Learning to Teach as Assisted Performance¹

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The prevailing model of teacher education is one of apprenticeship in which teacher education, in general, and field experiences, in particular, provide future teachers with an opportunity to practice the things that they will be expected to do as teachers. This model is predicated on the assumption that good teaching is a form of cultural knowledge that is best developed through trial and error by the novice in the company of an experienced practitioner. Critics note that the apprenticeship approach often leaves preservice teachers with a feeling that the only way to learn to teach is to wait until they have their own classrooms and are able to devise their own methods of teaching.

Many authors trace this notion of an apprenticeship to Dewey. A close reading of Dewey (19650, however, reveals that his description of an apprenticeship in teaching was considerably more robust and complex than the way the term is commonly used in the literature today. Dewey advocated both an incremental approach to a novice assuming responsibility for teaching and a laboratory approach to field experiences. Echoing Dewey, Feiman-Nemser (2001) proposed that teacher education programs should provide an opportunity for future teachers to engage in assisted performance by working with others to do things that they are no yet able to do alone. Because the term "apprenticeship" has become corrupted and overused, I use Feiman-Nemser's notion of assisted performance to interrogate the learning experiences of preservice teachers.

I conducted a 4-year study in which I followed 2 cohorts of preservice elementary school teachers from their first mathematics education course through their second year of teaching. The data corpus for the study included interviews with the participants, all of their written work from their mathematics education courses, lesson plans, and field notes from observations of their teaching across the 4-year span.

In this manuscript, I describe three tasks from a mathematics methods course that provided preservice elementary school teachers with opportunities to participate in an assisted performance arena. The three specific assisted performance components of the mathematics methods course were critiquing an essay written by a teacher (Paley, 1987) as she reflected on her teaching practice; working one-on-one with a child in mathematics for an extended period of time; and observing an experienced teacher teach an elementary mathematics lesson. Each is discussed in turn briefly below.

The Tasks and Their Connection to Assisted Performance

By reading and critiquing the article, the preservice teachers became aware of and explicitly analyzed their beliefs about mathematics teaching and learning in light of Paley's descriptions of children's thinking and its impact on her instruction. The ideas contained in the Paley chapter laid the groundwork for the preservice teachers to better understand learners and learning in their subsequent field experiences. Although reading

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the chapter, per se, did not help them develop a better understanding of children's learning in mathematics, it did seem to provide a concrete example of what the instructor meant by her continuous references to listening to students' thinking and building instruction on that basis.

The experience of reading the article and discussing it with peers also provided the preservice teachers with an opportunity to develop the tools to study teaching by giving them an example of how one studies one's own teaching. Although some preservice teachers initially dismissed what they had read, discussing the chapter with peers—with support from the instructor—helped them take a more open-minded approach to the text of the essay, to find something of value in the chapter, and to relate it to their own experiences. It is this interactive aspect of the experience that can be viewed as assisted performance. Left on their own to read the chapter and write a reflection, many preservice teachers were not yet ready to take the author's ideas seriously. But with assistance from their peers and the instructor, the preservice teachers were able to engage in a meaningful discussion of what the author meant, how it worked in her classroom, and the implications for mathematics teaching and learning. The fact that the preservice teachers continued to refer to the article in subsequent assignments and in their interviews suggests that this course task was a powerful learning experience for them.

Working one-on-one with a child for an extended period of time (referred to as the Barrow Buddy field experience) provided preservice teachers with on-going and sustained opportunities to analyze their beliefs about teaching and learning and to develop their understanding of learners and learning. Because the preservice teachers worked weekly with the same child for a period of two months, with on-campus class sessions interspersed with the fieldwork, they had an opportunity to engage in a protracted and deliberate study of the mathematical thinking and learning of a single child with support from their instructor. By writing weekly plans, enacting them, and writing a reflection on the session (that was shared with the classroom mentor teacher and university instructor), the future teachers gained experience with designing appropriate instructional tasks, justifying pedagogical actions, assessing student learning, and communicating with other educators. The teaching sessions themselves, coupled with the support and challenge from the instructor and teaching assistants, enabled the preservice teachers to experiment with various methods of teaching, questioning, and assessing student learning in order to develop a preliminary understanding of what works best under what conditions.

The Barrow Buddy field experience provided a deliberate forum for assisted performance in the areas of linking theory and practice, for developing teaching skills and pedagogical strategies, and for learning to analyze and reflect upon student learning and teaching. The preservice teachers were assisted in their performance by their Barrow Buddies, their peers, and their instructor.

Observing an experienced teacher provided the preservice teachers with an opportunity to study the ways in which different teachers work toward the same goal. In this case, the preservice teachers were able to compare and contrast their own teaching of one child with an experienced teacher in a classroom setting. In fact, several of the preservice teachers drew explicit connections between their teaching or beliefs and what they observed in the teacher's classroom. Approximately half of the preservice teachers' comments in their write-ups about their observation pertained to the teacher's actions while the other half pertained to student learning. This balance of attention suggests that

the preservice teachers were beginning to appreciate the synergistic relationship between teacher actions and student learning.

The observation of the experienced teacher is an example of assisted performance because the preservice teachers were assisted in developing and articulating their ideas about the role of the teacher. They were not yet capable of explicating the relationship between teaching and learning on their own because of their limited teaching experiences and observations. The assistance in this case came from the experienced teacher, who was carefully selected, and from the students in the classes that were observed.

The three activities from the mathematics methods class just described dovetail with three of the central tasks of teaching advocated by Feiman-Nemser (2001)—analyzing beliefs and forming new visions, developing understandings of learners and learning, and developing the tools to study teaching. These three course components provide images of what assisted performance might look like in a preservice methods course. Although Feiman-Nemser (2001) used "performance" to mean tasks of teaching such as planning and lesson implementation, we have expanded the notion of performance to include such things as analyzing one's own teaching and that of others. In different ways, each of the course components helped preservice teachers do something that they were not ready to do on their own when they started the program. The assistance part of assisted performance came from a variety of sources.

Implications

Instructors of both content and methods courses often feel pressured to "cover" the curriculum so that future teachers will be prepared to teach any topic they may encounter. Recognizing that it is not possible to provide preservice teachers with content knowledge, activities, and connections between every important topic at every grade level, we generally confine ourselves to the "big ideas," which in elementary mathematics education typically include such things as prenumber work, place value, the four basic operations with whole and rational numbers, geometry, measurement, and data analysis. As with K-12 teachers, there is an ever-increasing pressure to put more and more content into this curriculum; the latest push is for algebraic thinking at the elementary level. What would it mean to free ourselves from any sense of having to cover the curriculum? What might a course look like if it was not organized by content topics but instead by aspects of teaching (such as planning and assessment) or processes in which we want students to engage (such as conjecturing and generalizing) or by some other categorization and used examples from content to illustrate these organizing ideas? Again, a look at what we want preservice teachers to do while they are with us is in order. Do we want them to practice the things they will be doing when they leave us, or do we want them to take advantage of the support they have from us in order to engage in challenging tasks for which they may not have the resources to engage after they leave us? How do we assist them in performing these tasks?

A second area to question is the tasks in which we typically engage preservice teachers. This questioning logically connects to the prior notion of the goals and topics around which our courses revolve. For example, if a central course goal is for future teachers to understand the link between instruction and assessment, what kinds of tasks would we provide for them? What kinds of tasks would qualify as assisted performance in this arena? A first step would be to consider the purpose of the myriad typical tasks in which we engage preservice teachers, such as finding or writing activities, lesson plans,

and unit plans; writing reflections; critiquing textbooks; and peer teaching or microteaching.

Field experiences provide a rich ground for questioning why we do the things we do and how we might do them differently if we are serving the goal of creating opportunities for preservice teachers to engage in assisted performances. For example, we might investigate such practices as only assigning one preservice teacher to one mentor teacher, using only experienced teachers as mentor teachers, and staying with the same mentor teacher for an extended period of time. We might investigate the affordances and limitations of a field experience that is conducted for full days during a one-month block in comparison to weekly field experience on Tuesday and Thursday mornings. Beyond the configuration of field experiences, we could also question the tasks in which preservice teachers engage in the field, such as observation, teaching small groups, and teaching the whole class. We might look to co-teaching (with peers or with mentor teachers or with university faculty) as a form of assisted performance. We might consider having preservice teachers co-teach different subjects with different teachers because not all teachers are equally strong in all content areas. Or we might consider having a preservice teacher observe and co-teach with several different teachers—all in one subject area. Co-planning is another avenue for assisted performance. A mentor teacher and preservice teacher might co-plan a lesson that is then implemented by the mentor teacher. Or a university supervisor and a preservice teacher might co-plan a lesson that is implemented by the preservice teacher with support from the university supervisor.

We might also question the role of the university supervisor in field experiences. The role is typically one of evaluation and supervision. But if field experiences are an opportunity for assisted performance, we could consider the possibility that an observation is not a chance to sink or swim but a chance to be coached. Similar to our description of the Barrow Buddy experience, the mentor teacher and/or university supervisor might intervene in a lesson to ask a question that better reveals student thinking or to offer a management suggestion or to make a connection to the previous day's lesson. Rather than teaching entire lessons, preservice teachers might teach portions of lessons, such as the introduction and connection to yesterday's lesson or the main body of the lesson, or the summary and wrap-up of the topic. On a grander scale, we might ask why we have a semester devoted to student teaching. Is the typical two weeks of "solo teaching" a sacred cow whose time has come for reconsideration?

Freeing ourselves from the idea that teacher *preparation* is just that—preparation for the future in the form of practice—and opening ourselves to the idea that teacher *education* is about structuring learning opportunities for future teachers, using the same principles we use to design educational opportunities for children, provides a wide variety of interesting avenues for future scholarly work. The unarticulated and untested assumption within the idea of assisted performance, however, is that somehow the teachers will be able to "pull it all together" when they leave us in order to do the things that teachers do. Feiman-Nemser (2001) takes the next step in her article by suggesting what the central tasks of the induction years and professional development are and identifying key features of successful programs. Similarly, we plan to follow the participants in this study in order to develop robust descriptions of their learning trajectories and to ascertain the staying power of the teaching practices they began to develop *with assistance* in their preservice program.

References

- Dewey, J. (1965). The relation of theory to practice in education. In M. L. Borrowman (Ed.), *Teacher education in America: A documentary history* (pp. 140–171). New York: Teachers College Press. (Original work published 1904)
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record 103*, 1113–1055.
- National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author.
- Paley, V. G. (1987). On listening to what the children say. In M. Okazawa-Rey, J. Anderson, & R. Traver (Eds.) *Teachers, teaching, and teacher education* (pp. 77–86). Cambridge, MA: Harvard Education Review.