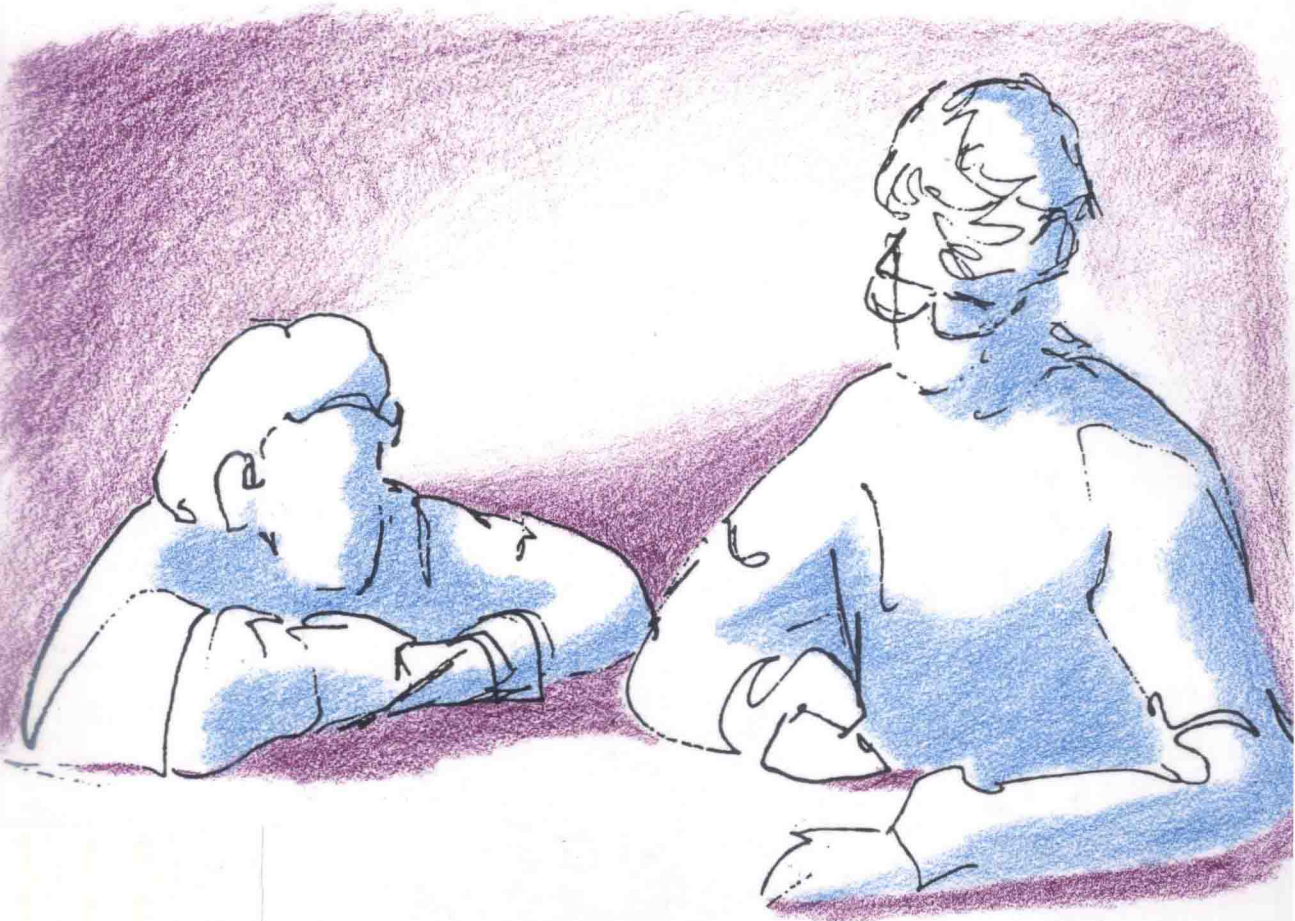


The Art of Classroom Inquiry

A HANDBOOK FOR TEACHER-RESEARCHERS



Ruth Shagoury Hubbard and
Brenda Miller Power

A HANDBOOK FOR TEACHER-RESEARCHERS

HEINEMANN ► Portsmouth, New Hampshire

HEINEMANN

A division of Reed Elsevier Inc.
361 Hanover Street, Portsmouth, NH 03801-3912
Offices and agents throughout the world

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Library of Congress Cataloging-in-Publication Data

Hubbard, Ruth, 1950—

The art of classroom inquiry : a handbook for teacher-researchers
/ by Ruth Shagoury Hubbard, Brenda Miller Power.

p. cm.

Includes bibliographical references.

ISBN 0-435-08762-2

1. Education—Research—United States—Handbooks, manuals, etc.

2. Teaching—Case studies. I. Power, Brenda Miller. II. Title

LB1028.H78 1993

370.78—dc20

92-27603

CIP

A portion of the authors' proceeds have been donated to support the work of the Center for Teaching and Learning in Edgecomb, Maine.

Design by Mary C. Cronin

Cover illustration by Karen Ernst

Printed in the United States of America on acid free paper.

01 00 99 EB 9 10 11 12

Acknowledgments



Our first thanks go to the many teacher-researchers with whom we have worked over the past ten years. They have been enormously patient while teaching us what it is they know and do.

Ruth is also grateful to her friends and colleagues at Lewis and Clark College. Special thanks go to Andra Makler for her careful readings of drafts of this text and her constant encouragement and to Kim Spir, Wanita McPherson, Kathy Anderson, and Mary Henning-Stout for their unfailing friendship and support and for their ready humor.

Brenda would like to thank her colleagues at the University of Maine, especially Phyllis Brazee, Paula Hatfield, Jan Kristo, and Rosemary Salesi. In addition, Carol Vukelich at the University of Delaware supported this work with long distance friendship. Brenda also thanks her secretary, Elaine “Skip” Mitchell.

Readers of this text have helped shape it throughout the conception and revision processes. Grateful thanks to Penny Chase, Linda Christensen, Jane Doan, Nancy Winterbourne, Gordon Donaldson, Jody Gaspervitch, Kathleen Holland, Mary Burke-Hengen, and Mary Stein for their careful readings and insightful comments.

And finally, we wish to express our thanks to our best friends James Whitney and David Power who listen with patience and good humor to our many plots and schemes, encourage us when we get discouraged, and surround us with the support that keeps us going. A thousand thanks!

Notes on Reading This Text



We have included dozens of examples from the work of teacher-researchers in this book. Most of the examples identify the teachers only by name; identities of students have been disguised. In Appendix C, however, you will find the addresses and school affiliations for the teacher-researchers cited in the book. Feel free to write to them and start forming some new research connections. These teachers would love to hear from readers!

After citing a teacher-researcher by her full name in an example, we then refer to her by her first name throughout the example. We want to put a human face on research, and we always use first names when we work together. There is also some awkwardness in co-authoring a text and referring to ourselves in it. “Ruth” in text is always Ruth Hubbard; “Brenda” refers to Brenda Miller Power.

Introduction



We meet in faculty rooms and hallways, at conferences and in college classrooms, sharing stories, frustrations, tools, and triumphs. There is no forum,^{76 77a} no national organization, no journal dedicated to our endeavors. Our curiosity about our students leads us to ponder, ask questions, and search for answers. Who are we? We are teacher-researchers. This book grew out of the needs of all of us—whether we work with elementary-school children or adult students—to look into the *process* of teacher research.

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 ten 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 dozens 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 strategies for culling 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 unfamiliar with the concept of teacher research, we recommend that you look at a collection of research studies or essays on teacher research as a companion to this handbook. *Seeing For Ourselves* by Glenda L. Bissex (1987) or *Reclaiming the Classroom* (1988) by Dixie Goswami and Peter Stillman are two wonderful introductions to teacher research.

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 does 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. That personal presence over time is critical for understanding, as Kathleen Stocking (1990) writes:

It is hard to live our lives in places where we have no memories. It limits the depth of our relationships—not just to people, but to places, to seasons. On the simplest level, knowing how this fall differs from last fall deepens my awareness. If anybody else in my community, or several anybodies, has a different or similar awareness, this also broadens my perception, makes it more prismatic, more real. (p. xxiv)

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.

Lee Odell, well known for his research in the field of writing, stresses two assumptions about research that pertain specifically to teachers.

"The first assumption," Odell claims (1987, p. 129), "is that all researchers must be able to 1) formulate and reformulate the questions that will guide their research, and 2) carefully describe the data they have collected. This assumption is particularly important since the process of asking questions and describing data is compatible with the normal demands of teaching. Consequently, the research described will involve teachers in doing what they have to do anyway—paying careful attention to what is going on in their classrooms."

The second assumption Odell makes (1987, p. 129) is that research is an ongoing process of discovery—"a process that continually requires us to rethink not only our understanding of our discipline, but also our sense of the questions we should be asking and of the best procedures to analyze our own and our students' work. Consequently, there is a sense that our research is never finished. As we learn new ways of describing what is going on in our classrooms, we see new questions that need to be answered; as we answer those questions we see other questions that didn't exist until we had answered the previous ones. Exploration leads to further exploration, discovery to still further discovery."

Who is the teacher that will make these discoveries? That teacher is you. And the teacher next door who wonders about the same issues as you in the teacher's lounge. And the teacher in a school across town, or across the state, or across the country who also wants to look closely at her students in order to become a better teacher. And teachers like Peggy Groves, who 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."

With so many teachers attempting research in their classrooms over the past ten years, it is ironic that the growth of the process- or holistic-teaching movement hasn't brought about a similar process-research movement. Lucy Calkins (1986) highlights this irony:

There is a contradiction at the heart of what we as composition researchers do. We urge teachers to focus on the process as well as the product of writing, but *our* focus continues to be on the topics of research, and we give only cursory attention to methods . . . we do not interview skilled researchers, observe them at work, or study novice and expert researchers so as to differentiate one from another. We do not ask prominent researchers in our field to provide personal, honest accounts of their research processes (accounts with the texture and complexity and tentativeness of reality), nor do we keep such accounts of our own emerging methods. Although research in composition is what we do, we rarely read or write about the process of research. (pp. 125–126)

Calkins's words ring true when we look at teacher-research findings. For example, when we read an account of a teacher-researcher successfully analyzing her conference procedures, we may find it hard to imagine her as a novice 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 delineated 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)

-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!

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. Arthur Applebee, a university researcher who writes the often-cited "Musings" column for the journal *Research in the Teaching of English*, sets up a dichotomy between teachers and researchers, defining their roles and then restricting us to those definitions. Applebee (1987) implies that "real researchers"—objective observers, personally removed—bring a rigor to their work that teachers lack. In his definition, teachers are necessarily "imperfect researchers," for they are part of, rather than removed from the context, and by necessity, will interact with their informants (p. 7).

Framing the arguments of what constitutes "real research" within this "objective view of reality" reminds 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, p. 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 may place upon 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 upon the challenge that is teacher research, you will be hooked. As Gail Parson 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 xeroxed 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 till 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 our 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 will be based upon 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 in the text, "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. The chapter closes with some suggestions for getting started.

In Chapter 2, “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.

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

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, “Writing Up Research,” takes you through the process of converting research 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 D.)

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 Work.” 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 as well as sources for funding.

There are many books and articles that can aid teacher-researchers. We list these in “Suggested Readings.” Finally, we have included a glossary with definitions of terms as a quick reference tool for readers.

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

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Try to Love the Questions Themselves

►►► FINDING AND FRAMING A RESEARCH QUESTION

*Be patient toward all that is unsolved in your heart and try
to love the questions themselves.*

Rainer Maria Rilke, 1934

THE DUNNE-ZA, a branch of the Athabaskan tribe, say that a person who speaks from the authority of his or her own experience “little bit know something.” Knowledge, the elders say, empowers a person to live in this world with intelligence and understanding (Ridington 1990). Dunne-Za men and women expect their children to gain power by observing the animals and natural forces around them through a series of quests called “vision quests.” Every person “knows something” from these experiences and from the stories that emerge from the quests.

The goals of teacher-researchers, like those of the Dunne-Za on vision quests, is to “little bit know something” about their students’ abilities and learning strategies. New knowledge not only better enables teachers to understand students and their world but also empowers the learners themselves.

Teacher-researchers at all grade levels—from kindergarten to graduate level—are increasingly turning to qualitative or ethnographic research methods. Observational studies help the teacher understand the student’s world from the *student’s point of view* rather than from that of the teacher’s own culture. Students are the informants in teacher research, helping us to learn both the recipes for behavior in their cultures and the learning strategies that they employ. And central to the role of informants is being an active collaborator in these research endeavors.

Teachers just beginning their own classroom research often feel overwhelmed; there is so much to study in their classrooms that they wonder how other teachers have known how to start. As Glenda Bissex writes, “A teacher-

researcher may start out not with a hypothesis to test, but with a wondering to pursue" (1987, p. 3). All teachers have wonderings worth pursuing. Transforming wonderings into questions is the start of teacher research.

FINDING THE QUESTION

In qualitative research, the questions come from real-world observations and dilemmas. Here are some examples of the wonderings that teacher-researchers we know are pursuing:

- ▶ What procedures or activities promote or encourage students to revise their writing?
- ▶ How does a writing-workshop approach affect the growth of students' skills in the mechanics of writing?
- ▶ How does a whole language/process approach affect a learning-disabled child?
- ▶ What problems does a pre-service teacher solve as she begins to teach without her mentor teacher?
- ▶ What happens when eighth graders choose their own reading material in a reading-workshop situation?
- ▶ What language occurs in mathematics learning and what role does it play?
- ▶ What can my eighth graders and I learn about our writing when they respond to a paper I've written?
- ▶ How do children resolve problems on their own in their improvisational dramatic play?
- ▶ How do teachers of writing change their instruction after participating in a writing institute?
- ▶ What is the difference between the genres of writing students use on a class message board and those they attempt in writing folders?
- ▶ How do students evaluate the reading and writing of peers?
- ▶ What strategies do students use to help peers during whole-class writing discussions?

The questions these teachers chose to pursue arose out of their classroom queries; they were important questions for their teaching.

Kimberly Campbell, a high-school teacher, struggled with the role of conferences in her classroom. In her teaching journal, Kim wrote:

I find that as I move around the room to ask, "How's it going?" I get very few responses. Often, I end up feeling like an intruder, an interruption in their process. . . . I also find myself struggling with the how's and when's of conferencing. For example, today I had five students ready for editing conferences, but only had time for two. I was interrupted three times during one conference by other students. And I had no time to do brief content conferences. I'm feeling confused and overwhelmed.

As the term progressed, Kim was able to focus her concerns into questions for research: *What is the role of conferencing in a high-school writing workshop? How do peer conferences differ from teacher conferences?*

First-grade teacher Christina Randall also used her writing to focus on concerns about her interactions with students. But her observations led to much different questions:

Going to lunch is one of the many hassles faced with youngsters in a portable classroom. We need at least fifteen minutes to wash hands, put on outer gear, and clean our room. Usually we are keeping some other class waiting. Last week the procedure was much the same. On our way into the main building they spy it. The line stops. "What's that?" "Is that a starfish?" "What's that starfish doing on top of the clam?" "Lookit! I just saw that clam thing open its shell." Questions are being asked faster than can possibly be answered. We are all fascinated with the saltwater aquarium. I reluctantly pull myself back from the tank with a "Let's go, gang. We can come back later to look at the aquarium." The questions continued after lunch and throughout the rest of the day. Within days the aquarium begins to show up in writing.

In creating a language-rich environment for young children, I have capitalized on the interest in the saltwater aquarium. We wrote a group story, went to research materials, and returned to the main building with observation logs in hand. Teachable moment? As a teacher in search of stimulating topics, I could hardly pass it up.

Teachable moment. Developmentally appropriate practice. Process approach. Cooperative learning. Least restrictive environment. Whole language.

Buzz words suggest that the transition be made from focusing on how the child succeeds with the curriculum to how the curriculum succeeds with the child.

But is success determined by the products of tests or the processes observed and documented? If the curriculum is rich and diverse in language-building activities, what about remedial services like speech and language therapy? Do children need to be pulled out for remedial services to work on specific skills?

Like Christina, many teachers have to do some wandering to get to their wonderings. Often questions for research start with a feeling of tension. Christina wants to look beyond faddish buzz words and rapid implementation of new teaching methods to try to figure out what is really going on with language development in her students and what this means for the systems of intervention established in schools. Kim wants to understand why her expectations for conferences are so often at odds with the expectations of her students, and how this might affect her future conferences with students.

It is not surprising that the root word of question is *quest*. Teacher-researchers embark on a new kind of vision quest as they look for research topics in their classroom. They want questions to research that can lead to a new vision of themselves as teachers and their students as learners. These questions often involve seeing their students in new ways.

Jack Campbell, a teacher-researcher from Fairbanks, Alaska, realized he needed to take a closer look at his students and their culture if he wanted to help them become better writers.

This past year, I've watched Native writers become confused because of the way their writing has been edited. When they receive feedback, either from their response groups . . . or from me, sometimes they lose confidence because they take the criticism 'personal.' When these criticisms occur in their experience-based writing . . . they seem to interpret their writing as being ineffective. When a novice writer offers an essay on his or her personal experiences, and these in turn are criticized, perhaps for legitimate technical reasons, their writing voices lose authority and direction. The critiques, without explanations, become forms of cultural tyrannies.

As Jack thought about changing his teaching to meet the needs of his students, he wanted to be able to document how these strategies affected his

students. He crafted his teaching dilemma into the following question: *How can Alaskan Native writers establish a stronger writing voice?*

Natalie Goldberg advises writers to be specific. "Not car, but Cadillac. Not fruit, but apple. Not bird, but wren. Not a codependent, neurotic man, but Harry, who runs to open the refrigerator for his wife, thinking she wants an apple, when she is headed for the gas stove to light her cigarette. . . . Get below the label and be specific to the person" (1990, p. 3). Goldberg stresses that the best way to create a vivid and true picture with words is through specific, tangible, concrete images. The same can be said of a good teacher-research question. All these teachers started with specific instances of tension in their classrooms—a lack of rapport in conferences, an inability to get students to line up, hurt feelings when revision suggestions were made. As these teacher-researchers thought about these tensions, they began to focus on larger issues of culture, learning, and school structure. The questions they asked were not aimed at quick-fix solutions to errors in classroom technique. While asking these questions might help these teachers with their methods, the explorations have even greater implications. All involve understanding students and teaching in much deeper ways.

This attempt at new understanding often leads beyond the classroom door. Joan Merriam, a fourth-grade resource-room teacher, was happy with the successes of her students. But her case study of Charles started when she realized that everyone involved in Charles's schooling did not share her definition of success:

On Parent Conference night, Charles's entire family arrived in my room at the appointed time. Charles chose some poetry books and took his younger sister to the couch and read to her while I talked with his parents.

They had just come from a conference with Charles's classroom teacher, and concern was on their faces. Fourth grade is the first level in our school that assigns letter grades, so letters on the rank card were a new experience for them. Charles had received C's in science, social studies, and spelling. Although his teacher had tried to assure them that C was average, they were not convinced. My glowing report of Charles's progress in reading and his grade of A did little to allay their fears. They were all too aware that *The Boxcar Children* in which Charles was reading so well was written at a third-grade reading level. While Charles's mom assured me that he was achieving success in my room, she was worried about what to her was a lack of success in the classroom. She asked me to predict when Charles would "catch up" to his peers and work at grade level. When he goes on to fifth grade, Charles will rotate among four teachers for classes. Both parents expressed concern that Charles might have difficulty "keeping up" with the rest of the class next year. While I did my best to reassure them that Charles was progressing, it was evident that they left the conference with some lingering doubts. That conference left me with some doubts as well. Charles's parents and I had been operating at different levels. I was excited at how far Charles had come, while they were very worried about how far he had to go. When writing Charles's progress report I had only considered his success during the one hour a day he worked in my room. I needed to look beyond my room for ways to help him succeed in his classroom and at home.

As a result of that conference, Joan established two research questions worth exploring: *How could she help Charles attain a higher level of "success" in his other classroom? How could she better communicate with his parents about his progress?*

Joan was willing to look beyond the one hour Charles spent daily in her classroom to understand his needs. Jack's research question would take him into Native American culture so that he could better understand what criticism meant to his students. The answers to these teachers' research questions won't necessarily validate their teaching practices. More likely, these teachers will discover that they need to change how they work with students and how they view young learners.

Nancie Atwell, a well-known teacher-researcher from Edgecomb, Maine, remembers her first years as a teacher-researcher. Over time, she found her research questions changing as her view of her own teaching changed:

For six years I studied the writing of eighth graders. Over these six years, the nature of the questions I asked in my classroom changed, as my understandings of research have changed. In the beginning I wanted to know, What should I do in my classroom? What will happen when I do it? I wanted to measure the effects of my teaching and prove my methods. My research was inevitably some variation of the same question: When I perform—say, write in my journal when I tell students to write in theirs—what wonderful things will my students do? . . . The focus was on my methods. The focus was on me. It was a truncated version of classroom research.

Then, as I started looking—really looking, through the prism of the stunning naturalistic studies of children's writing of the last decade—my teaching methods took a back seat. My students climbed up front and became my focus. I conducted research to learn from them about their uses and views of written language. (Atwell 1991, pp. 315–316)

Nancie's evolution as a researcher involved a willingness to change. Kim, Christina, Jack, and Joan are also unthreatened by change. They all could have easily developed questions through their observations from a defensive stance, a determination to maintain the classroom status quo. Kim could have asked, "How can I make my students understand the importance of my conferences with them?" Christina could have asked, "How can I get students to spend more time on task?" Instead, the research questions, if answered, will probably result in changes in the teachers—not merely in their methods, but in their teaching philosophies and attitudes toward students.

FRAMING THE QUESTION

"One purpose of qualitative methods is to discover important questions, processes, and relationships, not to test them" (Marshall and Rossman 1989, p. 43). To keep the research process open to continual discovery, the framing of research questions is critical.

The first consideration while framing questions is to make sure the question is open-ended enough to allow possibilities the researcher hasn't imagined to emerge. This rules out the kind of closed yes or no questions that are developed in experimental studies to test the differences between control and experimental groups.

Look again at some of the sample questions listed in the previous section on "Finding the Question." What do you notice about them? The patterns that you see in your colleagues' research questions can help you frame your own. You will notice that these questions are posed in a way that will be answered