

# Teachers as Reflective Practitioners and Action Researchers

**O**kay, so I have all of the students in their cooperative learning groups and I developed really neat material. Why aren't they interacting?

The teacher in the introductory scenario is demonstrating one of the many “realities of the classroom.” Although one might be enthused about using a specific teaching strategy such as a cooperative learning structure (Johnson & Johnson, 1994; Slavin, 1995), the reality is that sometimes a theory, a concept, or an approach, while well founded, must be adjusted to account for the unique characteristics of the situation to which it is applied. Do the facts that a teacher’s class is a middle-school class and the students are in mixed-gender groups make a difference in the use of a cooperative learning structure? Or is it possible that because many of her students are of Asian American heritage, they affect the group dynamic?

Adapting a theory, or even a standard of practice, in response to the unique characteristics of the setting or population with whom the practice is employed can result in its increased utility and effectiveness. Further, when such adaptation is conceived and implemented with the rigors of scientific research, the resulting data can lead to the increased refinement and validity of the underlying theory. This systematic adjustment of theory to practice and of theory from practice lies at the heart of **action research**.

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### ◆ Chapter Objectives

The value of teachers acting as reflective practitioners and action researchers is the focus of the current chapter. A review of the current literature highlighting definitions, implications, and sample applications of action research is provided.

After reading this chapter, you should be able to do the following:

- 1 Define action research.
- 2 Describe the utility of a reflective approach to classroom teaching.
- 3 Provide examples of potential targets for action research within an educational setting.

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## **REFLECTIVE PRACTITIONER AND ACTION RESEARCHER**

As noted in the Prologue, **reflective teachers** know what they are doing and why they decided to do it, and then review the effect of what

was done. Quite often, a teacher fails to approach teaching from a reflective stance. Without **systematic reflection** of practice decisions, teachers may find themselves doing what Judith McGonigal describes in her autobiographical case study: “unthinkingly [teaching] the prescribed curriculum the same passive way for 15 years” (1999, p. 5).

### ◆ From Reflection to Action Research

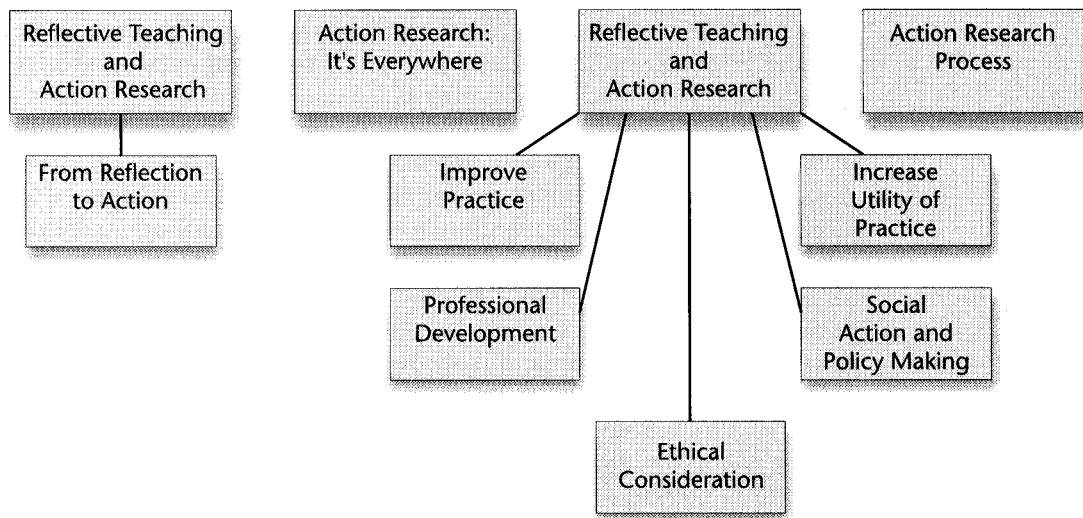
Schon (1983) claimed that important decisions are made during the act of teaching and that most often these decisions are based primarily on experience in a spontaneous, intuitive manner. Although **reflection** is a valued quality of effective teachers, even when based on nonsystematic memories of events or casual observations, the value of reflection is increased when based on data collected through **systematic observations** and data collection procedures (Lederman & Niess, 1997). When teachers employ systematic approaches to observations and data collection, they move into the realm of action researcher (Casanova, 1989; Cochran-Smith & Lytle, 1990; Hovda & Kyle, 1984).

Action research has been broadly defined (e.g., Goode & Bartunek, 1990; Peters & Robinson, 1984; Shani, 1990) as a form of investigation that enables teachers to examine their own practices (Tomlinson, 1995). As presented here, action research is **applied research** in which the researcher/investigator is also the practitioner (i.e., teacher) and attempts to *use research as a methodology for identifying the “what” they do and make decisions on doing it better.*

Action research goes beyond simple common sense. **Teachers as action researchers** apply the rigors of **scientific inquiry** in the context of their classroom and classroom experience in an attempt to improve teaching effectiveness. Because action research is conducted by classroom teachers, it serves as a vehicle through which teachers investigate issues of interest and then incorporate the results into their own planning and future teaching.

### ◆ Action Research: It’s Everywhere!

A quick perusal of an educational psychology text (e.g., Parsons, Hinson & Brown, 2001) might imply that action research is one of the latest “in” topics, with a short life span as a professional practice. Although action research is currently receiving a lot of attention among educators, it is far from a new or short-lived approach to professional practice. In fact, the concept of teacher as researcher was discussed in the 1920s (Buckingham, 1926). Further, the use of action research within the classroom has been in evidence since the early 1950s (Zeichner & Gore, 1995). As will be highlighted below, action research has been on the rise

**CONTENT MAP 1**

(Casanova, 1989; Cochran-Smith & Lytle, 1990) and has been employed as an approach for facilitating educational changes within a classroom, throughout a school, and across districts.

Action research is part of a teacher's professional life and will endure as long as teachers desire to improve their effectiveness and maintain their professionalism.

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### **REFLECTIVE PRACTITIONER AND ACTION RESEARCHER: WHY?**

Mention the word *research* to many teachers and you may encounter looks of confusion or concern and even gasps of horror! For many, the concept of research conjures images of large samples, complicated designs, and sophisticated statistical and computer analyses. Many teachers feel that they lack the necessary skills and the necessary drive and desire to become researchers, "action" or otherwise. So why should they? What possibly could be the draw?

Research and practice are not mutually exclusive. Rather, they are necessary for a teacher's continued professional growth, and research can ensure the efficacy of practice decisions. However, large-scale research projects are often prohibitive to the classroom teacher because they may require sophisticated, oftentimes elaborate designs for data collection and analysis. But action research, as presented here, is a mind-set as

much as it is a method. It is a way of approaching teaching with a desire to be accountable for professional practice and motivated by the desire to improve such service. Action research provides teachers with a method for viewing their professional decisions systematically and deciding on them rationally.

In addition to providing a vehicle for improving teacher decision making and increasing teacher effectiveness, an action research approach to professional practice can be used to explore a variety of issues in education. For example, Calhoun (1993) suggested that action research can (1) be a tool for the individual teacher focusing on changes within his or her classroom, (2) be an approach employed by a “research team” of teachers addressing a problem that extends across classrooms, and (3) be a facilitative approach to schoolwide or districtwide problems.

### ◆ Improving Practice

Action research is a model of research that has, as its focus, the improvement of practice. It is a model that guides the teacher in making practical decisions about, or improvements in, his or her teaching strategies. From this perspective, the strength of action research rests in the fact that it is self-evaluative and collaborative and ultimately will lead to an improvement in practice.

As teachers, we may want to believe that we have mastered our professions. The truth is that we need to reflect on our actions and the consequences of those actions. The need to reflect and continue to acquire knowledge and improve practice is clear. Each situation, each class, each student provides unique challenges and opportunities, and each calls from us unique approaches. Systematic reflection on our teaching at any one time can provide the impetus and means for improving practice.

Reflective teachers approach their classes with the belief that change can occur and that they can effect that change. They seek those strategies that will assist them in becoming most effective. It is in this process of reflecting on what was done—what resulted and then asking the question “What if?”—and implementing those innovations that the reflective practitioner becomes the action researcher (Bennett, 1994).

### ◆ A Tool for Professional Development

Action research has been found to serve not only as a means of improving teaching (e.g., Elliott, 1991; Nixon, 1987) but also in developing practitioners’ flexibility and problem-solving skills (Pine, 1981) and their attitudes to professional development and the process of change (Simmons, 1985). Participation in action research resulted in increased

confidence, self-esteem, willingness to embrace research, and liberated creative potential for the educator-turned-action researcher (McKay, 1992). These findings indicate that educators grow personally and professionally as an outgrowth of employing action research. Beyond the benefit to the individual teacher, action research has been described as a vehicle for improving preservice teacher education (Noffke & Stevenson, 1995), in-service teacher education (Letiche, van der Wolf, & Plooij, 1991), and for ongoing staff development (Miller & Pine, 1990). Further, the sharing of professional experiences has been found to promote a climate of professionalism and scholarship (Allen & Shockley, 1994).

### ◆ **Increasing the Utility of Practice and the Validity of Research**

Action research challenges the common wisdom and shared perspective that research occurs within the ivory towers, whereas practice takes place in the trenches. This perspective presents practitioners as consumers who apply the findings of the researcher. Hoshmand and Polkinghorne (1992) noted that the traditional concept of the relationship between science and practice has generally posited a one-way influence of science on practice. This perspective is limiting and underutilizes and undervalues the ways of knowing that are germane to practice. Action research brings those two realms of knowledge and experience together.

Like most research, action research involves research questions and hypotheses. The teacher attempts to understand the current situation by speculating about the nature of the problems encountered and possible actions to be taken that will lead to improvements. In action research these actions will be implemented, and data depicting their impact will be collected, reviewed, and employed to improve the understanding of the problem. In this way, teaching decisions are not only shaped by theory and research, but in turn help give shape and new directions to educational theory and research.

### ◆ **Social Action and Policy Making**

Although the origin of action research is open for debate, many have placed it with the work of Kurt Lewin (1946). A primary target for Lewin's writing and work on action research was the need to close the gap between social action and social theory (Peters & Robinson, 1984). He viewed action research as a tool for generating knowledge about a social system while at the same time attempting to change it (Lewin, 1946).

McLean described action research as a "process of systematically evaluating the consequences of educational decisions and adjusting practice to

maximize effectiveness” (McLean, 1995, p 3.). McKay, for example, suggested that action research can be used to investigate a variety of organizational practices, such as the implementation of a K–8 or K–5 and 7–8 grade alignment, or the value of interdisciplinary or departmentalized school structures (McKay, 1992).

Thus, action research can assist educators with a systematic method for determining what is best practice and policy for their students and can promote educational reform (Heckman, 1996; Zuber-Skerritt, 1991).

### ◆ **Action Research: An Ethical Consideration**

Viewed as a frame of mind, action research calls us to a continued interest in serving our students better and providing increased accountability for our teaching. As such, action research is not simply a good idea. Rather, it becomes an ethical responsibility for monitoring the effectiveness of our practice and increasing the competency of our teaching. Elliott (1991) suggests that action research applied to education is an ethical process that integrates

teaching and teacher development, curriculum development and evaluation, research and philosophical reflection, into a unified conception of reflective educational practice. (Elliott, 1991, p. 54)

No one professional can guarantee success in each and every encounter or situation. However, ethical teachers need to assess the degree to which their teaching decisions and strategies are both valid and effective. Action research provides a mechanism for monitoring the efficacy and adequacy of practice decisions and methods.

So why use action research? Because, as will become evident as you read the case applications in the upcoming chapters, action research is a vehicle for improving classroom practice, teacher knowledge and skill, and the overall functioning and performance of our educational systems.

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## **THE ACTION RESEARCH PROCESS**

The typical conceptualization of action research is that it is a **cyclical inquiry process** that involves identifying and defining a problem, developing action steps as a way of resolving the problem or improving the situation, implementing those action steps, and then evaluating the outcomes (Elden & Chisholm, 1993). Case Illustration 1-1 provides an example of this cyclical process of inquiry.

As suggested by the example, an action researcher engages in a process of observing-doing-observing-adjusting and doing again. Action

research can take many forms and employ a wide range of methodologies. The key to a worthwhile teacher-initiated investigation lies not in the methodology used, or the types of data collected, but in the questions researched and the degree to which they are meaningful and important to the teacher (Spaulding, 1992).

Throughout the following chapters examples of action research will be presented. In each example, it is clear that the teacher, as action researcher, is primarily concerned with documenting the effectiveness of a particular program or procedure employed within the classroom, as

### Case Illustration 1-1

#### Jerome: A Ninth-Grade English Teacher

Jerome is a first-year, ninth-grade English teacher. Jerome noted that he was having difficulty getting his students to engage in class discussion about the assigned readings. He felt that he has been encouraging and nonevaluative and has provided the students with stimulating “Questions for Reflection.” However, getting class discussion is almost “like pulling teeth.”

Jerome shared his frustration with Ginny, his team partner, who taught the same students in science and mathematics. Ginny suggested that perhaps the classroom structure may in some way be inhibiting the open discussion. Ginny shared her own experience of teaching science principles and then attempting to have the students discuss the relevance of those principles in their lives. She noted that moving from a lecture to a discussion format was difficult for the students until she rearranged the seating configuration in her classroom. Ginny shared what she had discovered through reading and experience—that discussions seemed to increase when the students were placed in a semicircle arrangement. Ginny gave Jerome an article by three educational researchers (Rosenfield, Lambert, & Black, 1985), which demonstrated that a semicircular seating arrangement (as opposed to straight rows) facilitated face-to-face communication, and thus increased spontaneous interaction among students.

Jerome liked the idea and decided to try an *experiment* using his two sections of English Literature. In

one section he decided to rearrange his classroom seating, moving the chairs from a single-row, front-facing arrangement to a large-circle arrangement with the teacher as a member of the circle. For his second session, he maintained the teacher-focused structure of straight-row seating.

As a way of assessing the impact of this seating option, Jerome took notes on how many of the ten stimulus questions he needed to use to elicit discussion during the twenty-minute discussion period. He *hypothesized* that with increased student participation about each question, fewer questions would be used. Following two weeks of running his experiment, Jerome reviewed his recorded data. He found that when the classroom was arranged in a circular formation the students required, on average, only three of the stimulus questions to start the twenty-minute discussion session during the daily class periods. However, in the group in which the classroom was arranged in straight rows, facing the teacher's desk, students went through eight of the stimulus questions during the same twenty-minute period.

From this experience, Jerome decided to arrange his rooms to allow for both teacher-directed (straight-row arrangement) and large-group discussion (circle arrangement). He even decided to read more about the impact of the “ecology” of the classroom on student learning (Parsons, Hinson, & Brown, 2001).



## Action Research

### Secondary Science Education

**A**s noted above, action research is an important way to both increase the effectiveness of classroom practices and stimulate improvement of overall functioning within an entire school.

Consider the following example of a preservice secondary science teacher, Caroline, concerned with identifying effective strategies in teaching science to linguistically diverse students (Keating, Diaz-Greenberg, Baldwin, & Thousand, 1998).

Caroline was interested in “investigating” the use and effectiveness of a specific science technique, the Specially Designed Academic Instruction in English (SDAIE), by a particular group of science teachers. Specifically, Caroline wanted to investigate:

1. How this approach differed from approaches used in mainstream classes
2. The difference in material taught in those classes compared with mainstream classes
3. Variation in the use of that strategy among science teachers
4. The effectiveness of SDAIE strategies related to student interest and achievement in science.

#### Method

Caroline used observations, interviews, and questionnaires with the three teachers employing SDAIE, as well as interviews and questionnaires from a

selected group of students enrolled in three SDAIE classes.

#### Results

The data collected revealed the following trends:

1. There was a distinctiveness in the strategies used in SDAIE classes when compared with the mainstream science classes.
2. Although the amount of time spent on SDAIE strategies varied among the three teachers, all three teachers employed specific SDAIE strategies (e.g., using multimodalities in delivering instruction, using student-centered activities).
3. The teachers covered fewer topics in these classes compared with the mainstream science classes. However, more depth of coverage was observed.
4. Students appeared to have increased understanding and achievement and expressed a more positive attitude toward science.

#### Conclusion

This preservice teacher concluded that the use of SDAIE strategies was very effective with linguistically diverse students. Sharing her data with her master teacher increased the master teacher's interest in the use of an action research approach to evaluating educational classroom questions.

opposed to developing a new theory or publishing a research paper. However, even with this emphasis on application as opposed to theory building, this informal classroom-based research should be coherent and systematic and should provide valuable information for the teacher. The steps described in the remaining chapters will assist the teacher as practitioner to incorporate the perspective and rigor of the researcher into her daily practice in order to increase both her awareness of the “what she does” and the effectiveness of her decisions on “how to do it better”!

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## **COOPERATIVE LEARNING EXERCISES**

### **Increasing Awareness of Teaching Decisions**

As a teacher you probably feel that you do not have the time or resources to perform research. As suggested throughout this chapter, action research is as much a matter of mind as it is a matter of method. Becoming an action researcher may require little more than becoming aware of your practice decisions and their impact. Simply becoming more reflective of what you do, why you did it, and what results from it is key to being an action researcher.

### **Working with Your Classmates or Colleagues**

- Step 1. Identify three decisions that you might make in the course of your professional day. For example, you may decide to introduce a new concept to the students by showing a brief movie or perhaps at some time you may choose to ignore a child who is calling out in order to receive attention. Identify three such strategies for your professional practice.
- Step 2. Select one of those strategies that you feel you would continue to implement in your teaching.
- Step 3. Select two very specific impacts or outcomes you would expect from such an action. In other words, what were you hoping to accomplish and how would it look if it were accomplished? Be as concrete as possible.
- Step 4. Assuming that your goal was met, how could you demonstrate it? What type of evidence would you use to show the impact of your action?
- Step 5. Return to your three strategies and select one of the remaining two. Follow Steps 3 and 4 to examine their effectiveness.

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## **INDIVIDUAL GUIDED PRACTICE EXERCISE**

### **Targeting an Area for Action Research**

The following exercise is provided in an attempt to help you personalize the materials just presented. In this exercise, you will be asked to observe, conceptualize, and reflect on a potential area of concern that may benefit from action research.

- Step 1. Select a classroom teacher and simply make observations about the teacher's decisions and behaviors during a defined time frame (e.g., 30 minutes).

- Step 2. Attempt to identify a potential problem being exhibited by one or more students in that setting. For example, are there any children not attending to the teacher?
- Step 3. Keep detailed notes describing how the teacher is addressing this specific problem. Did the teacher go over to the inattentive student? Did the teacher verbally reprimand the student?
- Step 4. Collect data that might reflect on the impact or effect of the teacher's actions. How did the student respond? How about other students?
- Step 5. Using your description of the problem area, the steps implemented by the teacher, and the apparent impact, identify an alternative set of action steps you may have implemented or would implement at this stage of the process. What is the basis (e.g., theoretical, empirical, or experiential) for your decision?

### Directions

Using a search engine or portal such as yahoo.com (Yahoo), lycos.com (Lycos), or av.com (Alta Vista), search the following terms:

- ◆ reflective teaching
- ◆ action research

### Connections

In this and all of the remaining chapters you will be invited to "surf the net" and make connections. The Internet allows you to connect not just with a wealth of information, but also with a vast pool of other professionals.

The exercises presented in the Connections section of each chapter are designed to expand and enrich the material presented within the chapter. Further, these exercises are created to provide you with the opportunity to connect with professionals who, like you, are reflective in practice and in pursuit of information and strategies that will increase their classroom effectiveness.

Simply scan the resources that are brought to your attention as a way of beginning to understand the value and general acceptance of those approaches to teaching. Begin to create a list of professional exchanges or web sites that you could visit at a later time.

## ◆ Key Terms

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|                          |                    |                              |
|--------------------------|--------------------|------------------------------|
| action research          | reflection         | systematic observations      |
| applied research         | reflective teacher | systematic reflection        |
| cyclical inquiry process | scientific inquiry | teacher as action researcher |

## ◆ Suggested Readings

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