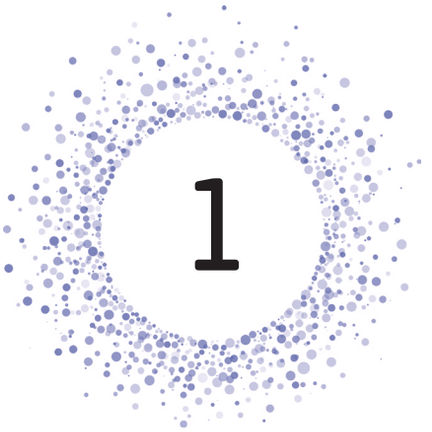


1

Introduction to Action Research

Action research: "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 or refining his or her actions."

—Sagor (2000)

WHY CONDUCT ACTION RESEARCH?

Listening to politicians and policy makers, one might conclude that the consumers of education—parents, students, and their future employers—are those most passionate about school improvement. While the general public is clearly interested in school reform, no group of people are more emotional and passionate about promoting universal student success than classroom teachers. Most days, even the most celebrated teachers, who are teaching the highest-achieving students, leave their classrooms frustrated, feeling that despite their best efforts, each individual student didn't progress as far as he or she might. The ritual is replayed on a regular basis; exhausted teachers drive home every day wondering why things hadn't gone better and then hoping against hope that tomorrow will be a better day.

Let's begin by unpacking the concept of universal student success. The examples contained in this edition of *The Action Research Guidebook* were chosen to illuminate the challenges and opportunities today's educators face with a workforce that is largely drawn from the majority culture while the student body is rapidly getting more diverse racially, ethnically, and by educational need. Whatever instructional approach you ultimately choose to implement to assist your students, we want these pages to provide a

real-time lens through which you can examine the alignment of your intent with its actual impact on your students. As pedagogy and policies adjust to meet the needs of twenty-first-century citizens, action research will offer an opportunity for you and your colleagues to examine which approaches are really working and for whom.

We've yet to meet the teacher who didn't enter the profession with a commitment to helping every one of his or her students prosper. Andy Hargreaves (1991) has insightfully pointed out that the greatest emotional turmoil faced by contemporary public school teachers is guilt. This guilt grows from an acceptance of the reality that they seem unable to generate the level of student success they desire. It is clear to anyone familiar with today's schools that this guilt syndrome, the debilitating experience of continually falling short of your own high expectations, isn't the result of a lack of commitment, caring, or intellect.

Several things conspire to keep educators in this chronic state of feeling that they are coming up short. One is the high expectations held by teachers, parents, and society. There is no question that the higher the bar, the greater the pressure. But no one who cares about youth would want the bar lowered. Nevertheless, while we pursue high expectations, we should acknowledge that the goal of universal student success, a dream held by most dedicated educators and an expectation now codified through state and federal regulations, has never been realized on a large scale. To our knowledge, in the history of humankind, no community has ever succeeded in getting *all* its children to high levels of performance on meaningful standards. However, that is our dream as well as the expectation of many other educators committed to equitable education. What this means for educators pursuing the simultaneous goals of equity and excellence is not only that we are pursuing lofty goals but that we are pushing ourselves to travel where no one has ever traveled before. For this reason, it isn't surprising that so many of our colleagues feel they have been abandoned in the wilderness without a guidebook, a map, or a recipe.

Besides having to deliver on their own and society's high expectations, there are three other significant factors that we believe contribute to chronic educator frustration:

- The complexity of teaching and learning
- The manner in which teacher work is organized
- The increasing diversity of student needs

The good news is that we can address all three of these factors while simultaneously pursuing the goal of universal student success.

THE COMPLEXITY OF ROUTINE INSTRUCTIONAL DECISIONS

Any problem we confront—be it personal, social, or scientific—can be expressed in the form of a mathematical equation. Arriving at a thoughtful solution requires considering all potential possibilities and probabilities. Every variable (factor) involved in the decision needs to be considered in light of (and multiplied by) each of the other variables. This is true for

simple as well as complex problems. For example, even when dealing with something routine, such as deciding the best outfit to wear to work on Thursday, once we review the decision-making equation, we can easily see its complexity. The equation for choosing an outfit for Thursday might be illustrated as follows:

$$(A) \times (B) \times (C) \times (D) \times (E) = X$$

A = Shirt choices

B = Pants choices

C = Jacket/sweater choices

D = Sock choices

E = Shoe choices

The more complex problem, confronted at least twelve times per day by the typical elementary teacher and minimally five times daily by the typical secondary teacher, is determining the most appropriate answer to the question, What is the best strategy for teaching this content to this particular group of learners?

Coming up with a viable answer to that question requires the teacher's consideration of a multitude of variables. To illustrate, let's assume we are middle school math teachers preparing a lesson where we will be introducing the concept of signed numbers. The set of variables we must take into account begin with the relevant student affective factors. For example, we will need to consider how each one of the students feels about the teacher, about math, about himself as a math learner, about his peers in the class, and so forth. Then, we will need to multiply these variables by thirty (or the number of students in the class), since the goal is meeting each student's individual needs. If this sounds complex, just wait; this is only the beginning.

Of course, we must also take into account the unique cognitive characteristics of each learner. For example, what prerequisite skills does the student possess, or what skills is the student missing? Where is this student developmentally? What are her strongest learning styles? And what cultural and conceptual understandings is she bringing to the learning of this particular math concept?

That's a lot to take into account, but simply knowing the affective and cognitive characteristics of each one of our students is only one aspect of the equation. Because even if we understand each student perfectly, that still won't be enough to inform us on how we should teach the class. There are at least two other sets of factors that must be considered by a teacher when designing a lesson. As professionals, we will minimally want to consider the knowledge base on culturally responsive teaching and middle school pedagogy (methods of teaching) so we can choose the most appropriate strategy for our students. For example, we could elect to teach this particular content using direct instruction. Alternatively, we could use individually guided instruction, cooperative learning, demonstrations/modeling, and so on. As complex as all this is, just considering these affective, cognitive, and pedagogical factors still won't be enough to solve this equation. For meaningful learning to occur, our lesson plans will need to be grounded in a thoughtful understanding of the discipline itself. Specifically,

why are we teaching this particular piece of content (in this case, signed numbers)? How does this concept fit with the previously taught content, and how will it relate to the upcoming material? What are the specific skills we want our students to gain from the study of this material?

Without belaboring the statistical aspect of this decision-making equation, it should now be clear that each and every lesson-planning decision made by a professional educator requires the consideration and integration of hundreds of factors. In reality, the design of an appropriate lesson for a diverse class of public school students is one of the most complex tasks any contemporary professional might ever be asked to tackle alone.

The Way Teacher Work Is Organized

But the complexity of the decision making is only one part of the problem. After all, in many fields, being expected to creatively solve complex problems is not a source of frustration or dissatisfaction. In fact, for many professionals, active engagement in the problem-solving process is the very thing that makes their work fun and motivating. Even as complex as teaching is, we aren't the only practitioners that are expected to grapple with perplexing, mind-numbing problems on a daily basis. So why does the complexity of designing innovative solutions to persistent problems of student learning prove more frustrating for educators than for professionals in other fields?

To answer that question, we need to take a look at the second problematic issue: the work context for most teachers. Even when the issues that a professional must overcome are complex, if the working conditions are such that the practitioner believes she has a reasonable chance of prevailing, there will be justification for optimism. Unfortunately, the reverse is also true: If the conditions of the work are such that it is unreasonable for a practitioner to expect success, then pessimism, alienation, and burnout are to be expected.

In other fields where practitioners are expected to prevail over unique and complex problems, two types of assistance are usually provided: adequate planning time and a support staff. Unfortunately, most classroom teachers aren't provided this type of assistance. Typically, classroom teachers work in isolation and are provided with minimal planning time. These are critical working-condition issues that will need to be addressed. Hopefully, one day we will develop the political will to provide these resources for all classroom teachers. Realistically, however, this isn't likely to occur in the immediate future. On the positive side, there are things that can be done to address the conditions of work in the short run. This is where this book fits in.

Action research is a small idea. It involves examining data on one's work to help improve one's performance. Although there isn't consensus on a single set of processes or steps that constitute action research, as presented here, action research is a straightforward four-stage process. The four stages of the action research process are as follows:

1. Clarifying vision and targets
2. Articulating theory
3. Implementing action and collecting data
4. Reflecting on data and planning informed action

These four stages help bring to the surface the critical knowledge and insights needed to improve our practice and move us ever closer to the goal of universal student success. As with many simple ideas, the ramifications can be huge. The greatest virtue of action research is its potential for radically transforming some of the most critical working conditions of the classroom teacher, specifically those conditions that, when left unaddressed, have been shown to frustrate and burn out the best and brightest. The cultural norms and organizational practices that support professional inquiry have an impact on student performance (Reeves, 2010). In schools where the ethic of action research has been institutionalized, teachers routinely experience success, as demonstrated by continually improving levels of student performance and a reduction in achievement and opportunity gaps (Hattie, 2008; Little, 1982; Rosenholtz, 1989). Better yet, in these settings, teachers find their work becomes more satisfying, more energizing, and less guilt producing (Nir & Bogler, 2008).

In the chapters that follow, we will explore numerous strategies used by teachers and school leaders as they work though the four stages of the action research process. As you read through this text, you will encounter specific examples of teachers working through each of the four stages and have an opportunity to examine the strategies they are using. Each example will be followed by step-by-step instructions and sample materials for you to use or adapt for use with your own action research. As we wind our way through the four-stage process, we will continue to return to the issues of teacher working conditions (complexity of the challenges, limits on time and support, etc.) and discuss how incorporating the habits of action research into your work might help you improve the conditions of your own work.

The Increasing Diversity of Student Needs

It is clear that America has been and continues to evolve demographically. According to the U.S. Census, "By around 2020 more than half the nation's school children are expected to be part of a minority race or ethnic group" (U.S. Census Bureau, 2015). The fact that our schools and classrooms are increasingly populated with children from a myriad of backgrounds provides us with great opportunities. The mosaic of cultures that make up our classrooms has the potential to enrich the education of all our students. Being educated in a diverse community should enhance any young person's appreciation of art and culture; it will help them improve their ability to understand, empathize, and problem solve. And lastly, it will provide them with preparation and appreciation for living in a global society. But change in the racial and cultural composition of our schools is not the only area where we are seeing increased diversity. Like us, most educators welcome the move for greater heterogeneity in our classrooms. We enjoy having boys and girls learning together, and nearly everyone is in agreement that the movement to educate all young people with physical and/or learning challenges with their peers in the mainstream has provided benefits for everyone concerned.

Having schools and classrooms enriched by diversity is full of plusses for our students. Yet this same diversity presents challenges for educators. It requires us to question some of our long-held (and too often unchallenged) assumptions about how teaching and learning should be organized.

The most powerful of these "constraining myths" is what Richard calls "the myth of homogeneity" (Sagor & Rickey, 2012). The myth of homogeneity is predicated on the assumption that the prime organizing unit for schooling is the class rather than the individual student. Consequently, we attempt to make our schools large enough so that building administrators are able to create classes of students who are so alike in their learning needs that all a teacher will need to do is design and teach a lesson that is appropriate for that class. This seems so efficient. For example, all a fourth-grade teacher needs to do is teach the fourth-grade curriculum. The assumption being that all of her students will have already mastered the third-grade material, and they now need the skills she plans on teaching (i.e., what's contained in the fourth-grade curriculum). Yes, on the surface, it sounds rational and efficient. But as soon as teachers begin conducting action research in their classrooms and examining individual student data, they discover that all the fourth graders aren't alike, regardless of how well the administration may have crafted the classroom assignments. Even in the largest schools with the most sophisticated student assignment systems, teachers find they have children who still aren't proficient with the skills taught in third grade sitting next to others who may be ready to tackle some of the challenges that normally aren't even introduced until sixth grade.

When teachers begin collecting data from students on their students' classroom experiences and looking for patterns in those data, the myth of homogeneity is shattered, and there is no going back. Seeing your classroom as a collection of unique individual learners and not as a single unit creates a paradigm shift that can make teaching both more rewarding and more challenging. As we work our way through the four-step action research process, we will explore strategies that will help you respond to the particular learning needs of each of your students and empower them to make the most of their experience in your class. You will become better at personalizing your instruction, and as a result, students will feel better about themselves and more at home in your classroom.

KEY TERMS AND CONCEPTS

Action Research

At the start of this chapter, we offered a definition of action research that said action research was any investigation conducted *by the person or the people empowered to take action concerning their own actions, for the purpose of improving their future actions*. At this point, it would be helpful to expand on that definition so that we can clearly distinguish *action* research from other forms of scientific or educational research. The best way to decide if an inquiry qualifies as action research is to ask three questions regarding the proposed study. If the answer to all three questions is "yes," then the inquiry justifiably fits under an action research umbrella. If the answer to any of the questions is "no," then while it might be an area worth investigating, action research probably isn't the appropriate approach. The questions are as follows:

1. Is the Focus on Your Professional Action?

If you are studying your own work, then the answer to this question is clearly "yes." In addition, if you are studying an issue that you are considering making part of your work in the future, then the answer can also be "yes." According to Kemmis and McTaggart (1988), there are three types of action that can legitimately serve as foci for action research:

Research of Action (Past Action): In this case, the action being studied has been completed (such as an evaluation study).

Research in Action (Present Action): In this case, the action is underway (as in a monitoring study).

Research for Action (Future Action): In this case, the action will occur in the near future (for example, evaluating materials being considered for adoption).

2. Are You Empowered to Adjust Future Action Based on the Results?

This question pertains to your sphere of influence. Most teachers are free to adjust their instructional strategies as they deem appropriate. Therefore, a proposed investigation into a new instructional strategy probably merits a "yes" to this question. This is because most teacher-researchers are free to adjust their teaching based on the data they collect in their classroom. Likewise, the members of a school's improvement team who were tasked with investigating a schoolwide issue and have been empowered to propose changes for implementation in their building could answer this question with a "yes." If, however, you have reason to believe that circumstances will prevent you from implementing changes, regardless of the quality and quantity of the data you amass, then you will have to answer "no" to this question.

3. Is Improvement Possible?

Although we all know that research for its own sake is a worthy pursuit, the only justification for practicing K–12 educators to invest their finite time in research is if their particular inquiry holds promise for increasing the success of their teaching or the learning in their schools. If you hold serious doubts that performance can be improved in a particular area, then you would be wise to avoid action research concerning it. If you are reading this text, it is highly likely you are an educator in pursuit of universal student success who believes improvement for every child is possible.

To recap, an investigation qualifies as action research if it pertains to one's professional action, focuses on an aspect of one's work where one can exert a significant degree of control, and thoughtfully focuses on a performance where (with enough information) improvement could be expected to occur.

The Four Stages

As you pursue the action research process through its four sequential stages, you will find that each stage is designed to help you answer a key question.

Stage 1: Clarifying Vision and Targets

Key Question: What do I want to accomplish?

In Stage 1, action researchers clearly enunciate their goals, clarify each of the subskills or attributes that contribute to success for that goal, and identify specific criteria that can be used with validity and reliability to document changes in performance on that goal. Ways to accomplish the tasks of Stage 1 and answer its question are the focus of Chapters 2 and 3.

Stage 2: Articulating Theory

Key Question: What approach do I believe has the greatest potential for helping me to realize my goal(s)?

In this stage, the action researcher articulates a detailed rationale for proceeding in a particular fashion. Earlier, we talked about the many factors that need to be considered when making a lesson-planning decision. When there is no proven best way to accomplish a goal, professionals may elect to pursue alternative strategies that seem theoretically sound. It is in Stage 2 when the action researcher is engaged in a thoughtful, deliberative planning process—one that has him or her examining and incorporating all of the dynamic relationships and interactions he or she believes might exist between the relevant factors that influence success on the performance targets identified in Stage 1. We will work through several strategies designed to help you identify and articulate your theory of action and answer Stage 2's key question in Chapters 4 and 5.

Stage 3: Implementing Action and Collecting Data

Key Question: What data will I need to collect if I am to understand the effectiveness of my theory of action?

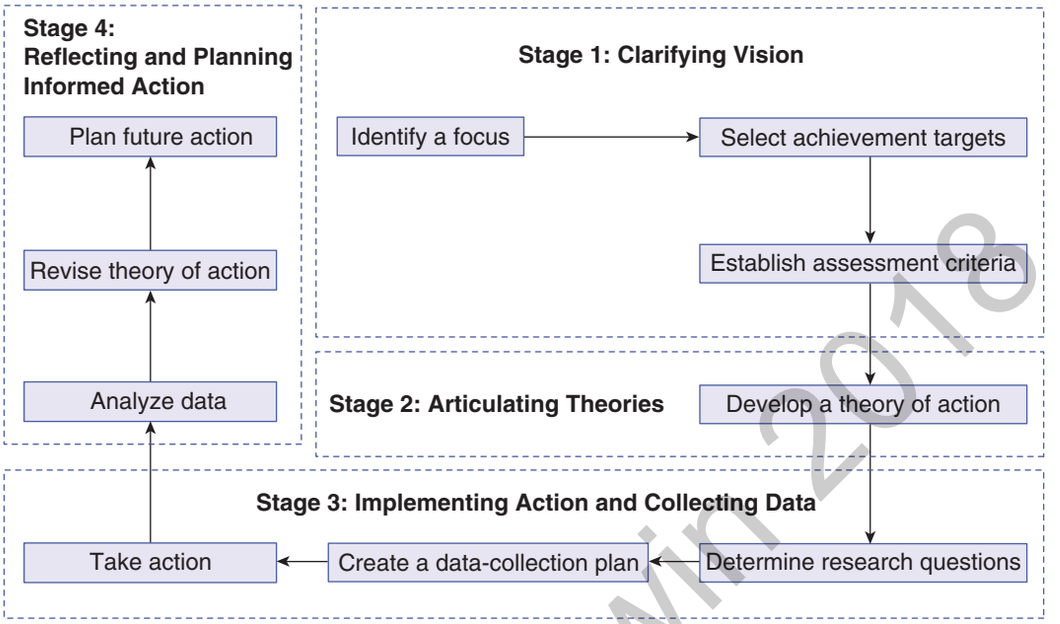
This is the portion of the action research process that takes place as we are doing our work—that is, while we are taking our professional action. It is here that we carry through on our theory of action while systematically compiling information (data) that will help us understand what is going on, both above and below the surface. It is at this stage where we determine what has been accomplished and the relationship between the actions we've taken and the results obtained. Our work on Stage 3 will begin in Chapter 6, where you will learn how to generate a set of research questions to guide your study. Then, in Chapter 7, you will develop a viable data collection plan designed to produce valid and reliable answers for your research questions.

Stage 4: Reflecting on the Data and Planning Informed Action

Key Question: Based on these data, how should I adjust my future actions (teaching)?

Stage 4 is where you complete your first lap around the action research cycle. It is here that action researchers are invited to return and revisit their original visions or targets (Stage 1), as well as their theories or best thinking on how to realize that vision (Stage 2). Then, based on data regarding the impact of specific actions (Stage 3) and an analysis of those data, action researchers can produce a revised theory of action, which will then become

FIGURE 1.1 Action Research Cycle



the basis for their future action. Figure 1.1 illustrates the cyclical nature of the work accomplished through the four stages.

The Two Categories of Action Research

Action research, like most types of inquiry, is generally undertaken for one of two fundamental purposes:

1. To determine what is currently occurring or
2. To test a hypothesis (theory)

When researchers seek to understand what is occurring, they are engaging in what is called *descriptive research*. When the research is primarily concerned with testing a hypothesis, the inquiry is called *quasi-experimental research*. (The qualifier *quasi* is used here because in the social sciences, it is both ethically and practically impossible to implement a classic experimental design, since that would require a control group. Consequently, research that seeks to test a hypothesis without a control group is defined as quasi-experimental.)

Quasi-Experimental Research

As teachers, we are frequently involved in quasi-experimental research, although most of us haven't been in the habit of documenting our studies. Every day, teachers make use of the best approaches they know. Yet it is the very rare day when all of the students in a class accomplish everything they possibly could. More often than not, when we reflect on why a student

or group of students hasn't succeeded, it triggers some creative thinking. We find ourselves asking, "What if . . . ?" When we are pondering the what-ifs, we are considering ideas or hypotheses that we might investigate. If we decide to attempt something new, we are saying that we believe this approach is likely to produce more superior outcomes than had been obtained before. When you decide to focus on the use of a new or modified approach, your research becomes a quasi-experimental study of the adequacy of that approach or, what is called in this text, your *theory of action*. Because of the dynamic and ever-changing nature of teaching, it shouldn't be surprising that this is the most common form of action research undertaken in schools.

Descriptive Research

There are many times when we find ourselves concerned about something occurring in our classrooms, with our kids, or in our schools. We know that we want to do something about the problem, but we don't feel we currently understand the issue in the context of our school or classroom well enough to design an effective strategy for improvement. When this occurs, our long-term goal is no different than that of educators who have decided to conduct quasi-experimental research. In both cases, the desire is to learn what we need to know to improve performance; it is only the immediate focus that is different. While the lens of the quasi-experimental researcher is trained on the efficacy of a particular approach (the theory of action) and its impact, the lens of the descriptive researcher is on the system or approach that is currently in place (the *operative* theory of action) and trying to understand its workings. Whatever the focus of your study, be it your theory or the operative theory, at Stage 4, all action researchers end up doing the same thing: They produce a plan for future action based on valid and reliable data regarding what has transpired. Figure 1.2 contrasts these two types of research across the four stages of the action research process.

It is worth noting that these two categories of research (quasi-experimental and descriptive) are not mutually exclusive. Frequently, they will even occur simultaneously.

In Chapters 7 and 8, we will explore an example of action research being conducted by a middle school principal in an urban school district in the Pacific Northwest, Mr. Johnson. He is implementing a theory of his own design. His theory of action involves, among other things, providing professional development for teachers on the use of specific strategies to increase overall student engagement, especially the engagement of males of color. The major thrust of his study will be quasi-experimental, as he wants to understand if and how his theory of action has succeeded in furthering the goal of increased student engagement across all categories of students. But at the same time, he will be conducting a second study within a study. This is because he is particularly concerned about the overrepresentation of students of color in disciplinary referrals. His two studies are related because he suspects that the increased disciplinary referrals result from an overall passive culture that has become pervasive in the school's classrooms and that results in significant disengagement of students of color.

FIGURE 1.2 Comparison of Four-Stage Action Research Process Between Quasi-Experimental and Descriptive Research

Stage	Quasi-Experimental Research	Descriptive Research
1: Clarifying vision and targets	The researchers draw clear and robust pictures of the desired outcomes. An attempt is made to visualize and imagine success in as much detail as possible.	Same as quasi-experimental
	The researchers identify the subcomponents of their vision. For each critical component, they decide on criteria to assess changes occurring with that component.	
2: Articulating theory	The researchers consider their own experience as well as the experience of others attempting to realize the vision and its components.	The researchers consider their own experience as well as the experience of others attempting to realize the vision and its components.
	Based on this examination, the researchers develop a new theory of action that involves a modification of past practice and holds promise for improving performance.	After reflecting on personal experience and the experience of others, the researchers conclude that more information (on what is occurring and how things are working) would be helpful.
	The new theory of action becomes the focus of study.	The researchers clarify the operative theory of action (what is now being done), which becomes the focus of their study.
3: Implementing action, collecting data	The researchers examine the new theory of action and determine a set of questions that they need or want to have answered.	The researchers examine the operative theory of action, looking for aspects of the theory (strategies, materials, outcomes, and so on) whose effects need to be better understood.
	The researchers develop a viable plan for collecting the necessary data.	The researchers develop a viable plan for collecting the data needed to illuminate the implementation of the operative theory.
	The researchers implement the new theory of action and collect the data as outlined in their plan.	The researchers collect the data as indicated in their plan.
4: Reflecting on data, planning informed action	The researchers compile and summarize the data collected in Step 3 and generate a list of findings.	Same as quasi-experimental
	Using these findings, the researchers summarize any insights gained regarding the realization of the vision.	
	The researchers develop a revised theory of action, incorporating new and relevant insights.	
	The researchers make plans to implement the revised theory of action.	

In order to better understand this relationship, he will be examining the experience of a subgroup of students in three classrooms at the middle school. He hopes this descriptive action research study will help him and his faculty understand the range of experiences students of color tend to encounter within the school's instructional environment. Mr. Johnson's hope is that after gathering more data on these students' experiences, he will be better able to develop a theory of action on improving the level of engagement for all students, especially those students of color who now seem to be minimally engaged. Implementing the resulting theory of action should enable these students to achieve greater success at school. Testing that theory or other theories that emerge will then become the basis for quasi-experimental action research carried out by the faculty.

It should be noted that *descriptive* and *quasi-experimental* are not simply synonyms for *qualitative* and *quantitative* research. While qualitative research methods are used to paint a robust picture of a phenomenon, they are also frequently used by action researchers conducting quasi-experimental studies. For example, if we were trying to determine the success of a new reading program across a culturally diverse student body (a quasi-experimental study), we might well choose to use qualitative data drawn from student reading journals and observational notes to illuminate the phenomena under study. Likewise, a team conducting a descriptive study aimed at understanding the climate at their school might make use of a numerical survey in which students and teachers rate attributes of the school on a ten-point scale (a quantitative method). In reality, most action research studies end up making use of both qualitative and quantitative data collection methods.

UNIVERSAL STUDENT SUCCESS

As mentioned earlier, most teachers approach their work with very high expectations. The disparity we witness in opportunities and outcomes for various groups of students most often results from well-intentioned educators proceeding to action without a process for carefully examining and revising their practice. Most educators share the goal of having all students producing their very best work and becoming as skillful as possible. This is not unlike physicians approaching their work with the goal of curing *every* condition and helping *every* patient live a long and vigorous life.

Realistically, we may know that this can't and won't happen all at once. While there are numerous texts and training programs available to assist educators with shifting their paradigms related to the success of every child, action research provides a shift in practice that will accelerate the evolution of those paradigms. Rome wasn't built in a day, and all human illness will not be eradicated in one fell swoop. Likewise, figuring out how to assist all learners in realizing their potential will take some time. But as inquiring professionals, we want to be continuously advancing our wisdom on what will be required to realize a vision of universal success. In the next chapter, we begin working on Stage 1, where you will be asked to take stock of your personal vision of success. To accomplish this, you will articulate a picture of truly outstanding performance. That picture will be detailed enough to enable you to incrementally measure

your success as you move ever closer to assisting each of your students in achieving proficiency. When we use the term *universal student success*, that is precisely what we mean. It is that promised land that we are constantly striving for, that wondrous time and place where all of us educators are in possession of all that we need to know to maximize the learning of all of our students.

With this as our goal, it is likely that our collective search for answers to the perplexing problems of teaching, learning, and school organization will keep us occupied for the rest of our careers. However, as long as we are purposefully engaged in the action research process and continue to learn our way forward along the road to universal student success, we can anticipate a career of repeated celebrations, times when we can stop and collectively acknowledge each and every breakthrough we are making along the way to the promised land.