1994) described what he calls an Idealized Model of the Action Research Cycle (see Figure 1–3) that includes observing, interpreting, planning change, acting, and "the practitioner's personal theory" (p. 27), which informs and is informed by the action research cycle.
- Richard Sagor (2000) described a seven-step process that includes selecting a focus, clarifying theories, identifying research questions, collecting data, analyzing data, reporting results, and taking informed action.
- Ernest Stringer (2004) described an Action Research Helix (see Figure 1–4) that includes looking, thinking, and acting as "phases of the research (are) repeated over time" (p. 10).

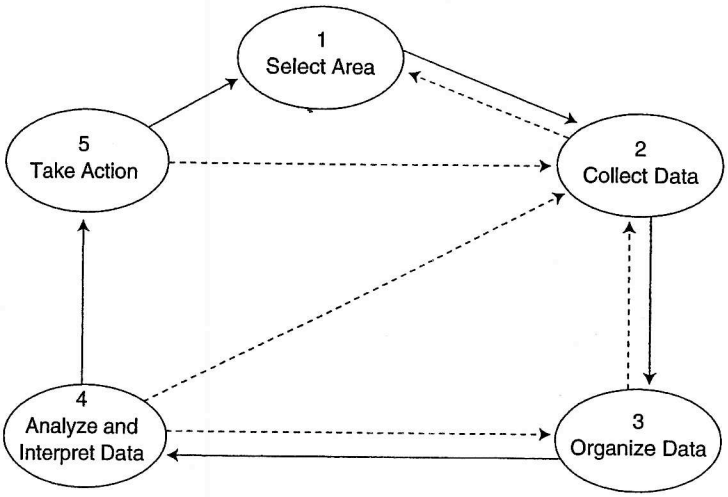

FIGURE 1–2 The Action Research Cycle

Source: *How to Use Action Research in the Self-Renewing School*, p. 2, by Emily Calhoun, 1994, Alexandria, VA: Association for Supervision and Curriculum Development. Copyright ©1994 ASCD. Reprinted by permission. All rights reserved. The Association for Supervision and Curriculum Development is a worldwide community of educators advocating sound policies and sharing best practices to achieve the success of each learner. To learn more, visit ASCD at www.ascd.org.

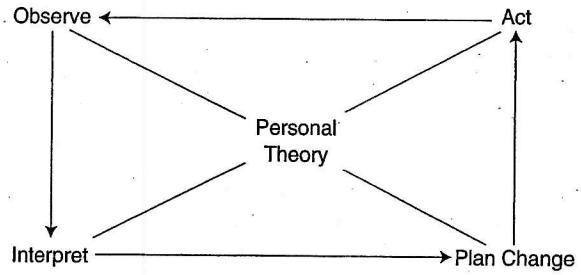

FIGURE 1–3 An Idealized Model of the Action Research Cycle

Source: *Changing Schools from Within: Creating Communities of Inquiry*, p. 27, by Gordon Wells, 1994, Toronto, Ontario: OISE Press. Copyright 1994 OISE Press. Reprinted by permission. All rights reserved. U.S. rights granted by permission of Gordon Wells: *Changing Schools from Within: Creating Communities of Inquiry* (Heinemann, A division of Read Elsevier, Inc., Portsmouth, NH, 1994).

- John Creswell (2005) described action research as a dynamic, flexible process that involves the following steps: determining if action research is the best design to use, identifying a problem to study, locating resources to help address the problem, identifying necessary information, implementing the data collection, analyzing the data, developing a plan for action, and implementing the plan and reflecting on whether or not it makes a difference.
- Cher Hendricks (2006) described an action research process that follows the principle of "systematic inquiry based on ongoing reflection" (p. 9) that is heavily influenced by the work of Lawrence Stenhouse (1981) from the Center for Applied Research in Education at the University of East Anglia in England (see Figure 1–5).

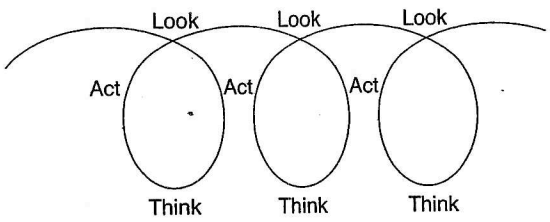

FIGURE 1–4 Action Research Helix
Source: *Action Research in Education* (p. 12), by Ernest Stringer, 2004, Upper Saddle River, NJ: Prentice Hall.

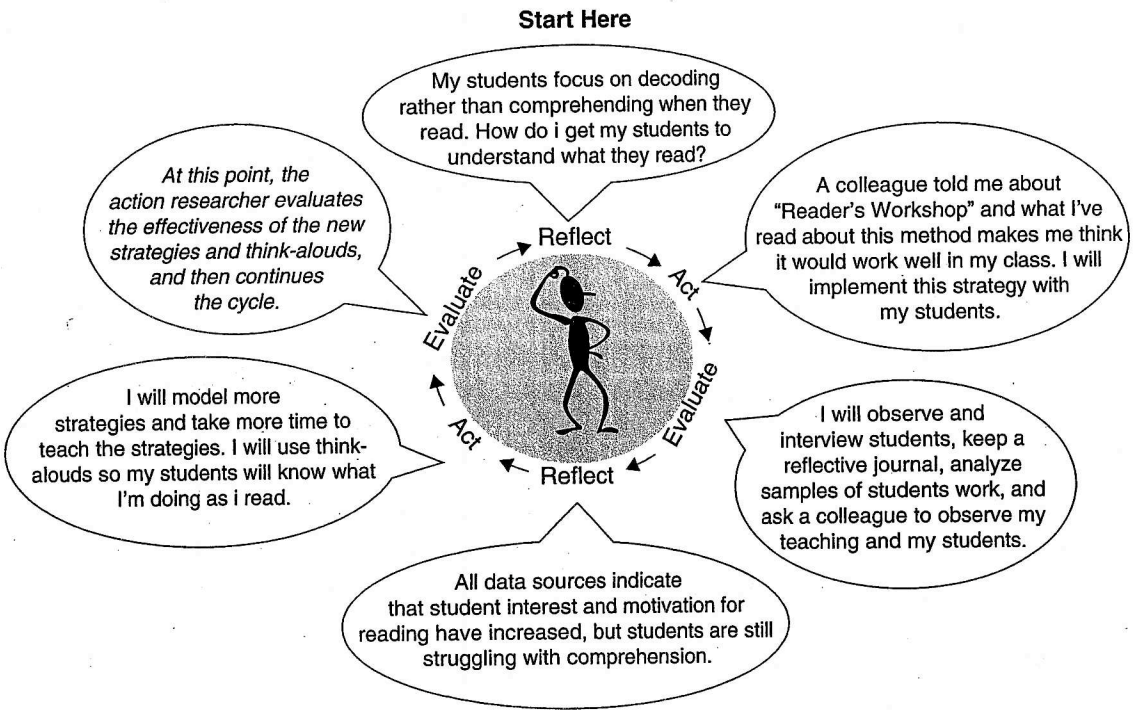

FIGURE 1–5 The Action Research Process
Source: *Improving Schools through Action Research: A Comprehensive Guide for Educators* (p. 9), by Cher Hendricks, 2006, Boston, MA: Allyn and Bacon.

All these models have enjoyed varying degrees of popularity, depending on the context in which they have been applied. For example, these action research models have been applied to agriculture, health care, social work, factory work, and community development in isolated areas.

Clearly, these action research models share some common elements: a sense of purpose based on a "problem" or "area of focus" (identification of an area of focus), observation or monitoring of practice (collection of data), synthesis of information

gathered (analysis and interpretation of data), and some form of "action" that invariably "spirals" the researcher back into the process repeatedly (development of an action plan).

These shared elements are what we will focus on in this book. The following chapters will address in detail how to proceed with an action research process that includes the four elements mentioned above: **identifying an area of focus**, **collecting data**, **analyzing and interpreting data**, and **developing an action plan**. Key Concepts Box 1–4 illustrates the action research process used by Deborah South, described at the beginning of this chapter.

This four-step process, which I have termed the **Dialectic Action Research Spiral**, is illustrated in Figure 1–6. It provides teacher researchers with a practical guide and illustrates how to proceed with inquiries. It is a model for research done *by* teachers and *for* teachers and students, not research done *on* them, and as such

KEY CONCEPTS BOX 1–4

Steps in the Action Research Process Based on Deborah South's Example of "Unmotivated" Students	
KEY CONCEPT	EXAMPLE
Identifying an area of focus	The purpose of this study was to describe the effects of a "study skills" curriculum on student outcomes. In particular, the study focused on the variables of student attendance, peer influence, adult influence, and students' self-esteem.
Collecting data	Data was collected through surveys, interviews, and report card/attendance records.
Analyzing and interpreting the data	Attendance did not appear to be an issue—children attended school regularly. Peer groups did affect performance. Students encouraged each other not be complete homework assignments. Teacher approval of student work appeared to have little effect on students' work habits, whereas about half of the children indicated that they were motivated to complete their homework to receive parental approval. On average, student grades had dropped dramatically during the term in which they were enrolled in the study skills class. Interpretation: The study skills class was having a negative impact on student outcomes, behavior, and attitudes.
Developing an action plan	It was determined that students would not be homogeneously grouped for a study skills class the following year because of a "critical mass of negativity" that appeared to emerge from the students as they fed off each other's lack of motivation. The study skills curriculum would continue to be used and monitored with a heterogeneous grouping of students.

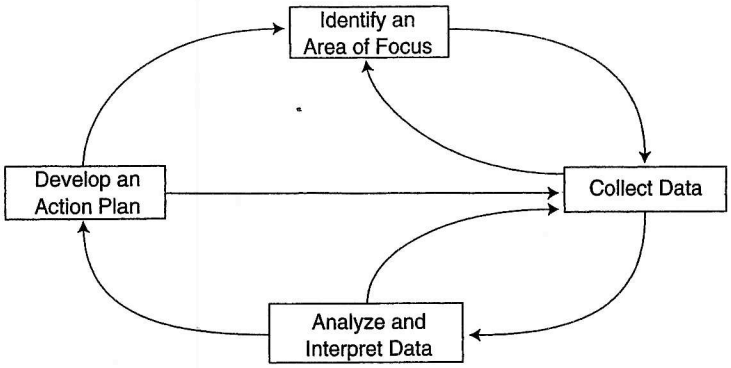

FIGURE 1–6 The Dialectic Action Research Spiral

is a dynamic and responsive model that can be adapted to different contexts and purposes. It was designed to provide teacher researchers with "provocative and constructive ways" of thinking about their work (Wolcott, 1989, p. 137).

Summary

Action research is systematic inquiry done by teachers (or other individuals in the teaching-learning environment) to gather information about—and subsequently improve—how their particular schools operate, how they teach, and how well their students learn.

The geographical settings and theoretical contexts in which action research efforts evolved are diverse. Two main philosophical perspectives inform current action research practice: **critical action research**, which has its roots in critical and postmodern theory and emphasizes democracy and liberation; and **practical action research**, which takes a more applied and contextualized approach to action research.

The shared goal for all types of action research is to improve the lives of students and teachers. Classroom teachers are often skeptical of research because of its historical failure to connect to classroom practice and the experiences of teachers and students. Action research is not a passing fad because good teachers have always critically reflected upon their practices. This text will provide realistic strategies and practical guidelines for incorporating action research into teachers' daily classroom practices.

Although there are a number of models for doing action research, the basic process consists of four steps: **identify an area of focus**, **collect data**, **analyze and interpret data**, and **develop an action plan**. The following chapters will explore these four steps in greater detail.

For Further Thought

1. How would you describe the purpose(s) of action research?
2. How do the tenets of the critical/postmodern perspective support the need for action research?

3. Suppose that the students in your class are not progressing in essay writing as you had hoped. Using the four steps in the action research process described in this chapter, sketch out briefly what you might do to systematically examine this issue.
4. Your school has received a large professional development grant focused on improving children's scores on a national reading test. You believe that your existing reading program is strong. What kind of action research study might you conduct to address the differences between your current reading program's outcomes and the concepts tested on the national test?