HELPING NOVICES LEARN TO TEACH LESSONS FROM AN EXEMPLARY SUPPORT TEACHER

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There is growing interest in the problem of teacher induction and widespread support for the idea of assigning experienced teachers to work with beginning teachers. Still, we know relatively little about what thoughtful mentor teachers do, how they think about their work, and what novices learn from their interactions with them. This article describes how one exemplary support teacher defines and enacts his role with beginning teachers. On the basis of 10 hours of interview data and 20 hours of observational data, the article illustrates specific principles and strategies that shape Pete Frazer's mentoring practice and discusses how he learned to do this kind of work. As a close study of thoughtful practice, the article offers a vision of "educative" mentoring and some ideas about the conditions needed to sustain it.

I want to be a cothinker with them so that I can help them to see new perspectives, new ways to solve the problems they have.

—Pete Frazer during an interview (1988)

In this eloquent statement, Pete Frazer, a 30-year veteran teacher, summed up the essence of his work with beginning teachers. Released from classroom teaching for 2 years, Frazer worked full-time as a support teacher in an induction/internship program jointly sponsored by a university and a local school district. Assigned to help 14 beginning elementary teachers, he spent most of his time visiting their classrooms and talking with them about their teaching.

I first met Pete Frazer in 1986 while conducting a study of an induction/internship program in which he was working. The research was part of the Teacher Education and Learning to Teach project, sponsored by the National Center for Research on Teacher Education at Michigan State University and carried out between 1985 and 1990. The project combined case studies of 11 teacher education programs (preservice, induction, in-service, and alternate route) with longitudinal studies of teachers' learning as

they participated in the programs and moved into teaching (National Center for Research on Teacher Education, 1988). I decided to write about Pete Frazer's philosophy and approach to working with new teachers because he was so articulate about his practice and because he offers a vivid example of what I call "educative" mentoring (Feiman-Nemser, 1998).

The idea of educative mentoring builds on Dewey's (1938) concept of educative experiences, which are experiences that promote rather than retard future growth and lead to richer subsequent experiences. According to Dewey, the educator is responsible for arranging the physical and social conditions so that learners have growth-producing experiences.

Every experience is a moving force. Its value can be judged only on the ground of what it moves toward and into.... It is the business of the educator to see in what direction an experience is heading ... so as to judge and direct it. (p. 39)

In this article, I use the term *educative mentoring* to distinguish Frazer's approach to mentoring from more conventional approaches that emphasize situational adjustment, technical advice, and emotional support (Little, 1990).²

Journal of Teacher Education, Vol. 52, No. 1, January/February 2001 17-30 © 2001 by the American Association of Colleges for Teacher Education

Educative mentoring rests on an explicit vision of good teaching and an understanding of teacher learning. Mentors who share this orientation attend to beginning teachers' present concerns, questions, and purposes without losing sight of long-term goals for teacher development. They interact with novices in ways that foster an inquiring stance. They cultivate skills and habits that enable novices to learn in and from their practice. They use their knowledge and expertise to assess the direction novices are heading and to create opportunities and conditions that support meaningful teacher learning in the service of student learning.

A close study of a support teacher who exemplifies this orientation is especially timely. There is growing interest in the problem of teacher induction, and the idea of assigning experienced teachers to work with beginning teachers has received widespread support. Currently, 28 states require districts to offer induction programs. Eight states plan to implement a program in the next few years, and five more expect to expand their current programs (Sweeney & DeBolt, 2000). Most urban districts provide some kind of support to beginning teachers, usually in the form of mentoring (Fideler & Haselkorn, 1999). These induction initiatives are part of a larger effort to improve the quality of teaching and learning in schools by focusing on the recruitment, preparation, induction, and renewal of teachers (National Commission on Teaching and America's Future, 1996).

Providing on-site support and guidance is especially critical during the beginning years of teaching. New teachers really have two jobs to do—they have to teach, and they have to learn to teach (Wildman, Niles, Magliaro, & McLaughlin, 1989). No matter what kind of preparation a teacher receives, some aspects of teaching can be learned only on the job. No college course can teach a new teacher how to blend knowledge of particular students and knowledge of particular content in decisions about what to do in specific situations.

Experienced teachers can help novices have a successful first year of teaching. They can also influence what novices learn from the experience. Little (1990) distinguishes between emo-

tional support that makes novices feel comfortable and professional support that fosters a principled understanding of teaching. She argues that the promise of mentoring lies not in easing novices' entry into teaching but in helping them confront difficult problems of practice and use their teaching as a site for learning. As a result, participating in a serious mentoring relationship may actually make the first years of teaching more strenuous in the short run while promoting greater rewards for teachers and students in the long run.

Assigning mentors to work with beginning teachers creates new incentives and career opportunities for experienced teachers. It also challenges past assumptions about where knowledge for teaching comes from and how it can be learned. Implicit in the title "mentor" is "the presumption of wisdom . . . accumulated knowledge that can serve as the basis of sensitive observation, astute commentary, sound advice" (Little, 1990, p. 316). Yet, we know relatively little about what thoughtful mentors try to teach novices, how they make their knowledge accessible, and how they think about their mentoring in context. Some studies of thoughtful mentors at work have been conducted (see Dembele, 1995; Nevins, 1993), but more are needed if we are going to understand the insides of this important professional practice and its influence on novices and their teaching. This article contributes to that agenda by describing how one thoughtful support teacher defines and enacts his mentoring role and also how he learned to function so effectively in that capacity.

THE SUBJECT, THE DATA, AND THE ANALYSIS

Considered a legend in his district, Pete Frazer had been teaching elementary school for more than 30 years when I met him. He earned a doctorate in 1975 from the University of New Mexico where he worked with Marie Hughes, a prominent early childhood educator. A frequent instructor at the university and presenter at inservice workshops, Pete Frazer is a strong advocate of anecdotal records as a way for teachers to

study children and keep track of their thinking and learning. When Frazer applied for the job of support teacher, the program director wondered whether others would be intimidated by his reputation: "It was obvious that he could work with children. It was obvious that he could work with adults. And it was obvious that he was open to learning. But was he so proficient that he would be threatening?" So she asked him, and his response allayed her concerns. "He was so modest and so willing to look at what other people could teach him. It was very obvious when I spoke to him."

This article is based on 10 hours of interview data and an equal amount of observational data gathered in four visits spread over a period of 2 years. Besides regular conversations with Frazer about the induction program, his participation in it, and the progress of his interns, we conducted two formal interviews designed to uncover Frazer's reasons for becoming a support teacher, his views of his role, how he learned it, and his thoughts about the impact of the work on his own teaching. In addition, we shadowed Frazer on three separate occasions, observing his interactions with eight beginning teachers/interns both in and out of the classroom and interviewing him about these interactions. We took notes about the teaching we observed, taped Frazer's conversations with his "clients," and interviewed him about what we had seen and heard. By watching Frazer in action and talking to him about his practice, we sought a better understanding of how he thought about helping beginning teachers learn to teach.

In analyzing the observational and interview data with regard to Pete Frazer, I was struck by the abundance of his strategic knowledge about teaching and mentoring and by the eloquence and precision with which he talked about his actions. Scattered throughout the interview transcripts were numerous instances when Frazer labeled a specific principle or strategy or offered a clear rationale for a particular intervention. As I thought about these examples in conjunction with the freestanding interviews, I began to see powerful connections between the way Frazer defined his role and the way he

enacted it. Here was a fresh set of terms for describing particular mentoring moves along with a conception of role and purpose to give them unity.

Much of the language of beginning teacher support and assistance comes from the literature on clinical supervision (e.g., Cogan, 1973; Glickman, 1985; Goldhammer, 1969) and coaching (e.g., Joyce & Showers, 1985). Although these sources provide valuable models, perspectives, and strategies, they are often represented as technologies to apply or patterns of action to follow rather than as a set of ideas from which a variety of actions could be generated. Focused on reflective conversation and targeted feedback, they do not consider how mentor teachers can use their own practice as a site for novices' learning.

By fusing of values, theory, and action, Pete Frazer's formulations differ from the procedural, morally neutral vocabulary of scripting, pattern analysis, conferencing, coaching, and feedback. Frazer's "moves" add nuance to a complex practice, and his commentaries illuminate the kind of reasoning and improvisation called for in this form of professional development. Learning how one thoughtful mentor weaves showing and telling, listening and asking together in support of beginning teacher development enlarges our understanding and our images of mentoring as an educational practice.

This wisdom of practice study highlights the commitments, stance, and strategic knowledge of one thoughtful support teacher. I begin with Frazer's thoughts about teaching and learning to teach and his ideas about the role of the support teacher. Next, I show how Frazer enacts his role by describing eight different moves that he identified and that we observed or heard him talk about. Third, I use one extended example to show how several moves come together in a dynamic whole. Finally, I briefly discuss how Frazer learned to work with beginning teachers and consider what we can learn from his example. Throughout the text, I make connections between Frazer's skillful mentoring and key issues in the literature on beginning teacher support.

DEFINING THE SUPPORT TEACHER'S ROLE

Pete Frazer has very clear ideas about what it means to be a support teacher. His role definition embraces a central tension between encouraging personal expression and maintaining professional accountability, between supporting the unique qualities of an individual teacher's style and promoting a shared understanding of good practice. Frazer wanted to cultivate the particular strengths of his new teachers. At the same time, he felt responsible for seeing that the novices' teaching was responsive to the community, informed by developmental theories, and reflective of the best thinking about learner-centered teaching. These obligations have their parallel in Frazer's views of teaching.

Talking about what it means to be a support teacher, Frazer identified two elements: (a) helping novices find ways to express who they are in their work, and (b) helping novices develop a practice that is responsive to the community and reflects what we know about children and learning. "Being a support teacher," he said, "means helping people grow and become good teachers. It's a combination of basing teaching techniques on what we know about children and learning and what we are like as people, our personalities, interests, inclinations."

This role definition parallels Frazer's ideas about good teaching.

Part of what I would call good teaching is just idiosyncratic to me and to my readings and my studies and my learning. Part of what I would call good teaching is more generalizable . . . and would be recognized by all.

By maintaining a double vision, Frazer tried to avoid two dangers in working with novices: "imposing his own style" and "sounding too laissez-faire." Committed to helping novices find their own way of doing things rather than copy his, he did not want to give the impression that anything goes. As he pointed out,

We do know some things about teaching and learning. We know some things about people and schools and communities. Hopefully the things that I know about, I can help them use, and not just be there and say, "Gosh, whatever you're becoming is wonderful."

Pete Frazer captured the essence of what being a support teacher means to him with the word *cothinker*.

I want to be a cothinker with them so that I can help them to see new perspectives, new ways to solve the problems they have.... And always, as they're doing the thinking, I bring to that as a listener my whole worldview, my whole perspective about the nature of human beings and education. So when I make suggestions, of course they have some relationship to what I think is good schooling...but I try to keep an awareness that Frank or Ellen or Diane—each one of them is in the process of developing their own set of things. So I certainly don't want to impose my whole view on them.... I just want to stand beside them and work and let them take from me what fits into the solution of the problem they're working on now [italics added].

Adopting the stance of cothinker rather than expert, Frazer tried to balance his desire to share what he knows about good teaching with his concern with helping novices figure out what works for them as they construct their own professional practice and identity. As an "educational companion" to his novices, he offered personal support and professional perspectives tailored to individual needs and purposes.

ENACTING THE ROLE

The moves and strategies Frazer used to enact his role and stance embody these principles and values. Some reflect his respect for novices as individuals in the process of developing. Others express his commitment to base emerging practices on self-study and relevant knowledge. Most striking is the strong parallel between the way Pete Frazer treated beginning teachers and the way he hoped they would treat their students.

Finding Openings

A big issue for support providers and others who work with beginning teachers is deciding what to talk about so that the conversation will be productive. The literature on clinical supervision recommends that the supervisor and teacher choose a common focus during the preobservation conference. The literature on advising advocates working from the teacher's

self-defined concerns (see, e.g., Devaney, 1978). Neither source pays sufficient attention to the process of interpreting teachers' concerns, clarifying their self-identified problems, or attending to the challenges of problem framing as well as problem solving. Recent literature on inquiry communities, networks, and cooperating teachers and student teachers as collaborative teacher researchers (e.g., Lieberman & Grolnick, 1999; Lytle & Cochran-Smith, 1992) emphasizes problem posing, question asking, developing interpretations, and researching together; however, mentor training programs rarely tap these sources.

Frazer conceptualized the process of figuring out what to talk about in dynamic terms. He talked about finding "openings," fruitful topics that are salient to the novice and that lead to a consideration of basic issues that all teachers need to think about. The word *productive* characterizes the kinds of topics he looked for—not just anything the novice brings up, but something that would open up a "productive line of thinking."

The idea of "finding openings" came out in an interview following a visit to the classroom of Ellen, a beginning teacher. When I asked Frazer how the conference with Ellen went compared with what he had expected, he explained that they ended up discussing something quite different from what he had anticipated.

Well, the only thing I had on my potential agenda going in was to do some follow-up on the Chinese New Year because the last time I had talked to her, she was real enthused about that. . . . As it turned out, the *opening* came in the direction of Ruben. And the key thing, I decided, was seeing if there was going to be *something productive* when I asked about the student of the week and how well he does on reading the school newsletter. That just *opened the door* to all this talk about possible retention next year. It was so much *rich content* there that it took all but 5 minutes of our half hour. (italics added)

Ellen had been worrying about whether Ruben would be ready to go on to second grade by the end of the year. The school district required teachers to notify parents early in the year about the possibility of retention so that they would not be surprised later on by such a recommendation. When Frazer noticed that Ruben was student of the week and asked how he was doing, Ellen poured out her concerns about what to do. This led to an extended discussion about Ruben's accomplishments to date, his likely progress by June, the pros and cons of holding him back or sending him on to second grade, and the problems caused by rigid grade-level expectations. Frazer suggested that Ellen find out more about the philosophies of the second-grade teachers concerning reading so that she would be in a position to recommend an appropriate placement. Ellen had never considered taking such a proactive stance. By exploring Ruben's situation in depth, Frazer not only responded to Ellen's immediate concern but also raised broader issues about assessment, individual differences, and the teacher's responsibility to be an advocate for his or her students.

Because Frazer saw his novices once a week, he usually had some idea of what they were working on and some expectations about what they would talk about. At the same time, the unpredictability of classroom life meant that he had to be prepared to deal with issues as they arose. Because Frazer wanted to use his time in productive ways, he did not take a catch-ascatch-can approach, talking about whatever came up. For him, the challenge lay in finding something to discuss that was salient to the teacher but that would also move the teacher's practice in fruitful directions.

Pinpointing Problems

A related strategy involved what Frazer called "pinpointing problems." In *How We Think*, Dewey (1933) reminds us that problems are not ready-made, that they must be constructed out of a problematic situation. More recently, Donald Schon (1983) elaborated on the nature of problem finding and framing in the context of professional work.

When we set the problem, we select what we will treat as the "things" of the situation, we set the boundaries of our attention to it, and we impose on it a coherence which allows us to say what is wrong and in what directions the situation needs to be changed. (p. 40)

The notion of problems as constructed rather than given seems absent from the literature on beginning teacher concerns. For example, one frequently cited review (Veenman, 1989) identifies discipline and management as the most pressing problems of beginning teachers. Yet problems so classified may have more to do with curriculum and instruction. A little probing reveals that such problems frequently arise because the teacher is unclear about his or her purposes, has chosen an inappropriate task, has not given students adequate directions, or does not understand the content.

Frazer recognized that problems in teaching must be identified or, as he put it, pinpointed. When Diane told him that she was not feeling very good about reading, he suggested that they talk about it next time. Later, he explained his rationale to me:

I want to help her clarify, what does she mean by, "Reading isn't going well"? I mean, let's sort out the elements because it's such a big statement—"Reading isn't going well." I'd like her to be able to get at this . . . to pinpoint the problem . . . to come up with some specifics about what about it isn't as good as it could be. . . . I'd like to think with her, to help her pinpoint more exactly what she means by "Reading is not going well." And that means looking for strengths as well as things she wants to change.

By working to pinpoint problems, beginning teachers practice talking about teaching in precise, analytic ways. This is a critical tool in joint problem solving and continuous improvement. Unless teachers can frame problems and communicate them clearly to others, they will not be able to get assistance.

Probing Novices' Thinking

To be a cothinker who engages in "productive consultations," Pete Frazer had to know what beginning teachers were thinking about an issue. Sometimes he issued beginning teachers an "invitation" to share what was on their minds by asking open-ended questions. Often, he asked probing questions to learn what novices meant by the things they said and to help them

clarify their ideas. He did not assume that he automatically understood.

I want to get at what they're thinking about an issue....I don't want to just assume that I know from a few words.... So I keep coming back with, What do you think? What's going on? I guess that's a style or technique I use to make sure I'm getting enough input from them.

When Ellen commented that the children were reading the school newspaper more quickly, Frazer asked, "Why do you think the work with the newsletter is going faster?" Later, he offered the following rationale for his question:

I was trying to get at what her picture is about why progress is occurring in reading. . . . What are her thoughts about why it is getting better? We don't just need to say, "They're better at this, now that's nice." A more productive line of thinking is, "Why did it get better? What has led to that?"

Frazer offered a similar rationale for his approach to Diane when she told him that "reading isn't going very well." Pete said he hoped she would clarify her reasons for using the basal as they talked it through:

I'm not sure how much she's thought of all the reasons, and I'm curious to know what her sequence is, why she's doing this, where do you go next, how do you help kids along the road to improvement? I'll think with her on that and we'll both learn from it.

Frazer sought knowledge about how his beginning teachers were thinking about their students and their work. By encouraging teachers to explicate their practice, he fostered an analytic stance and precision that is unusual in discourse among teachers (Ball & Cohen, 1999). Frazer wanted new teachers to have good reasons for the things they do and be able to explain themselves to others, including principals and parents. He also believed that teachers should inquire into their practice not only when they experience problems but also when things are going well so that they can develop grounded theories about teaching and learning.

Noticing Signs of Growth

As I observed Pete Frazer working with different beginning teachers, I noticed that he regularly complimented them on specific aspects of their teaching. He complimented Ellen on how nicely the children lined up and walked themselves down the hall, saying, "That's a testimony to the trust and respect that you give to them." He complimented Fran on the way she fostered thinking:

I don't think I've ever been in a class where so much thinking is going on.... You continually turn it back to them with an attitude that says, "Think about it because you'll probably be able to figure it out."

He complimented Diane on the way she handled the administrative intern: "You really showed you were a strong teacher."

When we questioned Frazer about this practice, he offered a general rationale based on the beginning teacher's psychological or emotional needs:

In the 1st year, you have doubts, you need reassurance, you're so overwhelmed by all the things you think you're not doing. "I'm not teaching enough science. I'm not teaching social studies in the right way." You need to know all the ways that you're effectively working. I don't think you can ever get too much of that.

In reassuring his clients, Frazer tried to offer specific feedback about individual accomplishments rather than general praise for doing a good job. Each instance of praise that we observed reflected an assessment of the teacher's unique strengths and needs. Later, Frazer explained that he tries to give compliments "that are really true and aren't just phony pats on the back." For example, in response to our query about Ellen, he said:

I want her to see, sometimes she says things to me that make me wonder if she knows how good she is. I think she needs to hear in many ways what an excellent job she is doing. I do that a lot with her because she says things like, "I don't know if I've been doing this right. What do you think?" I don't think it's fishing for compliments. I think she genuinely needs to hear a lot of times and in a lot of ways what a great job she's doing in that room.

He complimented Fran on how she fosters thinking because he wanted her to see how her teaching reflects her own intellectual style. "You're such a thinker.... The children in your room, their thinking is starting to parallel yours in so many wonderful ways."

Frazer called this "noticing signs of growth." Besides reinforcing his beliefs about good teaching and responding to novices' needs for reassurance, this practice fit with his view of learning to teach as a process of development. When he noticed Fran's dealing with a student in a more direct way, for example, Frazer repeated what she said and related that to her own development.

I can see you're now more directive. Jose was not doing what he was supposed to and you said, "I'm going to need to interrupt you. You really have a responsibility over there that isn't finished. Go get that done and then come back." That was more direct and less beating around the bush than before [italics added].

In the same vein, he reminded Diane that earlier in the year, she would not have been able to explain her position on reading to the administrative intern and principal. This kind of concrete and specific feedback helps novices visualize their evolving style, clarify what they need to work on, and concretize their own vision of good teaching.

Focusing on the Kids

In working with new teachers, Frazer kept his eye on students. He regarded information about students' thinking and sense making as invaluable feedback to the teacher and a rich source of ideas for curriculum development. Focusing on the kids also took some pressure off the beginning teacher by providing a "neutral ground" for conversation. For Frazer, the challenge was to "ask the question in a way that doesn't make the teacher think he's neglected Eric or that he doesn't know what he's doing."

When Frazer visited classrooms, he often got involved with the students, taking on the role of coteacher. This allowed him to gather information about pupils' learning, which he could share with the teacher. If Frazer visited Bonnie's room when the children were writing, he would pull up a chair, sit down, and start helping them with their editing. If he noticed something special about a pupil's writing, he might call it to

Bonnie's attention on the spot by going over and telling her, "Jenny is doing this and this with her writing and that seems to be such an improvement." Alternatively, he might write a note about something a child did or said and give it to the teacher. The day Ellen introduced a reading activity using sentence strips, Frazer overheard one of her students say that the strips of paper reminded him of Chinese fortune cookies. Frazer made a note about that and handed it to the teacher. Afterward, he explained his purpose to me:

I hope it helps her see. One of the ways you get feedback about your own work is from little indices like that during the day. For me, that kind of anecdotal information is so much more valuable for studying your own work than the test scores of children on standardized tests.

In focusing beginning teachers' attention on student thinking, Frazer departed from the conventional wisdom with regard to beginning teacher concerns. In her influential work on this subject, Frances Fuller (1969) argues that the preoccupations of beginning teachers follow a "developmental" pattern that starts with concerns about self, moves on to concerns about teaching, and finally arrives at concerns about pupils. Criticizing teacher educators for "teaching against the tide," Fuller advocates a better fit between the curriculum of teacher education and the concerns of beginning teachers.

Fuller's developmental theory of teacher concerns may have face validity, but it confounds description with prescription.3 Even if beginning teachers are preoccupied with their own performance, it does not follow that mentor teachers should avoid focusing their attention on student learning. As Dewey (1938) explains in Experience and Education, there is no point in being more mature if the educator, instead of using his or her greater insight to organize the conditions of experience, throws away his or her insight. Pete Frazer models how a support teacher can help beginning teachers attend to pupils' thinking and sense making even when they are concerned about their own adequacy and teaching performance.

Reinforcing an Understanding of Theory

Increased reliance on experienced teachers to mentor beginning teachers means greater access to teachers' practical wisdom. When mentor teachers have relevant theoretical knowledge they can help beginning teachers make meaningful connections between theory and practice. Pete Frazer deliberately looked for such opportunities.

After listening to Ellen talk about reading, Frazer brought up Frank Smith's (1985) research about "how kids bring their own meaning to a page." Later, he explained his rationale to me:

She knows that theory, but I think we can never know it enough. . . . It needs to be continually brought up because the new paradigms for teaching reading and writing and language are so completely different from the old ones that I think it's a career-long process to keep looking at that.

By reinforcing theoretical ideas in context, Frazer helped novices develop usable knowledge and principled understandings. He believed that teachers need a deep understanding of how children learn, enriched by theoretical knowledge and informed by firsthand experience. This was part of his induction curriculum for beginning teachers.

Giving Living Examples of One Person's Ways of Teaching

Teacher educators have long debated the merits of apprenticeship-type learning opportunities. Ever since Dewey (1904/1965) distinguished the "laboratory" view of practical work with its emphasis on intellectual methods from the "apprenticeship" view with its focus on performance, the apprenticeship has gotten bad press in teacher education circles. Critics argue that it encourages imitation rather than understanding.

While the apprenticeship model does encourage novices to learn the practices of the master, it does not preclude a consideration of underlying principles or the development of conceptual understanding (Ball, 1987; Schon, 1987). Collins,

Brown, and Newman (1989) have coined the term "cognitive apprenticeship" to describe experiential learning situations in which teachers think aloud so that learners can not only observe their actions but also see how their teachers think about particular tasks or problems.

The idea of a cognitive apprenticeship fits the intent behind Frazer's use of demonstration teaching, which he called "giving living examples of one person's ways of teaching." Frazer hoped that novices would not only pick up particular teaching ideas but begin to clarify general characteristics of good teaching. This required them to separate out those qualities unique to Frazer's personality and style from more general features of good practice.

When Diane expressed concern about how to motivate her low reading group and what to do with them for a whole hour, Frazer volunteered to teach a reading lesson. He introduced and read a story from the basal reader about a mouse. Then he read aloud from *Stuart Little* by E. B. White (1945), a classic children's book about a distinguished mouse born into a human family. During the lesson, he stopped to explain to Diane what he was doing and why. Here is how he described the demonstration lesson to me:

I got myself all jazzed up about mice and I said, "The first thing you need to do is get them so they want to know more about mice." So we did this activity to get them interested in mice and mice words. . . . I would stop as I was teaching and say, "This is why I'm doing this."

Frazer hoped that Diane would see "some specific methods for getting across a reading lesson." In particular, he wanted to show her how to integrate reading aloud good children's literature with lessons from the basal reader. At the same time, he hoped that she could look beyond the parts that were uniquely Frazer such as the way he imitated Donald Duck and pull out some general features of good teaching—"He responded positively to children. He really listened to children. He extended what they said."

Demonstrations can help beginning teachers visualize new practices and see how teachers enact particular values and principles. At the same time, beginning teachers may not see what experienced teachers notice or intend because their cognitive maps are less elaborated. To ensure that demonstrations are educative tools in teacher development, mentors need to point out what they regard as central and find out how novices interpret what they see. Frazer understood that giving living examples of another person's teaching could be an effective strategy, but he did not leave to chance what the beginning teachers made of the experience.

Modeling Wondering About Teaching

Educators generally associate modeling with actions. Frazer also modeled "wondering about teaching," which he saw as central to the improvement of teaching.

It seems that wondering about our work and wondering about kids is a major element in being able to improve our teaching. . . . Part of the excitement of teaching and also the effectiveness depends on a sense of wondering.

The idea of modeling wondering about teaching came up in an interview with Frazer about working with Frank on how to teach multiplication to third graders. The extended example, which follows, illustrates how Frazer modeled wondering about teaching. It also shows how the other moves we have examined came together in practice. In this episode, we see Frazer probing Frank's thinking, focusing on students' sense making, bringing in research, giving a living example of his teaching, and modeling wondering about teaching.

Frank had asked Frazer to work with a small group of third graders who were having trouble with multiplication. Frank had been doing some skill and drill work with them, but he was not sure the students were getting it. On the way to school, Frazer described his purpose to me:

I don't have a very specific goal except that both of us will think more about what goes on with kids.... I think we'll both be trying to clarify what are we trying to get kids to understand when they multiply and what can eight-year-olds [understand], what kind of sense of it can they make and what kind of manipulatives can we use to help make sense of that.

Frazer met Frank in his classroom at 8:00, 30 minutes before the children showed up. He brought a book about how children learn mathematics and a bag of small game pieces and rubber bands to use in helping students get the idea of separating things into sets. In his usual fashion, Frazer let Frank take the lead, listening patiently while Frank described his confusion with regard to the numbers in a multiplication problem—"Which is the number of sets and which is the number of items in a set?"

After a while, Frazer gently shifted the conversation from Frank's confusion to their plans for the morning. "Would Frank like to see what he was planning to do with the kids?" Frank listened eagerly as Frazer described how he would use the cubes and rubber bands to help students represent the times tables. He also accepted the extra materials Frazer had brought, putting aside the worksheet he had prepared for them. When the children arrived, Frazer worked with one small group while Frank worked with another. Then Frazer left for another appointment.

In the interview following the visit, Frazer (PF) explained to the researcher (R) that he wanted to show Frank the strategy of using game pieces and rubber bands, even though he did not necessarily intend for him to "do it that way." He also planned to use data gathered from working with the children to talk with Frank about how children make sense of mathematics. In the course of elaborating on this idea, he introduced the idea of modeling how he wonders about teaching:

R: What type of feedback will you give Frank?

PF: It depends on what he brings up. One of the things we can always keep thinking about . . . in a class of 24 kids . . . how much variety there is in their understanding of mathematics and how very individual it is I would like to highlight that with examples from his group and my group. . . . I want to model how important I think it is to . . . maintain a balance between the information you are dealing with and the individual realities of the kids.

R: When you say "model," what do you mean?

PF: Thinking about it, I guess. Say, for example, look at Luis, I wonder if he was thinking this or I wonder what he was thinking, but I don't have a theory. It seems important to give him examples of how I wonder about the work, as a teacher, how questions come up, how I say, "I wonder what is going on here. It could be this, it

could be this. What are the factors contributing to this?" So that's what I mean by modeling [italics added].

In this example, we see Frazer working on multiple agendas. To help clear up Frank's subject matter confusion and add to his pedagogical content knowledge, Frazer brought a book and concrete materials to represent the operation of multiplication. He also came prepared to work with students and gather data about how they thought about mathematics. This would provide the basis for a conversation with Frank about what different children understood, what they found confusing, and what the teachers might do to clear up confusions and strengthen understanding. In all this, Frazer would take the stance of coteacher and cothinker, using his own practice as a site for learning about student thinking and for helping Frank learn about teaching mathematics for understanding.

LEARNING TO BE A SUPPORT TEACHER

How did Pete Frazer learn to work with beginning teachers in this way? Where did he develop his ideas about the support teacher's role? Without diminishing the contribution of Pete Frazer's educational background, teaching experience, and enormous personal resources, it is also true that he worked in an induction program that provided support teachers with the same kind of backing and guidance offered to novice teachers. Pete Frazer learned the role of support teacher and developed his practice in the context of a professional learning community.

Frazer was one of eight support teachers working for 2 years (1986 through 1988) in the Graduate Intern/Teacher Induction Program, a joint venture of the University of New Mexico and the Albuquerque Public Schools. Through an ingenious financial arrangement that involved no additional cost to the district, the program released 15 experienced teachers from classroom duties to work full-time with preservice and beginning teachers for 2 years. It did this by placing 28 interns in classrooms where they carried out all the responsibilities of a 1st-year teacher while earning half a beginning teacher's salary. Interns also worked on a

master's degree at the university. The money saved allowed the district to continue paying the experienced teachers their full salaries.

Support teachers began learning about their role in a weeklong orientation before the start of the school year and continued studying their work in weekly, 3-hour staff seminars throughout the year. Conducted by the program director, a national expert on teacher induction, the staff seminars provided a regular opportunity for ongoing conversation about how to help new teachers. During the course of my research, I attended the orientation and observed six staff seminars over the course of 2 years. I also interviewed the program director about her goals and the support teachers about the contribution of the seminar to their work with interns and beginning teachers.

Presenting individual cases was a regular activity in staff seminars. Support teachers raised specific questions or described particular situations, which they needed help addressing. Besides talking about individual clients and how to help them, the support teachers also read and discussed various articles about teaching and learning to teach selected by the program director. Combining discussions of specific problems with more theoretical discussions and readings helped support teachers articulate their knowledge, clarify their beliefs, develop a shared language, and construct an understanding of their new role.

From his fellow support teachers, Pete Frazer learned a lot about how to work with beginning teachers. He also learned about the value of collaboration. Like most teachers, he had had few opportunities to learn with and from colleagues. "It means a lot to me," he explained. "As a teacher, I've gotten along well with my colleagues . . . but mostly I've done my own work and didn't work on a team." In an interview, Frazer described what he found most valuable about the staff seminar:

The biggest part has been the review of individual cases, individual things that are actually going on with one of my team members. I've got this and this going on with a teacher and principal at my school. Then we all think together with that person. OK, what's going on, in what ways can we put our heads

together to help you think of ways you can work with them? That has been the most continuously helpful thing for me.

Learning To Be More Direct

From colleagues and from firsthand experience, Frazer learned to be more direct about getting into people's classrooms. Compared with the other support teachers during his 1st year, Frazer said he was "the most cautious." By listening to colleagues talk about "ways to work their way into thinking with their clients about problems, ways to set miniagendas or ways to get into conversations that have depth and potential" and by experimenting with different strategies, Frazer gradually learned to be more direct.

When we returned in the 2nd year of the study to observe Frazer and talk to him about his work, he reflected on how he had grown as a support teacher: "Last year, I waited more for the clients to bring things up. This year, I bring them up more myself. . . . I'm better at my job . . . and it feels good." Then he described in great detail how he had been trying to work his way into the classroom of a very resistant beginning teacher. He started out indirectly but quickly surmised that that would not work. So he brought in a 10-sided die and showed the teacher some quick activities to do, hoping "that would make her know that I have practical ideas." But she said, "Thank you very much." And no invitation followed. Finally, he said directly,

You know, part of my job is to come in the room and help people. I work in the rooms of all my clients, and I would like to come in and work in your room, but I need to know when and if you would like me.

She said she would let him know. "I've done everything I can short of walking in there and sitting down. She doesn't seem to have anything to hide." He had gone in at lunch time to do miniworkshops on math and science for this beginner and the teacher next door. "I've given every hint I can in every direct way, and no way, she's not going to let me in her room." Although this seemed to be an extreme case, it was clear

that Frazer would not have taken such actions the previous year.

Learning New Approaches to Writing

Not only did Frazer develop his practice as a support teacher; he also broadened his ideas about teaching children, particularly in the area of writing. Attending a district-sponsored workshop on the writing process with his interns and watching several of them start a writers' workshop in their classroom led Frazer to rethink his approach to the teaching of writing. In the past, Frazer had had his students write stories about artificial topics (e.g., "A Martian landed in your community. What did the community do about it?"). During his tenure as a support teacher, he came to see the significance of grounding students' writing in their own life experiences. "You're teaching them to look at the world and write about things that they've experienced, that they've been through, and turning those into essays or stories." The intense involvement of the students and the quality of their writing persuaded Frazer that he should consider incorporating writers' workshop into his own teaching.

I'm so amazed how kids can stay involved. More and more, I'm thinking, "When I go back to a classroom, I'll try to make the writers' workshop the heart of our writing." It's been a slow change for me. I didn't know if it could work with kids, and it felt like all these steps and if they're spending so long on one piece of writing and thinking, "How will they do it?" And I see them doing it. It's very developmentally sound. Each child will be at their own level of writing and the process will help them write more and take them farther.

Pete Frazer not only contributed to the learning of beginning teachers, but he himself also learned. The things he learned helped him become a better support teacher and a better classroom teacher. Both Frazer's learning and the learning of the beginning teachers occurred within a community of practice where colleagues shared a vision of good teaching and a commitment to progressive public education and valued collaboration and inquiry.

CONCLUSION

Mentoring entered the vocabulary of U.S. educational reform in the 1980s as part of a broader effort to professionalize teaching (Little, 1990). Mentoring's early association with beginning teacher induction often led to a narrow view of mentoring as a form of temporary support to help novices cope with the demands of their 1st year of teaching. Through the early 1990s, as the idea of mentoring was extended to the preservice level, researchers advanced various competing and complementary role definitions and specifications of mentors' functions, characteristics, and qualities (e.g., Gehrke, 1988; Gray & Gray, 1985; Healy & Welchert, 1990). Most studies relied on self-report and took the form of program evaluation. Few reflected serious conceptual clarification or attention to mentors' practice and the consequences for novices' learning (Little, 1990).

Situated in practice and in a relationship with an experienced educator, mentoring has the potential to foster powerful teaching and to develop the dispositions and skills of continuous improvement. At the same time, mentors may also perpetuate standard teaching practices and reinforce norms of individualism and noninterference. How mentors define and enact their role, what kind of preparation and support they receive, whether mentors have time to mentor, and whether the culture of teaching reinforces their work all influence the character and quality of mentoring and its influence on novices' practice (Feiman-Nemser & Parker, 1993).

This portrait of an exemplary support teacher provides a vision of the possible in mentoring rather than a view of the probable. It shows how educative mentoring promotes beginning teacher development by cultivating a disposition of inquiry, focusing attention on student thinking and understanding, and fostering disciplined talk about problems of practice. Conventional approaches to mentoring may offer short-term, feel-good support. Educative mentoring bears a strong family resemblance to other forms of practice-centered, inquiry-oriented professional development that are linked to a vision

of powerful learning for all students and supported by a collaborative professional culture (Ball & Cohen, 1999; Hawley & Valli, 1999; Little, 1990).

If teaching is the profession that shapes America's future (National Commission on Teaching and America's Future, 1996), then investing in new teacher development and the development of teachers' mentors is an investment in that future. As large numbers of new teachers are hired to meet growing needs and to fill gaps created by unprecedented amounts of retirement and high rates of attrition in the early years of teaching, serious attention to induction and mentoring becomes even more critical. Policy makers and the public must understand that new teachers, like other beginning professionals, need continuing opportunities to hone their knowledge and skills under the guidance of more knowledgeable and experienced practitioners (Darling-Hammond, Berry, Haselkorn, & Fideler, 1999). Educators and administrators must create the structures and culture that enable all teachers to continue learning in and from practice as they address the complex challenges of public education.

NOTES

- 1. All names of teachers and students in this article are pseudonyms. I want to acknowledge the contribution of Michelle Parker in gathering most of the data for this case study and express my appreciation to the support teachers and beginning teachers who participated so generously in the research.
- 2. The concept of educative mentoring grew out of an analysis of Teacher Education and Learning to Teach data from two beginning teacher programs. Based on a comparison of mentoring practice in these two sites, we identified three kinds of mentors: local guides, educational companions, and change agents (see Feiman-Nemser & Parker, 1993). We continued to refine the idea of educative mentoring in a cross-cultural study of reform-minded mentors in England, China, and the United States and through development work in a professional development school affiliated with Michigan State University (Feiman-Nemser & Beasley, 1998).
- 3. For a critique of Fuller (1969) and other developmental approaches to teacher education, see Feiman-Nemser and Floden (1981).
 - 4. Lee Shulman (1983) explains the value of such a strategy:

It is often the goal . . . to pursue the possible, not only to support the probable or frequent. The well-crafted case instantiates the possible, not only documenting that it can be done, but also laying out at least one detailed example of how it was organized, developed and pursued. (p. 495)

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