

REVISED EDITION

# *The Art of Classroom Inquiry*

A HANDBOOK FOR TEACHER-RESEARCHERS

*Ruth Shagoury Hubbard & Brenda Miller Power*

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# Contents

Preface to Revised Edition	ix
Introduction	xiii
<b>chapter 1</b> Try to Love the Questions Themselves: <i>Finding and Framing a Research Question</i>	1
<b>chapter 2</b> Form and Function: <i>The Research Design</i>	12
<b>chapter 3</b> The Artist’s Toolbox: <i>Strategies for Data Collection</i>	36
<b>chapter 4</b> Pentimento: <i>Strategies for Data Analysis</i>	88
<b>chapter 5</b> The Legacy of Distant Teachers: <i>Creative Review of Literature</i>	134
<b>chapter 6</b> Perishable Art: <i>Writing Up Research</i>	144
<b>chapter 7</b> You Are Not Alone: <i>Finding Support for Your Research</i>	168
<b>appendix A</b> Research Designs	187
<b>appendix B</b> Data Collection Writing Strategies	197
<b>appendix C</b> Sample Field Notes	200
<b>appendix D</b> Writing—Starting with a Word and Writing Quotes	205
<b>appendix E</b> Resources for Publication	210
<b>appendix F</b> Incentive Education: <i>Project Proposal Form</i>	212
References	219
Index	225

# Introduction

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*If we knew what it was we were doing, it would not be called research, would it?*

—Albert Einstein

Teachers throughout the world are developing professionally by becoming teacher-researchers, a wonderful new breed of artists-in-residence. Using our own classrooms as laboratories and our students as collaborators, we are changing the way we work with students as we look at our classrooms systematically through research.

Over the past twenty years, a wealth of materials has been published about teacher research. Teachers have presented their findings in major journals and argued eloquently about the value of teacher research; however, most of these accounts lack specific information about how teachers become researchers. This book evolved from our work with hundreds of teacher-researchers as we explored the research craft. We struggled together to figure out the kinds of interviews that work best in different research studies; how to collect data in the midst of wholehearted teaching; and how to cull information from hundreds of pages of material for a brief, publishable article. This handbook describes the process of doing classroom research and provides many effective research techniques.

If you are already aware of the power of teacher research, this handbook may help you begin to see yourself as a teacher-researcher. But we hope it will do more than that. We hope the techniques and research activities that follow will enlist you as a member of the growing worldwide network of teacher-researchers.

Although many of us have been conducting informal classroom research as part of our teaching for years, we often do not think of ourselves as researchers. Julie Ford shares her changing notions of the definition of researcher:

When I think of research, I think of the big *R* type with long hours in the library, notes that could fill a novel, and a bibliography several pages long. I think of tension and stress lurking in the shadows. Feeling as I do about Research, the thought of conducting it in my classroom didn't curl my toes. But as I read the research [relating to classroom-based research], I felt as though a door was beginning to open. My definition of research took a turn, and that familiar twinge of anxiety didn't come rushing forward.

I began to think of "wonderings" I had regarding my students and my teaching. I pondered ways of pursuing these wonderings, feeling I was capable of doing some groundwork studies. I could look at my own initial research, related to my own very familiar environment. I didn't need to read for hours about studies conducted by Researchers elsewhere and then connect the findings to my room. My students and I could participate together, learning about our own classroom.

When Julie and other teachers like us read the research accounts of our fellow teachers, we realize that our wonderings are worth pursuing. By becoming researchers, we hope to find strategies to develop more principled classroom practice. But where to begin? And how to get past the internal critics who lurk in the back of our minds repeating, "Who are we to assume we have the ability to become researchers or to answer our own questions about teaching through research?"

Our answer is a resounding, "Who better to do this?" We teacher-researchers bring to our work an important element that outside researchers lack—a sense of place, a sense of history in the schools in which we work. Because of our presence over time at our research sites, we teachers bring a depth of awareness to our data that outside researchers cannot begin to match. We know our schools, our students, our colleagues, and our learning agendas. Our research is grounded in this rich resource base.

And while we expect our research to move us to a better understanding of our students and to better practice, we don't expect the research to shift the ground beneath us. Glenda Bissex (1996), one of the founders of the modern teacher-research movement, remembers vividly how disappointed some teacher-researchers were when she met with them about their findings at the

time they first considered what they had learned from teacher research. It was only after continued reflection that they saw the full impact on their professional lives:

I remember getting together with my first group of Case Study students—teachers who were doing research in their own classrooms—at the end of winter, after they’d been gathering data for months. As we went around the table where we sat and each spoke, there was an accumulating disappointment that they had not arrived at any monumental conclusions and a relief to find that others had the same experience. . . . I don’t know that any of the dozens of teacher-researchers I’ve worked with have felt they came up with earth-shattering conclusions. I also can’t think of one who felt that she or he hadn’t learned something from doing the study. If they learned less than they sought to learn, they also learned more; for they learned how to observe; they learned “why” they were teaching the way they were; they learned to reinterpret some events through seeing them from their students’ points of view; and they learned, among other things, that they could trust their own powers of learning. (182–83)

As teacher-researcher Peggy Groves reflects: “The difference between my recent classroom research and my usual classroom practices is that for my research I kept notes about what I did, I looked more closely at what happened, I asked myself harder questions, and I wrote about it all. These differences took a lot of time, but I think I’m a better teacher for it. And maybe even a better writer.”

We began collecting materials for this book almost twenty years ago, when we realized there were far more research findings published than accounts of the process of becoming a teacher-researcher. For example, when we read an account of a teacher-researcher successfully analyzing her reading group procedures, we may find it hard to imagine her as a beginning researcher. The fluid narrative may include some awkward questions about her teaching practices, but it rarely includes questions about research methods. The novice researcher may have little sense of how the teacher-researcher got from there to here—from the struggle to find and frame a research question to a clear and thoughtful presentation of her findings.

In our work as teacher-researchers, we have learned that this struggle is a natural one. You will see the line between teaching and research blur often as you read many examples of teachers doing research in this handbook because

teaching and research have many of the same skills at their core. Some of these skills were described by Charles Kettering in writing about research:

Research is a high-hat word that scares a lot of people. It needn't. It's rather simple. Essentially research is nothing but a state of mind . . . a friendly, welcoming attitude toward change . . . going out to look for change instead of waiting for it to come.

Research is an effort to do things better and not to be caught asleep at the switch. It is the problem-solving mind as contrasted with the let-well-enough-alone mind. It is the tomorrow mind instead of the yesterday mind. (Kettering, in Boyd 1961, 82)

If you have a problem-solving mind as a teacher, you are ready for research. If you welcome change and growth with your students, research can have a place in your professional life. The educational world is certainly in need of the tomorrow minds of teacher-researchers!

This is particularly true with the growing diversity in today's schools. At a recent education convention, noted educational activist Lisa Delpit was asked how it is possible to prepare teachers for the wide range of cultures, abilities, and talents that they will meet in any given classroom. She listed three key ingredients: The first is to be humble and recognize that you have much to learn from your students and their communities. Second, approach your teaching always with a sense of inquiry, framing questions about your students and their needs to guide your teaching. Finally, have a willingness to share your story. Other teachers need to know what you have learned and how you have gained your wisdom.

These three ingredients are the basis of teacher research. We approach our classrooms with humility and a sense of inquiry and wonder—and we make a commitment to add our wisdom to a knowledge base that educates others about the realities of teaching and learning. Teacher-researcher Tim Gillespie (2000) claims that our teaching narratives have become increasingly important:

We need to tell our stories, because true classroom narratives offer an important alternative to other prevalent modes of discourse about school life. There are competing narratives out there about this profession of ours that are dangerous, and classroom stories resist and complicate them. (2)

Debates about the changing roles of teachers and the value of their research persist. The teacher-as-researcher movement is not without controversy. Those of us who believe in the power of teacher research have been constrained by conservative definitions of university researchers and federal policymakers. These debates are entirely predictable, if only because universities and public schools still have different beliefs when ascribing value to research, as Michael Patton (2002) notes:

Debates about the meaningfulness, rigor, significance, and relevance of various approaches to research are the regular features of university life. On the whole, within universities and among scholars, the status hierarchy in science attributes the highest status to basic research . . . and virtually no status to formative and action research. The status hierarchy is reversed in real-world settings, where people with problems attribute the greatest significance to action and formative research that can help them solve their problems in a timely way. (223)

Teachers and many researchers who work in university settings will probably never fully agree on the value of different types of research. Ongoing debates about the value of teacher research remind us of an anecdote about Picasso:

A story is told of a French railroad passenger who, upon learning that his neighbor on the next seat was Picasso, began to grouse and grumble about modern art, saying that it was not a faithful representation of reality. Picasso demanded to know what *was* a faithful representation of reality. The man produced a wallet-sized photo and said, "There! That's a real picture—that's what my wife really looks like." Picasso looked at it carefully from several angles, turning it up and down and sideways, and said, "She's awfully small. And flat." (Nachmanovitch 1990, 118)

Like Picasso, teacher-researchers are heading a revolution in modern art—the modern art of teaching. We are looking at research possibilities from new angles. We are redefining our roles, rejecting the small and flat impoverished models of research that attempt to "turn classroom inquiry into a pseudo-scientific horserace" (Atwell 1991).

We are also declaring the work of fellow teacher-researchers as invaluable, regardless of the value other researchers and policymakers may place on it.



Teacher-researcher Jane Doan writes about case studies, arguing passionately for trusting our values as teacher-researchers:

The need to prove that case studies are valid in the scientific community stems from teachers' basic insecurities. We are forever trying to prove ourselves. Why can't we believe in ourselves enough to say that case studies are the way to do educational research? No explaining, no defending of ourselves, no worrying about accountability! Just, this is what we are doing. This is who we are.

This new stance is compatible not only with our vision of research but also with a vision of what teachers can be. This vision is not of passive teachers who perpetuate the system as it is, but of teachers who see how the system can be changed through their research.

"The growing awareness of the political 'stuff' that is inherent to teacher research is probably what stuck with me the most," reflects Gail Parson when she tells about her experience at a teacher-research institute. "I remember Mary Kay, sitting forward in her seat, jabbing at the air with one finger like she does, and saying with that enigmatic half-smile, 'It's a whole different thing to go to a school board or a curriculum committee and say, Based on my research. . . .'"

We think that once you embark on the challenge that is teacher research, you will be hooked. As Gail notes:

Somebody had to stick her neck out and try it . . . and we did. It makes me appreciate what's happening now even more. The study I did . . . remains a huge pile of "stuff"—the compost for one rough article, and a source of more and more questions I have about how adolescents think and process information and make meaning for themselves. I showed the suitcase full of [copies of] journals, audiotapes, and field notes to a professor friend who said, "You did this as a working teacher?!!!" Damn straight, sez I. Want to meet a few of my "working teacher" friends? Wait till you see what they're up to!

We invite you to meet some of our working teacher friends and enter into the growing community of teachers who are testing the limits of educational research. Wait until you see what we're up to!

Research, like teaching, is a complicated and messy process. You cannot divide the process into neat linear steps, no matter how hard you try. We had some trouble constructing this text about the process of doing research, and it may help you to see some of the bones that are sticking out in this skeleton.

Books are linear, but the research process is *not*. As researchers, we do not necessarily start with a question and then move through data-collection procedures and designs to our findings and publication in a lockstep fashion. Nor do we wait to analyze data until all our data are collected; we are analyzing, writing, and reflecting right from the beginning. We urge you to use this book in the ways that will most benefit your own process. You may want to skip around; how you read this book should be based on where you are in your development as a teacher-researcher.

For example, if you have problems with writing, start with one of the last chapters, “Perishable Art: Writing Up Research.” You will not be able to write down research notes or construct brief memos if you must first overcome an aversion to writing. In the same way, understanding data collection or research design will be difficult without a sense of the whole—how collection, analysis, and design can fit into your life as a classroom teacher.

We start with stories of beginning teacher-researchers and their struggles in “Try to Love the Questions Themselves: Finding and Framing a Research Question.” This chapter takes you through the initial stages of deciding what to investigate in the classroom and how to frame the question so that information can be gathered effectively. Chapter 1 closes with some suggestions for getting started.

Chapter 2, “Form and Function: The Research Design,” discusses the importance of designing the research to fit the area of investigation. You will read the stories of four teacher-researchers making decisions and solving problems as they refine their research designs.

In Chapter 3, “The Artist’s Toolbox: Strategies for Data Collection,” we detail the many ways to gather data in the midst of teaching. We share examples of the various ways that teachers log their data through field notes and teaching journals, as well as show strategies for collecting student samples, conducting interviews, and using the electronic media of videotaping and audiotaping to gather information.

Next, Chapter 4, “Pentimento: Strategies for Data Analysis,” demystifies the process of making sense of that mountain of data. We present strategies for preparing data for analysis, narrowing the focus, isolating the important findings, and fleshing out the final categories.

In Chapter 5, “The Legacy of Distant Teachers: Creative Review of Literature,” we discuss the implications of others’ research on your findings. This chapter purposely follows data analysis, since a careful review of literature is most helpful *after* categories are defined.

Chapter 6, “Perishable Art: Writing Up Research,” takes you through the process of converting research into words for sharing with a wider audience. We suggest writing exercises and resources as well as a wide variety of outlets for published work. (These resources are extended in Appendix E.)

We discuss the importance of creating a teacher-research network and support group in the final chapter, “You Are Not Alone: Finding Support for Your Research.” You will read tips from successful teacher-organizers for starting and maintaining these groups. We suggest strategies for writing proposals to fund research as well as smaller grants to fund classroom projects. Successful proposals and grants are included along with ideas for sources of funding.

There are several journals and websites that can aid teacher-researchers. We list these in Appendix E, “Resources for Publication.”

We hope you enjoy the stories and research techniques of the teacher-researchers that follow as much as we enjoyed compiling them.

Inquiry-based learning should be based in real-world connections, in something tangible to children, and so my resolution is to create inquiry-based learning experiences that students will relate to and retain. What challenges and successes have you had with problem-based and inquiry-based learning in your arts classroom? [Click here for resources of PBL and inquiry-based learning in the arts.](#)

About the Author. Brianne Gidcumb. Brianne is a former music educator from Chicago and current graduate class instructor with EdCloset™s Learning Studios. She earned her Masters degree in Music Education Groundbreaking when first published, *The Art of Classroom Inquiry* has become the classic book on the subject, helping tens of thousands of preservice and inservice teachers discover successful ways to conduct research in their classrooms. Thoroughly updated to reflect current thinking and technologies, this revised edition continues to show teachers how they can carefully and systematically ask and answer their own questions about learning. In crisp, jargon-free prose, Ruth Shagoury Hubbard and Brenda Miller Power present the nuts and bolts of classroom research strategies

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