



Exploring Children's Thinking through Teacher Research

A Conversation with Cindy Ballenger

LEAH SCHOENBERG MUCCIO

Recently, Leah Schoenberg Muccio, the Associate Editor of *Voices of Practitioners* chatted with noted teacher researcher Cindy Ballenger. Cindy has been a reading specialist in the Cambridge, Massachusetts public schools for the past 15 years. She has recently taken a position in the Eliot-Pearson Department of Child Development at Tufts University. She is one of the founding members of the Brookline Teacher Research Seminar, an influential group in the development of teacher research in the last 25 years. Cindy was also a member of the Chèche Konnen Teachers Seminar, a group shaped by a collaborative culture of critical, transdisciplinary inquiry and reflection among a diverse group of researchers, educators, and scientists from varied communities and professional fields. She serves on the steering committee for NAEYC's online teacher research journal, *Voices of Practitioners* and teaches a course focused on teacher research. Her recent books, *Teaching Other People's Children: Literacy and Learning in a Bilingual Classroom*, *Regarding Children's Words: Teacher Research on Language and Literacy*, and *Puzzling Moments, Teachable Moments: Practicing Teacher Research in Urban Classrooms* are explorations of teacher research.

In her most recent book *Puzzling Moments, Teachable Moments: Practicing Teacher Research in Urban Classrooms*, Cindy describes her work as a teacher researcher in a large urban school system. In the book, she shows how teachers can focus on children's strengths by using teacher research to understand their thinking, particularly the thinking of children who tend to be less successful academically. During the interview, Cindy elaborates on these approaches, shares recent experiences and questions she is currently exploring in her work with diverse children, and offers suggestions for other teachers who want to engage in teacher

research. The interview addresses Cindy's ongoing exploration of children's thinking and the ways in which she uses teacher research as a tool to understand children and improve her practice. She explains her techniques for structuring curriculum discussions to better understand the children's meaning. Cindy also discusses her approaches to teacher research including collecting and analyzing data. She believes that an inquiry focus on the children who puzzle us will not only help us tune into children and develop our teaching, but is also the crucial piece of a more democratic classroom.

L: Could you begin by explaining what teacher research is to you?

C: I teach in urban schools; my school is an extraordinary school but it remains true that children of color, poor children, children whose parents did not receive a great deal of education themselves, do not usually do as well as more privileged children. My experience researching as a part of my teaching in this environment has shaped my point of view on the goals of teacher research. I know there are different goals for different situations, but for me teacher research is the hope for equity and democracy in the classroom, and democratic classrooms are ones where everyone's ideas count and where every child feels that. Establishing democratic classrooms is the goal of teacher research for me.

However, powerful assumptions stand in the way of this goal. On the face of it, not everyone's ideas are equal—it appears that some children have more information to draw on, or understand more quickly. We have many assumptions about what thinking sounds like or what is a good answer. We become very wedded to the kind of sense we make or have been taught to make. Democratic classrooms are classrooms where these assumptions, these habitual ways of seeing, are open to question, open to change, to re-shaping; this includes the teacher's assumptions as well as the children's. Making this happen is for me the task of teacher research.

L: How does your emphasis on puzzling children fit in with this?

C: The best way I have found to interrupt the beliefs and assumptions we have about what counts as powerful thinking and who is doing it is to focus on a child we might regard as "at risk." I changed the term from "at risk" to "puzzling," because when we think of these children as "puzzling" instead of "at risk," we can move away from our habitual ways of seeing such children. Then we explore this child's ideas, preferably with others. In my experience, these children are always thinking—all children are thinking as every parent knows—and so it is a matter of uncovering what that thinking is.

L: And in your experiences, how does teacher research help teachers to understand these children and their ideas?

C: Teacher research helps teachers figure out what the children are thinking. When children say something that seems irrelevant or silly or off topic or just

not what I expect, I have trained myself to think, “Hmm...that’s a puzzling moment.” Then, as a teacher researcher, you want to hear more. You try to expand the talk, to create places in the discussion for that child to talk about his or her meaning, or perhaps have other children comment on what the child might have meant. Maybe the children will need to draw or act out some aspect of what they are discussing. The puzzling child has opened you to a range of connections. Of course, often you don’t really manage to do all that right there and so you should always remember that you can come back to things later. Here is where the note taking comes in. You can look your notes over later and notice the puzzling moments, and pursue the discussion on another day. Children almost always remember what they were saying.

L: How do the children learn to participate in these kinds of richer discussions?

C: Most do easily. But the children who think they have the right answers have more difficulty with children whose responses are different. You want them all to value each other’s input. For example, we had this discussion about how rivers are formed, and one child, Jacob, had reasonable knowledge of geology and talked about crevices in rocks. Markendy said, “Well, when I’m in the shower and the water kind of makes my fingers pitted and there are those holes that happen in my skin because of the water. And so I’m thinking that maybe when it rains something happens like that with each drop of rain.”

What Markendy was thinking about showers and rain was just another approach to understanding how rivers are formed. It was *imagining it in real time*. We know rain is involved but how exactly? Jacob, who knew a lot about geology, wasn’t visualizing it. He just had a lot of information. The use of imagination and trying to visualize the process in Markendy’s thinking about his fingers and how it could relate to rivers is something that Jacob really needed to develop. After I pointed this out, he got excited about it. But I had to explain it to him because at first he was thinking the shower analogy was kind of wrong or not a big enough idea. It didn’t include the concepts of erosion as he knew it, for example, but then Jacob saw that it really was a useful approach to understanding how rivers are formed.

L: So it sounds like you’re saying that all children have knowledge, but for some children, it is harder to access their knowledge. You’re saying, don’t just write them off. Is it different ways of understanding a topic? Different strengths?

C: Yes. As a teacher researcher, you really have to explore more about how and what the children understand or don’t understand. You need to step back and let them speak, and at the same you need some way to *stop time*. To do this you take notes or tape record so that you can think about what the children said later. It is very hard to recognize all that is going on at the moment.

Another advantage of recording what a child has to say is that the child then sees that you are really interested and usually expands on what she is talking about. Thus your chances of hearing more of the thinking are increased. For example, a child started us thinking about how things could go up in evaporation. We had put cups of water all around the classroom and over a few days we observed that some of the water had disappeared. Some children were noticing that, when suddenly, Daniel held up the cup and pointed out there was no hole in it. He asked, "But the water didn't go down?" Some children then told him that the water had gone up. He looked perplexed and asked, "How can things go up?" The children replied to him that the sun makes it dry and it goes up. I did not think much about his question at the time because the children had answered it. But later I realized that it was a very good question—and that I myself do not really understand how heat can make things rise. It's these children who try to imagine it who will say, as this child did, and believe me he was not a child who was doing well, "But how can it go up?" Checking my notes later allowed me to revisit my own thinking and bring us back to this question. Then everybody is taken aback because all of the children who feel like they actually know the water cycle, perhaps even the teacher, have never noticed that they don't really understand. After such an experience, the discussion is very open as children have more feeling about what they know and what they would like to really know. We did a lot of study on the water cycle after Daniel's question. I think it was very engaging for all.

L: So it's really about exploring more about how the children understand or don't understand—a deeper understanding that you're working to facilitate?

C: Yes. And helping people realize what they know and don't know because, particularly in science, we accept all kinds of things that actually we don't really get.

L: How do you see the relationship between the teacher researcher recording and analyzing children's discussions and the curriculum?

C: I think you often can develop activities from the discussions and conversations that you have with children, and they feed into the curriculum. In teaching English Language Arts, more and more, people are given lists of lessons that the kids should learn. 'Good readers find the main characters'. 'Good readers notice figurative language'. There are these lists that are given to teachers. However, most of these ideas come also from listening to children's discussions and noticing the things that they're worrying about or observing. It seems to me it's much better to take the mini-lessons from what's happening with the children rather than from the list. The children will come up with statements like, "Well that's the main character maybe, but for me the most important character is so and so." Or they'll complicate things. A book may actually be fiction, but feels so true to the child, he'll say it is non-fiction. Then you have to figure out why he said that. And your own ideas of fiction and non-fiction and the difference become more complicated and more responsive to the children.

L: How can teachers incorporate this process into their practice?

C: In the discussions, I write frantically, which is good because I talk less. The children think it's kind of cool that I'm writing down what they're saying. They will often slow down so I really get what they mean. That transcript either helps me plan for the next day or allows me to notice what was being said because I actually don't remember it all. It's remarkable how little we know of who said what and how they said it if we don't have some record. My writings help me plan for the next day. The children feel better because I can say, "You said such and such yesterday, I noticed." That's very affirming. Personally, when I go over it, I often find ideas that I missed that seem worth investigating. Like I missed a piece of figurative language or something, so what's going on there?

I don't think it's as hard to take notes during discussions as people think. I've heard many teachers who do try it find that it isn't so difficult. I mean, you scribble and so you've got to go over it later or you won't be able to read it. But you scribble during the conversations. The children can help because they can remember what they said, even days later. You ask, "Did you really say such and such?" And they say, "No what I said was..." they know. I must admit that it's hard to find the time to go over the notes afterwards. This is most important. The best idea is when you prepare for the next day; you go over your notes. It's a crucial part of planning, and you were going plan anyway. It really deepens your planning because, as you reread the notes, and fix them because you can't read your scribbles, the experience becomes kind of meditative. You get into the experience of the discussion again. I think it's very rewarding for most teachers. The note taking really allows you to revisit the curriculum and the children's thinking. I think the message that people need to hear is that it's not as hard as you think. Taking notes is really partly doing your planning for the next day. In the end, it doesn't take up more time.

L: Can you talk about the next steps—about the idea of *making the familiar strange* and your strategies for interpreting the data, because I think this is the part that teacher researchers may find the most intimidating or challenging. You discuss your process for data analysis beginning with poring over the transcripts, restating the child's ideas in your own words, looking for the connections students are making, and finally focusing on what particularly puzzles you.

C: In the groups of teacher researchers I have been a part of, we usually loved sharing our notes with the other members of the group. One teacher described the *making the familiar strange* concept this way, "You think you know what happened, but everybody else has a different perspective." I think that works because maybe someone else's perspective is better but, even if it's not, hearing it works because it loosens your connection to your one way of interpreting a situation. It loosens your grip. It's very hard not to believe you know what just happened.

L: Because you were there?

C: Yes, because you were there and because you know that child. You have interpretations and you need to make that strange. You need to distance yourself from that because your perspective is not allowing you to see all the possibilities. And I think if you can share perspectives with somebody else, other ideas come in, but it also loosens your inability to see other options.

L: And do you think that expanding of perspectives is something that can be taught or do you think that it is something that teachers have to be committed to?

C: There are people who are more or less eager to do that. It is hard, I concede that. Everything tells you that the problem with this puzzling child is that he isn't very scientific and his home life is deeply troubled, something like that. And yet if you look closely at what he's producing in school, he often has very creative and sophisticated ideas. Children with all kinds of problems are still thinkers—we have to remember that and it's not easy. And people may not enjoy the feeling of *topsy-turvey-ness*, when you realize that something you didn't think was serious participation was in fact just that. I myself enjoy that feeling. It keeps the humor and joy in teaching.

L: And what do you see as the next step? So a teacher has completed his or her analysis of the data, then what comes next?

C: The crucial thing is for it to lead into your practice. Your practice should expand and change and become more flexible in lots of ways if you're really looking at children deeply. And it changes your knowledge of the content you're teaching.

L: How do you think teachers could evaluate their teacher research work?

C: I think the questions that one asks are, "Did it deepen my respect for a child or children?" And, "Did it increase or complicate my knowledge of what I'm teaching?" If it deepens your respect for a child's thinking and if it had some effect on your knowledge of what you were teaching, then I think you can sort of go with it. I think some of the simpler questions that researchers ask, such as studies of who talks more, girls or boys, and you end up with tally marks for each child who talks—I think the answer to the question, "Did this increase my respect for any child?" would be, "No, not really." Maybe it told me that the boys talked more in science and the girls talked more in literature, but it didn't really increase my respect and understanding of children and it didn't increase my knowledge of the content.

What you want to do with your study after that varies. Some people are only concerned with their own practice. Others want to share their learning with other teachers. I think telling the story of your students and what you taught

them and what you learned from them is very helpful to other teachers. We learn from vicarious experiences with other teacher's children as well as from our own experiences. Some teacher researchers feel their experience leads them to address issues of policy. I think for everyone it increases one's feeling for the importance of teacher decision-making and not just accepting curriculum from on-high, and that may be something people will want to publicly address with their accounts of student learning.

Copyright © 2012 by the National Association for the Education of Young Children.
See Permissions and Reprints online at www.naeyc.org/yc/permissions.
