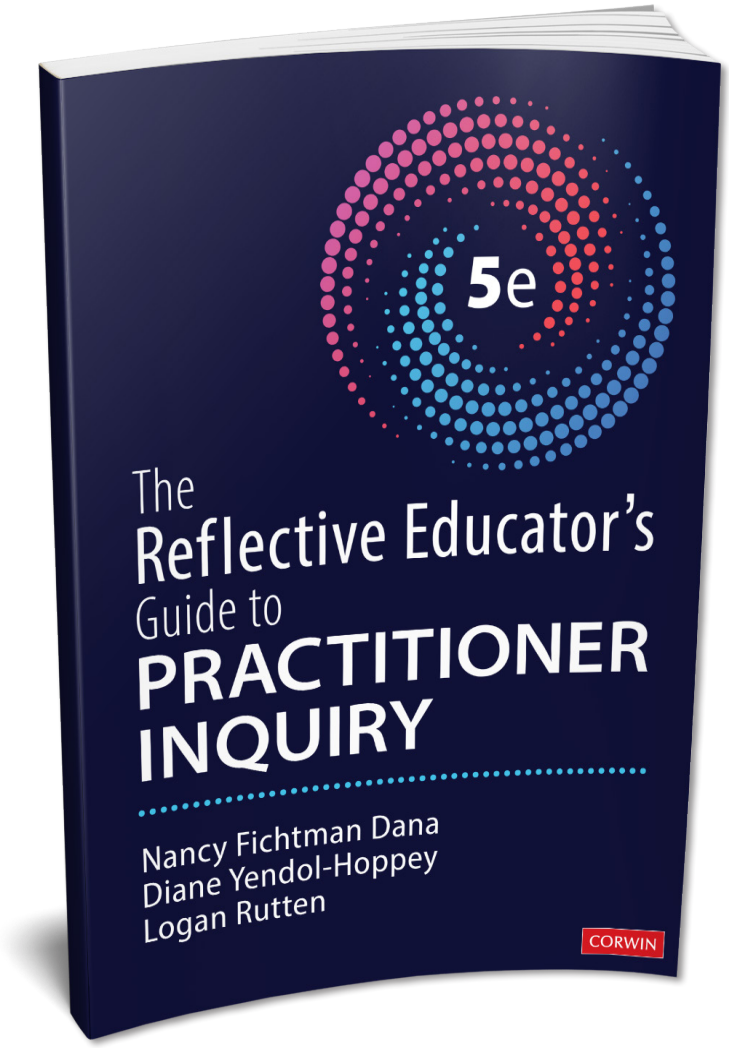


Thank you

FOR YOUR INTEREST IN CORWIN

Please enjoy this complimentary excerpt from The Reflective Educator's Guide to Practitioner Inquiry.

LEARN MORE about this title!

CORWIN

Preface

We (Nancy and Diane) have had the joy of reading about, studying, writing about, doing, and facilitating others' learning through inquiry since the late 1980s. We have long recognized that as we age as inquiry authors, scholars, and advocates, the power of inquiry will endure well beyond the time we have left to contribute to the movement that we love. For this reason, for the fifth edition, we wished to invite a junior scholar, who is as passionate about inquiry as we have always been, to join our writing team and carry this work forward. We were delighted when Logan Rutten, assistant professor at the University of North Dakota, accepted our invitation, and we proudly introduce the reader to the third member of our authorship "we" (Nancy, Diane, and Logan).

Working together as an authorship trio has greatly enhanced the ways we present the inquiry experience to the reader in the fifth edition, which followers of our book will recognize has had a slight title adjustment from *The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learn Through Practitioner Inquiry* (a mouthful) to a shorter, simpler title: *The Reflective Educator's Guide to Practitioner Inquiry.* We believe this modification for the fifth edition better represents the book as a whole as well as who the book is for, as while many of the examples we use in the text emanate from teachers' classrooms, other educational professionals who do not have their own classrooms such as principals, other district administrators, librarians, professors, and the like, have used this book to learn about and guide their own inquiries. Furthermore, we use the terminology *practitioner inquiry* throughout the book, rather than *classroom research*, so we thought it made sense to bring these words from the subtitle into the main title itself.

While there has been a slight title change, the core of the fifth edition has remained the same, while simultaneously offering updated examples, a reorganization, and new material we believe will enhance

the reader's inquiry experience. Our fifth edition renovations include an expanded discussion of inquiry as stance and repositioning of the inquiry cycle diagram from the final chapter to the book's first few pages. This expanded discussion and repositioning will set readers on their inquiry journeys with a clear understanding of the ultimate goal of engagement in the process of inquiry described in the chapters ahead.

Speaking of inquiry journey, for the fifth edition we have worked hard to elevate the journey metaphor throughout the book. With the inquiry cycle illustration now positioned at the start of the book, we repeat the illustration throughout the text with a "You are here" notation, echoing a map where you find a "You are here" marker to help orient you as you chart your course. We have also improved our discussion of the circuitous nature of inquiry, both directly in our writing and with a new text feature that invites the reader to skip ahead and circle back to different parts of the book as needed throughout their inquiry journey.

In Chapter 1, we also added two new sections, "How Is Inquiry Changing With the Times?" and, as one of the most impactful changes of the times is the emergence of AI on the educational landscape, "What Is the Relationship Between Teacher Inquiry and AI?" You will note in this section that we introduce the reader to a textbox feature in the book called "AI Moments." We, or inquirers with whom we have worked, have written seven of these textboxes that appear throughout the book, adding a modern take on both the topics relevant for educators to inquire into and the use of AI to enhance each component of one's inquiry journey.

Chapter 4 is a brand-new chapter that we believe makes an important addition to the text. This chapter focuses on planning your inquiry and takes the reader step-by-step through the planning process. In previous editions, the chapters on wondering development and data collection ended with exercises that helped the reader plan their inquiry, but that approach pretty much left the reader on their own to apply what they had learned in those chapters to the design of their work. This new chapter takes the reader by the hand and helps them apply what they learned about inquiry thus far in the book to the creation of their own inquiry plan. This approach also enabled us to streamline the chapter structure from the fourth edition by subsuming the content of three short fourth-edition chapters (Chapter 3—Learning With and From the Literature; Chapter 4—Learning With

and From Your Colleagues; and Chapter 5—Considering the Ethical Dimensions of Your Work as an Inquirer) into the new chapter on planning.

The chapters on data collection and data analysis have also been updated, with an explicit definition of data collection presented at the start of Chapter 3 and seven new exercises, designed to help inquirers practice and refine their data collection skills, ending the chapter. In this edition, we have provided a more detailed description of the formative data analysis process, capturing it with a new figure that guides the reader step-by-step through analysis of data as they are collected. Furthermore, we streamlined our discussion of summative data analysis, better integrating summative analyses with quantitative and qualitative data sources.

Finally, in our last chapter, we offer a new discussion of inquiry as process, product, *and* stance, defining each as well as illustrating the interconnectiveness among these three constructs. Reflecting new material in this edition, we have also expanded our presentation of quality indicators in this chapter to assess the products of inquiry with a total of seven indicators now presented, up from five in our previous editions. We hope our careful work updating these quality indicators will truly help teacher researchers everywhere continue to grow not only as practitioners but as researchers as well.

In addition to these chapter changes and other updates, this fifth edition continues to integrate the previous material we had available on the book's accompanying website with the text of the book itself by presenting discussion questions at the end of each chapter. After the discussion questions, we also print a summary of the online materials available to teach each chapter (many of which have been updated or added to), continuing to make the connection between the book's text and website more fluid.

The fifth edition emerges from our understanding of the literature in the areas of professional learning, action research, teacher research, qualitative research, quantitative research, and the process of change as well as our collective experience working with practicing and teacher candidates engaged in inquiry for more than 30 years. Over those 30 years, we have seen how inquiry both endures through the times and shifts in response to the times. To reflect the simultaneously enduring and shifting nature of inquiry, we have purposefully left some of the initial examples of teacher inquiry from the first edition published in 2003 that remain relevant today but also replaced some examples

from the first four editions that were outdated with new examples gathered from teachers since the publication of the fourth edition in 2020. What we have learned from all the many teacher inquirers we have worked with over the past 30 years about how and why they inquire provides insights into the power that teacher inquiry holds to transform classrooms and schools to places where teachers' voices contribute to the knowledge generated about teaching and learning.

Teacher Inquiry Defined

1

Teaching involves a search for meaning in the world. Teaching is a life project, a calling, a vocation that is an organizing center of all other activities. Teaching is past and future as well as present, it is background as well as foreground, it is depth as well as surface. Teaching is pain and humor, joy and anger, dreariness and epiphany. Teaching is world building, it is architecture and design, it is purpose and moral enterprise. Teaching is a way of being in the world that breaks through the boundaries of the traditional job and in the process redefines all life and teaching itself.

—William Ayers (1989, p. 130)

Whether you are a beginning or veteran teacher, an administrator, or a teacher educator, when you think of teaching, learning to teach, and continuing your growth as a teacher, you cannot help but be struck by the enormous complexities, paradoxes, and tensions inherent in the act of teaching, captured so eloquently in the quote from William Ayers. With all of these complexities, paradoxes, and tensions, a teacher's work shapes the daily life of his or her classroom. In addition to responding to the needs of the children within the classroom, a teacher is expected to implement endless changes advocated by those outside the four walls of the classroom—administrators, politicians, policymakers, and researchers. While teachers have gained insights into their educational practice from these groups, teachers' voices have typically been absent from larger discussions about educational change and reform. Historically, teachers have not had access to the tools that could have brought their

knowledge to the table and raised their voices to a high-enough level to be heard in these larger conversations.

Teacher inquiry is a vehicle that can be used by teachers to untangle some of the complexities that occur in the profession, raise teachers' voices in discussions of educational reform, and ultimately transform assumptions about the teaching profession itself. Transforming the profession is really the capstone of the teacher inquiry experience. Let's begin our journey into the what, why, and how of teacher inquiry with a brief overview of this very complex, rewarding, transformative, provocative, and productive process.

What Is Teacher Inquiry?

First and foremost, inquiry is a stance—an intentional, enduring way of approaching your teaching. Working from an inquiry stance entails a commitment to addressing all the great complexity inherent within teaching while continuously growing your ability to enhance the learning and life chances of every student you teach. An inquiry stance is rooted in curiosity, always remaining open to and inquisitive about your students and teaching by actively noticing and subsequently wondering about your day-to-day teaching practices. For example, when you teach from an inquiry stance, you might notice that some of your students seem engaged and thriving during a lesson while others seem simultaneously disengaged and not yet understanding. This noticing might lead you to wonder: Why do some of my students seem to grasp the concept being taught in this lesson while others seem to struggle? The important questions, or wonderings, that emerge when you approach your teaching through an inquiry stance can be addressed through an inquiry process that entails:

- systematically capturing the thinking and experiences relevant to your wondering that occur as a part of your everyday work (data collection);
- intentionally reflecting on what you have captured and the meaning it holds for your own learning and the learning of your students (data analysis);
- making informed changes to improve the learning and life chances of your students (action); and
- communicating what you have learned through inquiring with others (sharing).

The term *inquiry stance,* or *inquiry as stance,* was first coined by Marilyn Cochran-Smith and Susan Lytle. When these scholars began writing about inquiry as stance in the 1990s, they described it as follows:

> In everyday language, "stance" is used to describe body postures, particularly with regard to the position of the feet, as in sports or dance, and also to describe political positions, particularly their consistency (or lack thereof) over time. . . . In our work, we offer the term "inquiry as stance" to describe the positions teachers and others who work together in inquiry communities take toward knowledge and its relationships to practice. We use the metaphor of stance to suggest both orientational and positional ideas, to carry allusions to the physical placing of the body as well as to intellectual activities and perspectives over time. In this sense the metaphor is intended to capture the ways we stand, the ways we see, and the lenses we see through. Teaching is a complex activity that occurs within webs of social, historical, cultural, and political significance. Across the life span, an inquiry stance provides a kind of grounding within the changing cultures of school reform and competing political agendas. (Cochran-Smith & Lytle, 1999, p. 288–289)

Since then, Cochran-Smith and Lytle (2009) have authored an entire book entitled *Inquiry as Stance,* carefully choosing these words for their title to suggest that inquiry is more than the sum of its parts (i.e., developing questions, collecting and analyzing data, taking actions for change based on what was learned through the process, and sharing that learning with others). While inquiry does, indeed, involve a systematic and intentional process of investigating one's teaching, working from an inquiry stance is truly about "a worldview and a habit of mind—a way of knowing and being in the world of educational practice that carries across educational contexts and various points in one's professional career and that links individuals to larger groups and social movements intended to challenge the inequities perpetuated by the educational status quo" (Cochran-Smith & Lytle, 2009, p. vii). This stance can provide both early-career and veteran educators a firm foundation for a career in education—and a way of responsibly navigating continuous change and complexity (e.g., Rutten & Wolkenhauer, 2023a, 2023b, 2024). In sum, inquiry is both a process for investigating one's teaching—and a consistent, principled way of living one's life as an educator to maximize impact. This way of living entails making life and learning conditions

Figure 1.1 Inquiry Cycle

Source: Dana (2013).

better for *all* the children we teach by cycling through the five components illustrated in Figure 1.1, either in shorter daily bursts, entire school-year investigations, or anywhere in-between. The culmination of this reflective, inquiry stance and the iterative, systematic process results in the generation of new understandings, which are the true products of the inquiry that empower teachers to strengthen their practice.

What Evidence Exists That Teacher Inquiry Is Worth Doing?

Now that we have defined inquiry, you may be thinking that it sounds okay in theory but have developed a healthy skepticism. The everyday work of teaching is challenging, and teachers are constantly asked to do more and more with less and less. If teachers are to incorporate the process of inquiry illustrated in Figure 1.1 into their very full days, it's important to know what evidence exists that it is truly worth doing.

Fortunately, evidence abounds that teachers' engagement in inquiry is indeed worth the effort. The first set of evidence comes from teachers themselves who have published their work. There are numerous collections of teacher research, and from reading and analyzing the work of actual teacher researchers that appear in these collections, it is clear that engagement in inquiry can have a powerful impact on the

professional learning of teachers and the lives of the students in their classrooms. Some of our favorite collections of teacher research include the following:

- *Creating Equitable Classrooms Through Action Research* (Caro-Bruce et al., 2007). This book shares the research of 10 educators from the Madison (Wisconsin) Metropolitan School District, whose inquiries focused on making their school district a more equitable place for all learners.
- *Empowering the Voice of the Teacher Researcher: Achieving Success Through a Culture of Inquiry* (Brindley & Crocco, 2009). This book shares the research of six teacher researchers from a single school in Florida, whose inquiries focus on better meeting the needs of middle school children.
- *Engaging in Educational Change: Voices of Practitioner Inquiry* (Fleet et al., 2016). This book contains real-life cases of several teachers across various classroom contexts in Australia, capturing their stories of inquiry to improve their practice and ultimately the outcomes for the children they teach.
- *Our Inquiry, Our Practice: Undertaking, Supporting, and Learning from Early Childhood Teacher Research(ers)* (G. Perry et al., 2012). This book shares the research of six early childhood professionals, working in both primary grades and preschool, as well as reviews of some of the finer points of the inquiry process and how it is particularly suited for early childhood contexts.
- *Promising Pedagogies for Teacher Inquiry and Practice: Teaching Out Loud* (Crawford-Garrett & Carbajal, 2023). This book contains five chapters written by teachers in New Mexico who participated in a multigenerational teacher inquiry group over a two-year period during the COVID-19 pandemic, exploring what it means to teach for social justice in politically contentious times.
- *Taking Action With Teacher Research* (Meyers & Rust, 2003). This book shares the research of six teacher researchers from the Teacher Network Leadership Institute in New York, whose inquiries focused on political action.
- *Teachers Engaged in Research* (Langrall, 2006; Masingila, 2006; S. Z. Smith & Smith, 2006; Van Zoest, 2006). This four-volume series published by the National Council of Teachers of Mathematics (NCTM) shares the inquiries of several teachers into their mathematics teaching in Grades K–2, 3–5, 6–8, and 9–12, respectively.

The second set of evidence that teacher inquiry is worth doing comes from university-based researchers. There is a large body of university-based research conducted on both teacher candidates and practicing teachers engaged in the inquiry process to better understand the impact of their work. One of the most extensive studies of impact was published by Sue Nichols and Phil Cormack in the text *Impactful Practitioner Inquiry: The Ripple Effect on Classrooms, Schools, and Teacher Professionalism* (2017). These University of South Australia faculty began their research on the process of inquiry by developing a database of 339 educators who had participated in inquiry projects with them in various capacities over the course of a 10-year timespan and successfully made contact with 290 of the individuals amassed in their database. To understand inquiry impact, Nichols and Cormack collected data from these educators in three ways: a survey, interviews with the inquirers, and interviews with the inquirers' colleagues. Among other impacts, teachers reported that engagement in inquiry enabled them to:

- view the curriculum differently;
- develop new resources;
- see new connections between practice and theory;
- increase the diversity of learning activities offered to students;
- modify existing resources to benefit student learning;
- view students from a strengths-based rather than deficit-based perspective;
- increase their use of technology to enhance learning;
- incorporate more student choice into lessons;
- increase range of assessment practices; and
- integrate inquiry as a pedagogical approach to their own teaching of students. (Nichols & Cormack, 2017, p. 14)

Complementing the work of Nichols and Cormack, several studies have also reported on the influence of practitioner inquiry on both teacher candidates' and practicing teachers' learning, concluding that practitioner inquiry can:

- enable a safe, collaborative environment to pose questions (Adams, 2016; Rutten et al., 2024; Willegems et al., 2018);
- promote growth and change in teaching practice (Dresser, 2007; Ermeling, 2010; Levin & Rock, 2003; Rock & Levin, 2002) and enhance teacher identity (Taylor, 2017);

- increase research skills and data literacy (Athanases et al., 2013; Davis et al., 2018);
- bring issues and systems of inequity into sharper focus (Rutten et al., 2022; Weisberg et al., 2024);
- facilitate meaningful changes toward educational equity (Butville et al., 2021; Crawford-Garrett et al., 2015);
- support incorporation of instructional technology (Clayton & Meadows, 2013);
- lead to increased teacher efficacy and confidence (Capobianco & Ní Ríordáin, 2015; Kinskey, 2018; Rutten et al., 2023); and
- foster both individual and collective teacher empowerment and transformation (Rutten et al., 2024).

While we share some studies on the impact of inquiry above, it is beyond the scope of this book to review *all* of the empirical studies completed by academics focused on teachers' engagement in inquiry. Many additional studies are reviewed and referenced in Marilyn Cochran-Smith and Susan Lytle's book *Inquiry as Stance: Practitioner Research for the Next Generation* (2009). It is clear from the studies we reviewed here as well as the extensive review of research on teacher inquiry in the Cochran-Smith and Lytle text that engaging in the inquiry process results in several benefits for both teacher candidates who conduct inquiry as a part of their studies in teaching at the university and practicing teachers who conduct inquiry as part of their everyday work in schools.

The publications by teachers of their own inquiries as well as publications by university-based researchers that report research efforts to understand the impact of teachers' engagement in the process attest to the important role inquiry can play in the lives of teachers and the children they teach. An additional source of evidence of the value inherent in engagement in inquiry comes from the fact that inquiry has been around for a long time, has endured through changing times, and remains relevant today. Teachers who have taught for years often report seeing many new ideas come and go over time, reducing them to educational fads. As the next sections will demonstrate, this is not the case with inquiry, providing further evidence that inquiry is, indeed, worth doing.

What Are the Origins of Teacher Inquiry?

Reviewing the history of teacher inquiry helps to make the case that inquiry is not a new educational fad that will come and go. Our history lesson begins by looking closely at three educational research traditions:

process-product research, qualitative or interpretive research, and teacher inquiry (see Table 1.1).

Table 1.1 Competing Paradigms: The Multiple Voices of Research

	RESEARCH PARADIGMS		
	PROCESS-PRODUCT	QUALITATIVE OR INTERPRETIVE	TEACHER INQUIRY
Teacher	Teacher as technician	Teacher as story character	Teacher as storyteller
Researcher	Outsider	Outsider	Insider
Process	Linear	Discursive	Cyclical
Source of research question	University researcher	University researcher	Teacher
Type of research question	Focused on control, prediction, or impact	Focused on generating descriptions or explanations of a process or phenomenon	Focused on gaining insight into a teacher's own classroom practice in an effort to make changes that will ultimately improve student learning
Example of research question	Which culturally responsive instructional strategies demonstrate the most significant impact on student motivation?	How do children experience culturally responsive instruction?	How can I use culturally responsive instruction to support my ESL students at the kindergarten writing table?

Two paradigms have historically dominated educational research on schooling, teaching, and learning. In the first paradigm, process-product research (L. Shulman, 1986) portrays teaching as a primarily linear activity and depicts teachers as technicians. The teacher's role in the process-product paradigm is to implement the research-based recommendations of outside experts, almost exclusively university researchers, who are distant from the local happenings of teachers' real-world classrooms. In this paradigm, teachers are not expected to act as professional problem posers or problem solvers. Rather, teachers are tasked with implementing approaches or interventions developed by others, such as teaching with fidelity a curriculum designed by expert researchers outside of their classrooms.

Based on their experiences with research from the process-product paradigm, many teachers have learned that it is sometimes best not to question or problematize their classroom experiences and first-hand observations because to do so may mean an admittance of failure to implement a curriculum as directed. In fact, the culture of many schools has demonstrated that teachers can suffer punitive repercussions when teachers identify current practices as problematic. Pointing out problems has often resulted in teachers being subjected to retraining or remediation. In the process-product paradigm, an educational community does not encourage active solution-seeking by professional classroom teachers but rather passive, technical implementation of other people's ideas.

In the second paradigm—educational research drawn from qualitative or interpretative studies—teaching is portrayed as a highly complex, context-specific, interactive activity. A goal of the research is often to generate a vivid description or compelling explanation of some phenomenon or process of interest. In addition, the qualitative or interpretive paradigm emphasizes investigations of important differences across classrooms, schools, and communities. While acknowledging the value of research from the qualitative or interpretive paradigm, Clark (1995) problematizes this paradigm's tendency, over time, to ignore important contextual differences as follows: "Description becomes prescription, often with less and less regard for the contextual matters that make the description meaningful in the first place" (p. 20).

Although qualitative or interpretive research does attend to issues of context, most of the studies emerging from this research paradigm are still conducted by university researchers and are intended primarily for academic audiences. Such university research can provide valuable insights into the connections between theory and practice, but, like the process-product research, the qualitative or interpretive approach limits teachers' roles in the research process. In fact, the knowledge about teaching and learning generated through university study of theory and practice is still defined and generated primarily by outsiders to the school and classroom. While both the process-product and qualitative research paradigms have generated valuable insights into the teaching and learning process, they have too often excluded the voices of the people closest to children—classroom teachers.

Hence, a third research paradigm—teacher inquiry—has emerged to showcase the vital role classroom teachers play as knowledge generators. This paradigm is often referred to as "teacher research," "teacher

inquiry," "classroom research," "action research," "practitioner inquiry," or "practitioner research." In general, the teacher inquiry movement focuses on the concerns of teachers (not outside researchers) and engages teachers in the design, data collection, and interpretation of data around a locally framed question. Termed *action research* by Carr and Kemmis (1986), this paradigm for approaching educational research has many benefits, among them: (1) theories and knowledge are generated from research grounded in the realities of day-to-day educational practice; (2) teachers become collaborators in educational research by investigating their own problems; and (3) teachers play an integral part in the research process, which makes them more likely to facilitate change based on the knowledge they create.

Although the terms *teacher research, teacher inquiry,* and *action research* are comparatively new, the underlying conceptions of teaching as inquiry and the role of teachers as inquirers are not. Early in the 20th century, John Dewey (1933) called for teachers to engage in reflective action that would transition them into inquiry-oriented classroom practitioners. More recently, teacher educator Ken Zeichner (1996) traced and summarized more than 30 years of research, calling for cultivating an informed practice as illustrated in such descriptors as "teachers as action researchers," "teacher scholars," "teacher innovators," and "teachers as participant observers" (p. 3). Similarly, scholar Donald Schön (1983, 1987) also depicted teacher professional practice as a cognitive process of posing and exploring problems or dilemmas identified by the teachers themselves. In doing so, teachers ask questions that other researchers may not perceive or deem relevant. In addition, teachers often discern patterns that outsiders may not be able to see. Today, *action research* usually refers to research intended to bring about a desired change of some kind, usually with a social justice focus, whereas *teacher research* quite often has the goal of generating insights into a teacher's classroom practice in order to improve teaching or to better understand what works.

As these varying examples illustrate, while some of the terms have been used interchangeably, they do have somewhat different emphases and histories (Cochran-Smith & Lytle, 2009). For the purposes of this text and to streamline our discussion of research traditions, we have grouped all of these related processes together to represent teachers' systematic study of their own practice. Yet we use the term *inquiry* most often because, in our coaching of teachers' systematic studies of their own practices, we became discouraged by the baggage that the word *research* in the term *action research* carried with it

when the concept was first introduced to teachers. The images that the word *research* conjures up come mostly from the process-product paradigm and include "a controlled setting," "an experiment with control and treatment groups," "an objective scientist removed from the subjects of study so as not to contaminate findings," "long hours in the library," and "crunching numbers." Teachers, in general, weren't overly enthused by these images, and it took a good deal of time for us to deconstruct these images and help teachers see that those images were antithetical to what teacher/action research was all about. So, over time, we began replacing the terms *action research* and *teacher research* with one simple word that carried much less baggage with it—*inquiry*—and we will continue this tradition both in this section on research traditions and throughout the remainder of this text.

To help unpack some of the baggage the word *research* carries with it, it is important to further explore the difference between research conducted in a university setting (stemming from the process-product and interpretive paradigms) and inquiry conducted by classroom teachers. First and foremost, in general, the purpose of research conducted by academics and classroom teachers is quite different. The general focus of university-based research is to advance a field. Professors are required to publish their work in journals read by other academics and present their work at national and international venues to their peers at other institutions as evidence of their ability to impact the field broadly. In fact, professors' value within many institutions is measured largely by their publication record and the number of times their publications are cited by others. In contrast, the purpose of engagement in inquiry by classroom teachers is to improve classroom practice. The point of doing inquiry is for identifying and implementing changes that lead to real improvements in student learning and life outcomes, not for impact in scholarly literature or theory (although this can happen, too).

The focus of university-based researchers and teacher inquirers is also different. In general, university-based researchers working in the process-product paradigm focus their efforts on control, prediction, and impact, while university-based researchers working in the qualitative or interpretive paradigm focus their efforts on description, explanation, and understanding of various teaching phenomena. In contrast, teacher inquirers focus on providing insights into teaching in an effort to make change, working tirelessly to unpack all of the complexities inherent in the act of teaching to become the very best teachers they can be for every individual student.

A final difference between research conducted at the university and inquiry conducted by classroom teachers into their own practice is ownership. While the research generated by university researchers is critically important to teachers, it is university researchers who make the decisions about what is important to study and how to go about studying it based on a careful and critical analysis of a broad and extensive body of literature related to the topic of study. In contrast, teacher inquirers make decisions about what is important to study and how to go about studying it based on a careful and critical analysis of what is happening at a local level in their own classrooms, schools, and districts. The work of university-based researchers informs the inquiries of teachers, but ownership of the classroom-based investigation resides with classroom teachers themselves.

To help distinguish between research produced at a university and inquiry done in classrooms and schools (summarized in Table 1.2), we often invoke the words of Lawrence Stenhouse, who noted, "The difference between a teacher researcher and the large-scale education researcher is like the difference between a farmer with a huge agricultural business to maintain and the 'careful gardener' tending a backyard plot" (Hubbard & Power, 1999, p. 5).

> In agriculture the equation of invested input against gross yield is all: it does not matter if individual plants fail to thrive or die so long as the cost of saving them is greater than the cost of losing them. . . . This does not apply to the careful gardener whose labour is not costed, but a labour of love. He wants each of his plants to thrive, and he can treat each one individually. Indeed he can grow a hundred different plants in his garden and differentiate his treatment of each, pruning his roses, but not his sweet peas. Gardening rather than agriculture is the analogy for education. (Ruddock & Hopkins, 1985, p. 26)

Table 1.2 University-Based Research and Teacher Inquiry Comparison

	UNIVERSITY RESEARCH	TEACHER RESEARCH (INQUIRY)
PURPOSE	Advance a field	Improve classroom practice
FOCUS	Control/Prediction/Impact/ Explanation	Provide insight into teaching in an effort to make change
OWNERSHIP	Outsider	Insider
IMPACT	Broad	Local

This image of the university-based researcher as a farmer with a huge agricultural business and the teacher inquirer as a gardener helps to encapsulate the differences between the university-based research you are likely most familiar with and the research you can generate from within the four walls of your own classroom. It is of value to note that the work of both farmers and gardeners is important and somewhat related but also quite different. Such is the case with university-based researchers and teacher inquirers. The work of both is important and somewhat related but quite different. As we discuss each component of the inquiry process in depth throughout this book, you will continue to uncover the importance of both types of research, including the relationship and differences between them.

How Is Teacher Inquiry Changing With the Times?

As we learned in our brief history lesson, teacher inquiry traces its origins to the writings of John Dewey in the 20th century. Although its antecedents are decades old, contemporary understandings of teacher inquiry (as both a process and a stance) continue to evolve in tandem with rapid changes in schools and society. In fact, teacher inquiry has been consistently "remodelled" across different times and contexts (Dana, 2016; Somekh & Zeichner, 2009)—and yet, for many teacher inquirers, the pace of change has seemed to accelerate in recent years.

Since the last edition of this book, teachers have confronted the dual pandemics of COVID-19 and systemic racism (J. M. Jones, 2021). The global COVID-19 pandemic that spread rapidly in the year 2020 turned schooling upside down, with teachers, students, and communities scrambling as they shifted to emergency remote teaching. Many teachers had to figure out, in the span of just days, how to teach via Zoom, Microsoft Teams, or Google Meet. Teachers and students reported feelings of isolation and mental health challenges (Baker et al., 2021; Kush et al., 2022). For some teachers, the significant inequities that had long been embedded in school systems—such as assumptions about students' access to high-speed internet connections, or the role of school meal programs in nourishing students—were laid bare for the first time (Rutten et al., 2022).

Also in 2020, teachers across the United States and in other countries grappled with how to teach responsibly and equitably in the wake of killings by White police officers of Black people, including Breonna Taylor in Kentucky and George Floyd in Minnesota, which many

understood as high-profile, public manifestations of systemic racism. As we write the fifth edition of this book, the impacts of these events on teachers and students are still being investigated—yet they have also increased many educators' sense of urgency in pursuing inquiries that meaningfully enhance equity and social justice (e.g., Grace et al., 2024), illustrating the enduring relevance of teacher inquiry to change with the times.

For example, in some school districts and teacher education programs where teacher inquiry had long served as an anchor for professional learning, the familiar stance and process of inquiry furnished a powerful mechanism for navigating even the significant challenges of the dual pandemics (Dana & Kilgore, 2021). At the P. K. Younge Developmental Research School at the University of Florida, teachers lived out their inquiry stances through a Remote Learning Inquiry (RLI), in which they investigated how remote learning tools could help them reestablish caring relationships and classroom communities when their school transitioned to emergency remote learning necessitated by COVID-19 (E. Davis et al., 2021). In a teacher education program at The Pennsylvania State University, teacher interns rapidly claimed new identities as emergent teacher leaders by asking critical questions of veteran teachers and school administrators and using insights from their inquiries to push school administrators to consider issues of equitable access to technology (Rutten et al., 2022). And in a public school district in central Minnesota, where expiring American Rescue Plan Act (ARPA) federal funds were about to precipitate significant budget cuts, a veteran elementary teacher inquired into how she could support the well-being and mental health of her teacher colleagues; Kelly Herrera's impactful inquiry is highlighted in Chapter 2.

In other school districts, the creation of new inquiry communities, where teachers met in support of one another throughout the COVID-19 and systemic racism pandemics, served to renew connection and collaboration through the stance, process, and products of inquiry. These communities reduced the sense of professional isolation many were experiencing. For example, in one semirural school district, where teachers had been grappling with issues of racial injustice, one teacher reflected on the powerful role of an inquiry community in helping her reconnect with colleagues as she navigated these issues:

> I had really been feeling like an island. Part of the experience for me was learning that I can find common ground with people who seem so opposite and so different from me—and

> finding the language that would help me communicate with them. . . . If I hear how other people in the inquiry community are approaching different things, it helps me also to understand how other people in my building might be approaching things. . . . You're learning new ideas. You're like, "Well, I never thought about it that way!" (Rutten et al., 2024, p. 298)

Another teacher from the same community shared:

> It's that collaboration and supportive environment where you can explore ideas and not feel silly, or somebody can build on what you start with, or you can, you know, help them back-and-forth. There's not a lot of time for that anymore. But we're finding that place to respect concerns in a real way, and really delve into them and come to a common ground on them. (Rutten et al., 2024, p. 300)

And a third teacher shared the impacts of engaging in inquiry in the wake of COVID-19:

> There's started to be dialogue between the admin and teachers that has never, ever, happened before. That allowed for more collaboration in our building, so maybe that's the piece that has been the most powerful, is that the inquiry community actually created a space for that difficult interaction to start happening. . . . That's some of the most powerful learning that there is. (Rutten et al., 2024, p. 299)

As these examples illustrate, teacher inquiry and inquiry communities are flexible, yet durable, ways of working and learning together—serving as both a road map for improving teaching across a career span, and a compass for navigating uncertain terrain such as COVID-19.

In addition to the dual pandemics, many teachers presently face heightened challenges stemming from the political contexts that frame their professional practices. The political nature of curriculum and teaching is nothing new for teacher inquirers, whose inquiries have long engaged head-on with competing visions for society and divergent understandings of justice (Cochran-Smith & Lytle, 2009, p. 151). Still, in recent years, political polarization and partisanship have fueled a uniquely turbulent context for teaching (Hallman et al., 2022) where teachers find their day-to-day professional practices

under unprecedented scrutiny by parents, caregivers/guardians, and community members (Journell, 2022).

For many educators, a steady stream of divisive national headlines, heated local debates about school board policies, social media posts, and controversial state legislation has contributed to a climate of fear surrounding the work of teaching (Carter Andrews et al., 2018; Pace, 2022). In particular, teachers whose curriculum or standards require them to teach about difficult topics such as race and racism, slavery, human rights abuses, or issues of privilege and oppression may fear community backlash (Ranschaert, 2023). Controversies over both domestic and foreign affairs such as presidential elections, international conflicts, immigration, abortion, or gender compound an already turbulent context for teaching (Rutten et al., 2023, 2024). Furthermore, teachers from any grade level or content area may find that classroom discussions of difficult or contested topics may "bubble up" unexpectedly during their day-to-day work—from sources such as student issues, professional issues, curriculum issues, community issues, and teachers' own identities (Rutten et al., 2025). As one teacher who recently participated in an inquiry community focused on learning to address difficult topics shared:

> As a math teacher, I didn't really think I had difficult topics. But now I also understand LGBTQ issues, and issues like abuse in the home, and all kinds of things that are not necessarily *what* I'm teaching—but when those are the issues that are walking in my door, I've realized that I need to address it and not pretend like it's not here. . . . These difficult topics aren't going away. (Rutten et al., 2024, p. 300)

While it is understandable that some teachers may be inclined to "shy away" from the difficult topics or contested issues they face within their schools, many teachers decide to "lean in" to such topics (Rutten et al., 2024) because they recognize potential educational value for their students such as the possibility of fostering empathy (Haas, 2020), civic discourse (McAvoy & Hess, 2013), or critical-analytic thinking (Middaugh, 2019; Woolley, 2011). In particular, adopting an inquiry stance and intentionally leaning into potentially difficult topics such as race and racism (D. Harris, 2023) can assist teachers in enhancing the learning of every student.

The challenges of "leaning in" to difficult topics and contested issues are many, yet both the process and stance of teacher inquiry can

support teachers in making informed decisions about whether, and how, to engage with such topics. Teachers in urban, suburban, and rural communities alike are adapting inquiry, and collaborating within new kinds of inquiry communities, to assist them in engaging with difficult topics in their schools and communities (Rutten et al., 2024). By grounding their approach in an inquiry stance, teachers and students alike are learning, together, how to discuss difficult topics and contested issues. As one teacher shared:

> Our inquiry community has made me a different kind of teacher. I'm more open to hearing from students, and that affects every minute of every day—that I'm more open to hearing what students have to say. You may be teaching in one way, and then you're going to find this whole new way of thinking. Inquiry is about giving students a voice and making them feel like they matter in the classroom, and to me that is just a completely different mindset. This is intentionally giving everyone a voice, and I love it. And with inquiry, it never stops. We're setting them up to be thinkers and to be inquirers. (Rutten et al., 2024, p. 301)

In addition to investigating difficult topics in their professional practices, the process and stance of inquiry provide an anchor for teaching difficult topics within the curriculum. Fifth-grade teacher inquirer Wendy Lane Smith described living in a county in the Eastern United States that had been "in the national spotlight for proposed school board policies related to classroom and school library books, many of which were written by or featured the stories of people of color" (Rutten et al., 2023, p. 9). She joined an inquiry community of other teachers who wanted to use inquiry to navigate difficult topics and, over time, introduced inquiry to her students—first as a way of building their classroom community, and later as a way of learning curricular content together. Wendy described the challenges she sometimes faced in her community when teaching about slavery and the Civil War, but rooting her approach in inquiry—rather than in a "sage on the stage" approach—supported her in teaching responsibly. She shared how, in the past, she had "used the textbook to lay out facts" but that, in a recent year,

> I decided to use the inquiry cycle to structure the Civil War unit. As I began to explain the inquiry cycle to my students, I was able to present myself as a co-learner and let them know that I did not know all the outcomes of our

> inquiries, but that we would learn together. . . . Each student had to support their ideas with evidence from individual research. They also worked in groups to create their own representations of the factors that helped the Union to win the war. I guided and coached them in finding their conclusions but only intervened if there was misinformation involved. Given the previous problems we had with students being unkind to each other, it was gratifying to watch them sort through, debate, and discuss tough issues in a supportive way. (Rutten et al., 2023)

As Wendy's example illustrates, teaching from both the stance and process of inquiry can offer a responsible, respectful, and hopeful way of addressing difficult topics and contested issues—illustrating how an inquiry stance is both an enduring professional posture and a way of changing with the times.

What Is the Relationship Between Teacher Inquiry and AI?

One of the most riveting changes currently happening in education is the proliferation of artificial intelligence (AI). AI refers to the broad research/development field that targets the creation of machines to perform tasks that ordinarily require human intelligence (i.e., problem solving and reasoning). The development and rapid advancement of AI tools such as chatbots, computer programs that use AI to imitate human conversation and writing, lead to problems of practice teachers everywhere now face, such as:

- In what ways might AI best support our work as educators?
- How do we integrate AI into instructional practice?
- What are the ethical implications of student and teacher use of AI tools?

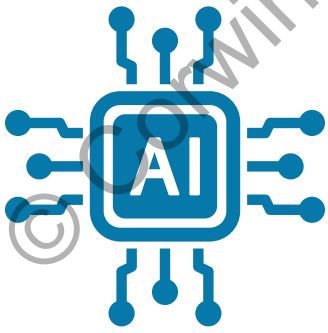
Inquiry can serve as a powerful mechanism to explore uses of AI in the classroom and the relationship between these uses and student learning.

In addition to AI being a topic of inquiry for educators, it can also enhance the inquiry process. In particular, AI tools can aid in each of the components of inquiry introduced in Figure 1.1, as well as in the design of inquiry itself. Many teacher researchers are already using AI as integral aspects of their inquiries. According to Florida teacher researcher Jon Mundorf:

> As I pursued an inquiry into AI in education, "Lex," as the chatbot ChatGPT now asked to be called, has become a key collaborator in the research process. From helping design the research questions to reflecting on AI's impact in classrooms, Lex has provided valuable insight. Though my inquiry work is my own, Lex has significantly shaped my study, helping me explore the evolving relationship between AI, teaching, and learning. Having Lex as a thought partner has transformed my approach to teaching and research, allowing me to focus on what truly matters—connecting with my students and enhancing their learning experiences.

As Jon's quotation illustrates, AI can be used throughout the process of practitioner inquiry. It might serve as the topical focus of your inquiry, a "key collaborator" as you design your plan for inquiry, or a means of supporting your data collection and analysis activities.

For this reason, throughout this book, we will continually suggest some ways AI might enhance the various components of inquiry. Look for the special AI Moment textboxes, noted by this icon, in the chapters ahead:



How Is Teacher Inquiry Different From What I Already Do as a Reflective Teacher?

All teachers reflect. They reflect on what happened during previously taught lessons as they plan lessons for the future. They reflect on their students' performance as they assess their work. They reflect on the content and the best pedagogy available to teach that content to their learners. They reflect on interactions they observed students having, as well as on their own interactions with students and the ways these interactions contribute to learning. Teachers reflect all day, every day, *on* the act of teaching while *in* the act of teaching—and long after the school day is over. Reflection is important and critical to good teaching

(Körkkö et al., 2016; Loughran, 2010; Schön, 1987; K. M. Zeichner & Liston, 1996). In addition, reflection is a key component of teacher inquiry. Yet teacher inquiry is different from daily reflection in and on practice in three important ways.

First, teacher inquiry is less happenstance. The very definition of teacher inquiry includes the word *intentional*. We do not mean to suggest that reflection is never intentional, but in the busy, complex life of teaching, reflection is something that frequently occurs in an unplanned or spontaneous way, such as on the way to the teachers' room for lunch, during a chat with a colleague during a special, when students are engaged in an independent activity, on the drive home, in the shower, or during dinner—wherever and whenever a moment arises. Unfortunately, few teachers have a planned reflection time. Teacher inquiry invites intentional, planned reflection, heightening your focus on problem posing.

Second, teacher inquiry is more visible than reflection. The daily reflection teachers engage in is not observable by others unless it is given some form (perhaps through talk or journaling). As teachers engage in the process of inquiry, their thinking and reflection are made public for discussion, sharing, debate, and purposeful educative conversation, and teaching becomes less isolated and overwhelming. Gail Ritchie, veteran teacher researcher from Fairfax County Schools, Virginia, notes that the goal of being a teacher researcher is to facilitate teaching and learning and maximize student potential. As teacher researchers engage in reflection, they intentionally ask questions about teaching and learning, organize and collect information, focus on a specific area of inquiry, and benefit from ongoing collaboration and support of critical friends (Lassonde et al., 2008).

Finally, teacher inquiry requires identifying, collecting, and making sense of data to inform decision-making and practice. Reflection is often based on personal observations, experiences, and judgments, which are valuable but not always systematically grounded in evidence. In contrast, inquiry goes further by demanding a deliberate process of gathering and analyzing data that surround and inform the teacher researcher. These data might include student work, assessment results, classroom observations, or other artifacts that help the teacher explore a specific problem or question more deeply and systematically. By grounding their reflections in evidence, teacher researchers can move beyond intuition to develop actionable insights that drive meaningful changes in teaching and learning.

Why Inquire? Inquiry as a Pathway to Equity

Up to this point in Chapter 1 we have introduced you to inquiry by defining it, providing evidence of its value, discussing its history and evolution (including AI's recent appearance to this movement), and distinguishing inquiry from everyday reflective practice that is the foundation of good teaching. Yet we have not yet addressed the most important question. As a part of your introduction to inquiry, it is imperative to ask, "Inquiry for what purpose? What do teachers inquire for?"

One reason why it is critical to pose this question is, as already stated in this chapter, inquiry is not a fad—teachers have been researching their own practice for decades. As inquiry has evolved through the years, it has been "shaped and reshaped in relationship to the era within which it has existed" (Dana, 2016, p. 1). As a process evolves and shape-shifts "both *through* time and *in response to* the times, those who engage in the process can easily lose sight of *why* they are doing it in the first place" (Dana & Currin, 2017, p. 1). Hence, the "why" of inquiry is not always made explicit when the process is first taught to teacher candidates as a part of their teacher education programs or to practicing teachers as a mechanism for professional learning.

To answer the "Why inquire?" question, we turn to the most pervasive problem of practice that all educators face today—the persistent achievement gaps in America's schools. People of color and those living in poverty routinely encounter an educational system that inadequately supports their chances for achievement. The term *achievement gap* is still used widely by educators to reflect the disparities that exist, as measured by standardized test scores, in academic achievement between minoritized groups, primarily African Americans, Hispanics, and Native Americans, and the dominant group, primarily White people, as well as variance in performance by students based on socioeconomic status (J. V. Clark, 2013; Darling-Hammond, 2013). While educators still broadly use the term *achievement gap* to discuss the schooling experiences of different groups of students throughout the nation, several educational scholars have noted the need to reframe the discussion with the term *opportunity gap* to reflect the fact that the inequalities that exist in schools are a direct consequence of the inequalities that exist within our society, encompassing systemic disparities in health care, wealth, education, affordable housing, quality childcare, school funding, teacher quality, and curricula (Boykin & Noguera, 2011; G. Ladson-Billings, 2007; Milner, 2010; Welner & Carter, 2013).

Hence, understanding and correcting the inequalities that exist in schools and society are of critical importance to all educators. Engagement in inquiry can be a powerful pathway to the creation of more equitable classrooms. In fact, echoing back to our definition of inquiry as stance earlier in this chapter, distinguished scholars of the practitioner research movement, Marilyn Cochran-Smith and Susan Lytle, maintain that the ultimate goal of practitioner inquiry "always and in every context" is to enhance "students' learning and life chances for participation in and contribution to a diverse and democratic society" (Cochran-Smith and Lytle, 2009, p. 146). Teachers engage in inquiry for equity to increase the learning and life chances of every student with whom they work, regardless of factors (e.g., race, socioeconomic status, gender, sexuality, and ability) that often inhibit students in an educational system that was not designed to meet their needs. Returning to one of the largest research studies undertaken on the impact of inquiry we introduced earlier in this chapter, educational researchers Sue Nichols and Phil Cormack reported, "Practitioner research was at its most powerful when it served [teachers'] ethical commitments to struggling students" (Nichols & Cormack, 2017, p. 20), reinforcing the importance of inquiry undertaken for more equitable learning and schooling experiences for all.

Whereas the creation of more just and more equitable schooling experiences is the ultimate goal of engagement in the process of inquiry, not all teachers first come to inquiry with an equity focus, but rather discover this underlying problem of practice through time and several cycles of the inquiry process. For this reason, in this text, as we teach about each component of the inquiry process in Chapters 2 through 6, we will highlight many examples of inquiry related to the creation of more equitable learning experiences, but we will also share examples of the process that may not be directly related to issues of equity, but nonetheless, did serve as powerful professional learning experiences for teachers and teacher candidates at the start of their inquiry journeys. We will return to the ultimate equity goal of practitioner inquiry in Chapter 7, where we share the story of a prolific teacher researcher who came to see inquiry as a pathway to equity over time, as well as teacher candidates who are beginning their teaching careers with a passion for using inquiry to examine issues of equity.

What Are Some Contexts Ripe for Teacher Inquiry?

With an understanding of what teacher inquiry is and the ultimate reason for engaging in the process, let us consider the kinds of professional and collaborative contexts that can support teacher inquiry.

As previously discussed, teaching is full of enormous complexities, and hence, teaching itself invites inquiry. However, even as inquiry beckons each and every teacher, becoming a lone inquirer is difficult! For this reason, we explore five particularly ripe contexts for developing your inquiry stance: (1) professional development/learning programs, (2) professional learning communities, (3) teacher candidate clinical experiences/residencies, (4) Professional Development Schools, and (5) professional practice doctoral programs. You may already be engaged with one or more of these five contexts—or you may wish to get involved as you begin or continue your teaching career.

Professional Development/Learning Programs

Throughout their careers, teachers have a wide variety of opportunities to grow their professional practices. Many teachers seek out professional growth by enrolling in professional development/learning programs. Participation in such programs can frequently also be used to fulfill requirements for maintaining your state teaching credential, earning a graduate degree, or advancing on your school district's salary schedule. As a teacher, you are likely to spend many hours each year engaged in professional development/learning. These programs can be among the most promising contexts for growing your inquiry stance.

The types of programs you join may take the form of traditional professional development programming, which has historically focused on acquiring new knowledge or skills through one-size-fits-all workshops planned by external experts. Such one-shot programs typically feature minimal follow-up, customization, or support for classroom application—and they may or may not be meaningfully connected to your day-to-day teaching experiences. In contrast, a change in both terminology and approach to emphasize professional learning represents a shift away from professional development and toward an ongoing, collaborative, and contextually specific process in which teachers take an active role in their own growth. As agents of their own learning, teachers who engage in sustained, high-quality professional learning intentionally contribute to shaping their own learning, their students' learning, and educational change.

Significant professional learning requires that teachers be supported with sufficient professional time and autonomy to engage in deep collaboration as they tackle shared, locally defined problems of practice. Although many school districts in the United States still emphasize professional development, other districts are restructuring their

yearly calendars, daily bell schedules, and overarching philosophies to weave time and space throughout the school year for sustained professional learning to occur. To aid in enacting this important shift from professional *development* (PD) to professional *learning* (PL), we highly recommend the organization appropriately named Learning Forward (https://learningforward.org). Reflecting the goals of this outstanding organization and the ongoing shift from "PD" to "PL," throughout the rest of this book we intentionally use the term *professional learning* as a way to acknowledge the roles of teachers as lifelong professional learners who are active in propelling their own growth.

Inquiry is a powerful approach to designing a professional learning program. It can be coupled with traditional professional development approaches, serve as a stand-alone professional learning design, or be seamlessly integrated with innovative school calendars for professional learning. In each of these ways, inquiry can assist you in connecting your learning about content and pedagogy with your classroom practice. For instance, the University of Florida's Prime Online program uses inquiry to support teachers in integrating research-based mathematics teaching methods with their classroom practices (Dana et al., 2017). Similarly, the University of North Florida's Project InTERSECT (**In**quiry to **T**ransform **R**eadiness for **S**TEM+C **E**arly **C**hildhood **T**eaching) uses inquiry to support early childhood educators' abilities to implement STEM+C project-based learning (Robinson-Wilson et al., in press), and Tiger Academy (a school in Duval County, Florida) offers inquiry-based professional learning programming focused on responding to the literacy needs of PK–5 students. You may be able to locate these kinds of professional learning programs through a partnership with a university in your area, or you might work with colleagues and administrators to build a local, inquiry-based professional learning program within the walls of your own school.

Professional Learning Communities

While there are many types of professional learning programs, professional learning communities (PLCs) are among the most widespread. PLCs serve to connect and network groups of professionals to do just what their name entails—to *learn* from practice. PLCs meet on a regular basis, and their time together is often structured by the use

of protocols to ensure focused, deliberate conversation and dialogue by teachers about student work and student learning. Protocols for educators provide a script or series of timed steps for how a conversation among teachers on a chosen topic will develop (Dana & Yendol-Hoppey, 2016).

A variety of protocols has been developed for use in PLCs by a number of noteworthy organizations such as Learning Forward (e.g., Lois Brown Easton's *Powerful Designs for Professional Learning,* 2004), School Reform Initiative (www.schoolreforminitiative.org), and the National School Reform Faculty (www.nsrfharmony.org), which developed one version of a PLC called Critical Friends Groups (CFGs). In their work conceptualizing CFGs, the National School Reform Faculty laid much of the groundwork for shifting the nature of the dialogue between and among teachers about their practice in schools, and is responsible for training thousands of teachers to focus on developing collegial relationships, encouraging reflective practice, and rethinking leadership in restructuring schools. The CFGs provide deliberate time and structures dedicated to promoting adult professional growth that is directly linked to student learning.

By their own nature, then, PLCs enhance the possibilities for conducting an inquiry and cultivating a community of inquirers. In fact, in our companion book to this text, *The Reflective Educator's Guide to Professional Development* (Dana & Yendol-Hoppey, 2008a), as well as in our book simply titled *The PLC Book* (2016), we describe a model for school-based professional development that combines some of the best of what we know about action research and PLCs and, in the process, address a weakness that has been defined in traditional professional development practices. We name this new entity the "inquiry-oriented PLC" and define it as a group of six to twelve professionals who meet on a regular basis to learn from practice through structured dialogue and engage in continuous cycles through the process of action research (articulating a wondering, collecting data to gain insights into the wondering, analyzing data, making improvements in practice based on what is learned, and sharing learning with others). The book *Inquiry: A Districtwide Approach to Staff and Student Learning* illustrates inquiry-oriented learning communities of teachers and principals and how they can be set up across an entire district (Dana et al., 2011).

Teacher Candidate Clinical Experiences/Residencies

Like PLCs, clinical experiences, internships, student teaching, or teacher residences offer rich contexts for professional learning. If you are a veteran teacher, you likely recall your own student teaching experience as an important feature of your preservice education. Similarly, if you are a teacher candidate, you have likely looked forward to your clinical experiences with great anticipation. According to a 2018 report prepared by the American Association of Colleges for Teacher Education (AACTE), a paradigmatic shift in teacher preparation is needed that places a greater emphasis on the clinical experience and learning within the field. Similarly, the Association of Teacher Educators published their standards for clinical experiences (2023). The standards emphasize inquiry as a pedagogical tool by highlighting how clinical educators engage teacher candidates in data-driven conversations to critically reflect on and systematically inquire into improving their teaching practices. The goal is to prepare teachers who are simultaneously content experts and innovators, collaborators, and problem solvers. According to the AACTE's recent report:

> Clinical practice offers a lens through which to understand the problems of practice that currently face the profession, stemming from factors such as demographic changes, poverty, and teacher shortages. The problematizing of these issues allows for creative thinking and innovation by the many players engaged in the clinical practice space. (AACTE, 2018, p. 8)

Within the report, teacher inquiry is highlighted as an important tool for strengthening clinical practice, and an inquiry stance is an orientation believed to strengthen teacher preparation. Mounting evidence suggests that field experiences that include engagement in teacher inquiry enhance the quality of teacher preparation (see, e.g., Dana & Silva, 2001; D. C. Delane et al., 2017; Rutten, 2021, 2022; Yendol-Hoppey & Franco, 2014). The reason why inquiry has become so much a part of quality teacher preparation is quite logical. Given that the act of teaching is an enormously complex endeavor, learning to teach in any brief, simple, and step-by-step way is impossible. As a teacher candidate, you are immersed in the complexities of teaching for the first time in clinical experiences. Immersion in this complexity naturally encourages engagement in inquiry, since questions about teaching, schools, and schooling abound. As you student teach, inquiry can help you learn to identify the complexities and problems inherent in teaching

and tease these complexities apart to gain insights into your work with children. Given the comprehensive nature of teaching, identifying complexities and striving to understand them is a process that lasts an entire career. Engagement in teacher inquiry as an integral component of field preparation enhances the power of the field experience. As you simultaneously learn to teach and to inquire into teaching, these two processes become intricately intertwined. When teaching and inquiry become synonymous, you have cultivated an inquiry stance toward teaching that will serve you, your students, and the field of education well for the duration of your career!

Professional Development Schools

Since the late 1980s, a specialized setting for student teaching and other field experiences has emerged—the Professional Development School (PDS). A PDS is a learning community that intentionally fosters collaboration and mutual learning among pre- and in-service P–12 practitioners, university-based teacher educators, and scholars (National Association for Professional Development Schools [NAPDS], 2021). According to Darling-Hammond (1994), PDSs

> aim to provide new models of teacher education and development by serving as exemplars of practice, builders of knowledge, and vehicles for communicating professional understanding among teacher educators, novices, and veteran teachers. They support the learning of teacher candidates and beginning teachers by creating settings in which novices enter professional practice by working with expert practitioners, enabling veteran teachers to renew their own professional development and assume new roles as mentors, university adjuncts, and teacher leaders. They allow school and university educators to engage jointly in research and rethinking of practice, thus creating an opportunity for the profession to expand its knowledge base by putting research into practice—and practice into research. (Darling-Hammond, 1994, p. 1)

In a PDS, then, teacher inquiry is a central part of the professional practice of all members—practicing teachers, teacher candidates, administrators, and university teacher educators. This transition to inquiry is the mechanism for reinventing schools as learning organizations. Hence, a PDS culture supports and celebrates the engagement of teachers and other PDS professionals in constructing knowledge through intentional, systematic inquiry and using that knowledge to

continually reform, refine, and change the practice of teaching (Dana, 2017; Wolkenauer et al., 2022; Yendol-Hoppey, 2011; Yendol-Hoppey & Dana, 2008).

Beginning in 2005, PDSs organized themselves through a national network referred to as the National Association for Professional Development Schools (NAPDS). Given the success and expansion of partnership work, in 2024 the organization changed its name to the National Association for School University Partnerships (NASUP) as a way of expanding their reach and forming more inclusive conversations about partnerships committed to improving teaching and learning. The mission of this new organization is to advance the education profession by providing leadership, advocacy, and support to create and sustain school–university partnerships such as Professional Development Schools to function as learning communities to improve student learning, prepare educators through clinical practice, engage in reciprocal professional learning, and conduct shared inquiry. Specific examples illustrating how inquiry is central to the work of PDSs can be found in the Fall 2017 special themed edition of *School–University Partnerships* entitled "Teacher Inquiry in Professional Development Schools: How it Makes a Difference." The work of teacher inquiry remains a vital component of NASUP, and teacher inquirers from PDSs and similar school–university partnerships regularly share their work at the annual NASUP conference.

Professional Practice Doctoral Programs

In recognition of the need to cultivate leaders and change agents who will not leave their practice contexts to become *professional researchers* in institutions of higher education but remain in their schools and districts and function as *researching professionals,* well positioned to tackle the most pervasive problems our education system faces, a new focus on professional practice doctoral programs has emerged (L. S. Shulman et al., 2006). Led by the Carnegie Project on the Education Doctorate (CPED) (D. G. Perry & Imig, 2008), the professional practice doctorate is a national movement. The goal of the professional practice doctoral degree is to meet the unique needs of practitioners who do not wish to leave their positions on the front lines to enter higher education, but want to earn their doctorates to develop the skills to lead informed change and improvements from within their schools and classrooms. Termed *scholarly practitioners* by CPED, these professionals use "practical research and applied theory as tools of change" (J. A. Perry, 2013, p. 3) as they "direct their research to the improvement of practice, based in the needs of the organizations that they seek to help and blend

research methods with problems of practice" (Barnett & Muth, 2008, p. 12). Since the work of the practitioner scholar targets "empirical inquiry that is more closely tied to practice settings than to theoretical questions" (McClintock, 2004, p. 4), engagement in inquiry/action research has been adopted as a signature pedagogy in many professional practice doctoral programs as they have been launched across the nation (Buss, 2018; Dana et al., 2016; Wetzel & Ewbank, 2013), culminating with the Dissertation in Practice, a study that uses practitioner inquiry as the primary research methodology (Ma et al., 2018). Hence, several advanced practitioners working on their doctorates are using the process of inquiry introduced in this book to earn the terminal degree in the field, seamlessly weaving into their career trajectory the centrality of taking an inquiry stance toward their practice to transform the schooling experience from the inside out, rather than from the outside in.

How Does My Engaging in Teacher Inquiry Help Shape the Profession of Teaching?

Regardless of your method of inquiry, the subject of your inquiry, or the context of your inquiry, what is most important is that you *do* inquire! For decades, scholars of teaching and teacher education, such as Aronowitz and Giroux (1985), Greene (1986), and Zeichner (1986), have argued that "teachers are decision makers and collaborators who must reclaim their roles in the shaping of practice by taking a stand as both educators and activists" (Cochran-Smith, 1991, p. 280). These calls continue today as educators engage in inquiry to change, enhance, and challenge their practices (Butville et al., 2021; Rutten et al., 2024). Inquiry is a core tool that teachers use when making informed and systematic decisions. Through the inquiry process, teachers can support with evidence the decisions they make as educators and, subsequently, advocate for particular children, changes in curriculum, and/or changes in pedagogy. Inquiry ultimately emerges as action and results in change.

As a teacher candidate, practicing teacher, mentor teacher, and/or doctoral student interested in problematizing your professional practice, you have committed to simultaneous renewal and reform of the teaching profession and teacher education. Teacher inquiry is the ticket to enact this reform! Cochran-Smith and Lytle (1993) claim that in any classroom where teacher inquiry is occurring, "there is a radical, but quiet kind of educational reform in process" (p. 101). Your individual engagement in teacher inquiry is a contribution to larger educational reform, a transformation of the teaching profession . . . so, let us begin the journey.

What Is Ahead in This Book, and How Do I Use It?

Using a journey metaphor, in this text we take you through inquiry step by step, beginning in Chapter 2. This chapter, appropriately titled "The Passions That Drive Your Journey: Finding a Wondering," gets you started on an inquiry by engaging you in a series of exercises to help you explore all of the intricacies and complexities of teaching from different vantage points. This exploration serves to jump-start your development of an inquiry question that will guide your journey. The passions you will explore for this purpose are inquiring into an individual child's academic, social, and/or emotional needs; a desire to improve or enrich curriculum; a desire to enhance content knowledge; a desire to improve or experiment with teaching strategies and teaching techniques; a desire to explore the relationship between your beliefs and your classroom practice; an investigation of the intersection between your personal and professional identities; advocating for issues of equity and social justice; and understanding the learning context. As we explore each passion, we use examples from teacher inquirers we have worked with to illustrate the ways their inquiry questions emerged from the intersection of their real-world problems of practice and one of the particular passions defined in Chapter 2.

In Chapter 3, we discuss 10 common strategies for data collection used by teacher inquirers (student work and other instructional artifacts, field notes, interviews, focus groups, digital pictures, video, reflective journals/blogs, surveys, standardized test scores and other assessment measures, and colleague feedback). Throughout our discussion, we point to the ways each of these strategies connects to what you already do in your life and work as a teacher. We do this because we want you to see how teacher inquiry is *a part of* and not *apart from* the work you do as a teacher.

With the start of possible wonderings to drive your journey completed in Chapter 2 as well as the knowledge you develop about data collection strategies in Chapter 3, you will be ready to plan your first cycle of inquiry, a topic explored in Chapter 4. This chapter takes you through five stages of designing an inquiry cycle that will help you fine-tune your wondering, select relevant data collection strategies to gain insights into it, and consider additional pertinent topics associated with inquiry design such as developing a theory of action, collaborating with others, and the ethical dimensions of inquiry.

In Chapter 5, we explore what we have found to be one of the most difficult steps for teacher inquirers—data analysis. We discuss and

illustrate the ways you analyze data *as* you are collecting them as well as *after* collection is complete. If you enjoy jigsaw puzzles, you will particularly enjoy your journey through this chapter, since we fully develop this metaphor to describe the summative data analysis process step by step. In addition, we use the work of one teacher inquirer to illustrate what data analysis might actually look like in practice.

To extend the learning that happens during data analysis, in Chapter 6 we look closely at sharing your inquiry with others through both oral presentation and writing up your work. One teacher inquirer's work is shared in its entirety to illustrate four basic components of any teacher's inquiry write-up.

In Chapter 7, we return to the question posed earlier in this chapter, "Inquiry for what purpose?" by further making the case that the ultimate goal of engagement in inquiry is to create more democratic, equitable, and socially just schooling experiences for all children. We illustrate this purpose through two stories: one of a longtime teacher researcher and one of four teacher candidates and their professor embarking on inquiry for the first time.

Finally, in Chapter 8, we return to and discuss stance again in greater detail, positioning it alongside a discussion of inquiry as process and inquiry as product. One part of enacting stance is reflecting on the quality of the teacher research you produce. Hence, Chapter 8 offers seven quality indicators and questions you can ask yourself as you reflect on your own and your colleagues' research, preparing you for a lifetime of professional learning through inquiry.

While we organize the chapters of this book using a journey metaphor and promise to take you on this journey step by step, we do need to qualify this promise before moving forward. As you saw in Figure 1.1, each inquiry component is depicted in the shape of a circle with the individual components connected to one another. We illustrate inquiry in this way in order to reflect its cyclical, rather than linear, nature. Hence, in some ways it is insincere to promise that we will take you through this process "step by step," which suggests that inquiry progresses in a forward motion with a clear beginning, middle, and end. Yet we must find some way to discuss each component within the linear sequencing of a book. As such, we artificially tease apart the cyclical process of inquiry and order it in the chapters ahead, but we do so with the qualifying statement that your journey will likely not unfold in the step-by-step progression laid out in this book. Rather, you may step into one part of the

process and feel the need to leap multiple steps ahead or take a side-step to consider another part of the process as your journey unfolds. Furthermore, you may find yourself multiple steps into the process but needing to circle back to the beginning of your inquiry path to review and/or reconsider an earlier step you made. For this reason, we utilize a call-out feature, an example of which appears below, that suggests places in the book you might wish to skip ahead or circle back to as you work on each individual component of inquiry presented in the chapters ahead.

Across the nation, prospective and practicing teachers vary greatly in their experience with teacher inquiry. Perhaps you are brand-new to teacher inquiry. Perhaps you have been engaged in inquiry for years and wish to further the development of teacher inquiry in your school or as part of your graduate program to earn a master's or doctoral degree. Perhaps you wish to make teacher inquiry a more visible or meaningful part of your teacher education program. Perhaps you seek to mentor other professionals in their first inquiries. Wherever you may be in your inquiry journey, we hope this text provides the impetus for you to take the next steps along the pathway of simultaneous renewal and reform, and to improve life and learning outcomes for *all* of the children you serve. Happy inquiring!

CHAPTER 1 EXERCISES

1. Look at some examples of teacher research published in the collections we mentioned in this chapter or that you may find in journals such as *Journal of Practitioner Research, Journal of Teacher Action Research, Voices of Practitioners, Action Research,* and *Networks: An Online Journal for Teacher Research.* What are some things you notice about the process of inquiry you will explore in this book from looking at actual examples of teachers' research?

2. Start an inquiry journal to trace your learning journey as you proceed through this book. For your first entry, capture the excitement and enthusiasm you may be feeling for the inquiry process after reading Chapter 1, as well as any apprehension or trepidations you feel about the process. Use these sentence starters as your journal prompts:
   - My greatest hopes for engaging in the inquiry process include . . .
   - My greatest fears for engaging in the inquiry process include . . .

   Discuss your responses with colleagues and continue to use your journal throughout the text to respond to the exercises provided in each chapter. When you actually begin your own inquiry, your journal can evolve into a way to collect data (covered in Chapter 3).

DISCUSSION QUESTIONS

1. What role does teacher inquiry play in educational reform?
2. The authors state, "Teacher inquiry is a vehicle that can be used by teachers to untangle some of the complexities that occur in the profession, raise teachers' voices in discussions of educational reform, and ultimately transform assumptions about the teaching profession itself." What are some common assumptions the general public holds about teaching and learning that you would like to see challenged? How can your engagement in inquiry help to challenge these assumptions?
3. What conceptions about educational research did you hold prior to beginning this book? To articulate your prior conceptions, consider the following:
   - Who does educational research?
   - Where is educational research done?
   - When is educational research done?
   - Why is educational research done?
   - How is educational research done?
   - What do you see as the strengths and weaknesses of educational research?

(Continued)

(Continued)

- Do you think teachers value educational research? Why or why not?
- Is there anything missing from educational research as you see it?
- In what ways might engagement in inquiry address what is missing?

4. How does engagement in teacher inquiry differ from traditional models of professional development?
5. Which ripe contexts for teacher inquiry professional development/learning programs, PLCs, teacher candidate clinical experiences/residencies, PDSs, or professional practice doctoral programs) are most pertinent to your current position? How can/will engagement in inquiry become a part of your current work as an educator?
6. What difficult topics or contested issues do you face in your context? How might the process and stance of inquiry support you to address these issues?
7. How can inquiry be a powerful tool in creating more equitable classrooms?
8. What excites you about the teacher inquiry movement? What concerns you?
9. How do you feel about embarking on your personal teacher inquiry journey?

ONLINE MATERIALS

The following materials designed to facilitate the exploration of inquiry are available for download at **https://companion.corwin.com/courses/ReflectiveEdsGuide5e**:

- **Activity 1.1: Block Party.** Discuss 12 provocative quotes about inquiry from Chapter 1.
- **Activity 1.2: Save the Last Word for Me.** Share and discuss your selection of the most significant passage from Chapter 1.
- **Activity 1.3: Hopes and Fears.** Name and discuss your hopes and fears generated by the prospect of studying your own professional practice.