



An Apprentice Teacher's Journey in "Seeing Learning"

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Debates rage about how best to prepare teachers for contemporary classrooms, especially in urban contexts where issues of equity reign large (Darling-Hammond & Bransford, 2007; Howard & Aleman, 2008; Ladson-Billings, 2000; Lucas, Villegas, & Freedson-Gonzalez, 2008; Nieto, 2000; Sleeter, 2008; Villegas & Davis, 2008). What do preservice teachers need to know to meet the needs of their future students, especially students from widely varying backgrounds, under inequitable societal conditions?

One concern centers on integrating theory and practice. How many and what kinds of field-based experiences best serve apprentice teachers? How do preservice teachers integrate theory and practice as they combine field experiences with university course work? What do they take from the field and from theory into their

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own work? What roles do theory and practice—together and separately—play in reproducing, shaping, contesting, and/or reimagining dominant forms of educational practice?

A related concern centers on the role of the apprentice's reflection and observation of learning. Some advocates call for "more field work," but research has shown that a longer student teaching duration does not correspond with better teacher outcomes (Ronfeldt & Reininger, 2012). Moreover, just what kinds of practices are most beneficial for apprentices? What, in particular, can help teachers to interrupt the deficit mind-set that looms large in much teaching of students from nondominant cultural groups (Valencia & Solórzano, 1997)?

In this article, we detail our attempt to encourage apprentices to merge theory and practice in a way that is atypical in teacher education. We base our approach on the idea that before stepping into the active work of teaching on their own, apprentices need more time observing *children* and seeing *learning*. Observing is hard to do when trying to master lesson delivery and when working with large groups of children with only the support of a single master teacher. What does learning look like when children interact with one another and with other adults under different conditions and in varying contexts?

Our aim is to contribute to conversations about how best to prepare teachers for schools as they currently exist and for the students they will meet in their classrooms. But perhaps more significantly, we ask another set of questions: How can we prepare teachers for classrooms and schools that we might envision and imagine but that do not exist right now? How can we help teachers to meet the needs of a *changing* student body? How can we prepare teachers to be innovators and change agents who are responsive to the conditions they encounter and who can lead us into unknown futures rather than remain locked in the ways of the past (Oakes, Lipton, Anderson, & Stillman, 2013)?

We report on a case study, Cassandra (pseudonym), a student in an innovative teacher preparation program that aims to do these things by tightly linking theory and practice, immersing teacher candidates in a nonformal learning context as well as in traditional student teaching placements. The teacher candidates wrote field notes about their observations, which we (the instructional/research team) read and responded to, with the aim of supporting their learning and stretching their ideas. Drawing from Wolcott's (2008) notion of ethnography as a way of seeing, we guided teachers to describe the everyday activities of schooling and to reflect deeply on their own practices. We encouraged them to see children, teaching, and learning in new ways—not merely as mirrors of their own experiences in K–16 education or those they observed in student teaching (McDonald, Bowman, & Brayko, 2013). We thus arranged for them to observe and work with children in different kinds of learning contexts, including home and community settings, traditional classrooms, and an after-school program.

Teacher Education Debates

Linking Theory and Practice

A key and long-standing issue in teacher education is how to integrate theory and practice. In his 1904 essay “The Relation of Theory to Practice in Education,” John Dewey bemoaned the approach of preparing teachers as “efficient workmen,” with command of the tools of teaching, over supplying teachers with the “intellectual method and material of good workmanship” (p. 249). He argued that neither practice nor theory should fall subordinate to the other; instead, he suggested, they should be married.

Contemporary teacher education typically tries to achieve this union by offering a series of university classes in a university setting, with some focusing on theory and others on methods, and with observation and participation in classrooms followed by formal student teaching arrangements (Feiman-Nemser, 2008). But programs vary in how they enable students to connect their classroom learning with their classroom practices. Many offer haphazard clinical experiences, with minimal guidance and little connection to university course work (Darling-Hammond, 2010). It is common for new teachers to report that they did not learn much from their university courses but got a great deal from their experience in the field (Knowles & Cole, 1996). Such reports demonstrate that these preservice teachers view their course work and field experience as two unrelated parts (Rosaen & Florio-Ruane, 2008).

Apprenticeship models that have proliferated in the past two decades offer a different approach. These programs place novice teachers, with little to no preparation, into classrooms while completing course work for certification (Feistritzer & Chester, 2003). These are often shortcuts to certification, however, rather than integration of theory and practice in the spirit John Dewey intended, and theory often gets shortchanged as new teachers are left on their own in classrooms to “sink or swim” (Darling-Hammond, 2010).

More promising models are the professional development schools (PDSs), which, like teaching hospitals, have teachers learn under the guidance of expert teachers in yearlong residencies (Darling-Hammond & Bransford, 2005). PDS models strive for state-of-the-art practices and strong partnerships between schools, school districts, universities, and school and university faculty so as to create meaningful clinical experiences for preservice teachers that correspond in a coherent way with course work. It would take tremendous resources and political willpower to expand the PDS model for all teacher preparation programs, however. Our own model does not require such a significant shift in practice, but we believe it offers a tighter integration of theory and field experiences as well as a new approach to what constitutes the “field.”

Field Contexts for Teacher Education

Perhaps not surprisingly, the field that is used for the practice side of university-based teacher education programs is almost exclusively the classroom setting (Zeichner, Melnick, & Gomez, 1996). Typically, apprentices begin on the periphery, observing in one or more classrooms with a minimal level of participation; when tasks are assigned, they are generally mechanical and management oriented (Goodman, 1985). As programs often offer little opportunity for reflection on and discussion of classroom observations, candidates are left on their own to reconcile the cookie-cutter teaching routines they are taught in university classes (Darling-Hammond, 2000, 2008) and the models offered by their mentor teachers, with their university course work on learning theory and so-called best practices in teaching. Apprentices are given ad hoc teaching responsibilities over time; what these responsibilities look like varies greatly based on the school site and university program, but the general intention is to provide teaching experience with support from the mentor teacher and university field support.

In their focus on teachers and teaching, school-based field placements rarely attend to the sociopolitical context of a teacher's work. Apprentices who have placements in urban areas might shuttle to the school and back home. They lack opportunities for what Téllez and Hlebowitsh (1993) called "being there": listening to and having meaningful interactions with students outside of classroom settings, with their families and in their neighborhoods.

Alternatives to this often shallow and haphazard approach to field placements are offered by some university programs that place preservice teachers in community-based organizations and in service-learning field placements in addition to traditional classroom assignments. These hybrid spaces bring in school and community perspectives that are often not up front and center in classroom-based teacher-training models (Zeichner, Payne, & Brayko, 2012). Such programs aim not only to develop teachers with a mastery of professional and pedagogical knowledge but also to instill dispositions that value multiculturalism, asset-based views of students and their families, and a commitment to public engagement in communities and neighborhoods (Zeichner & McDonald, 2011). A further aim is for teachers to draw on their new understandings of children and their families in their teaching, incorporating the complexity of children's lives into the classroom so as to improve learning (McDonald et al., 2011).

Our approach shares these aims with a slightly different focus. Unique to our program is using B-Club, a play-based after-school program, as a field placement. Gallego (2001) similarly reported on the coupling of the classroom and a community-based after-school field experience for preservice teachers. The program she leads at San Diego State is a sister program to our own, both operating in the Fifth Tradition/La Clase Magica tradition (Cole, 1991–1994; Gallego, 1995). An after-school setting is a liminal space between school and out-of-school contexts

where we hope to bring apprentices' attention to *children* and *learning*. We describe our approach in an upcoming section.

Educational Anthropology and Teachers as Anthropologists

A long history of educational anthropology makes clear that schools are very particular contexts for learning and that much can be gained from seeing how children learn in informal contexts outside of school. This research has paralleled a move in educational research from theorizing teaching as a process of transmission of information to viewing learning as situated in the sociohistorical and cultural practices of a community (Rogoff, 2003; Vygotsky, 1978). Following this conception, and from numerous anthropological accounts of the discontinuity that children from nondominant cultural groups experience between the school and the home (Au, 1980; Delpit, 2006; Heath, 1983; Philips, 1972), scholars became interested in how teaching might be better aligned with and informed by the cultural practices and ways of thinking of diverse student populations. In this pursuit, researchers began working side by side with teachers to identify pedagogical problems related to culture and teaching, to investigate children's lives beyond the school walls, and to implement instructional strategies informed by these anthropological explorations (Erickson, 2006).

The roots of this teacher and researcher collaboration movement extend back to 1960s work of George and Louise Spindler, who employed anthropologists to observe and interpret students' culture *for* teachers. (See Jewett and Schultz, 2011, for a comprehensive review of this scholarship.) More recent and seminal work in this area is that of González, Moll, and Amanti (2005), which brought researchers to study *with* teachers, as co-researchers, the knowledge domains, or *funds of knowledge*, of students' homes and communities.

Applying an Anthropological Lens in Preservice Teacher Training

An anthropological lens has sometimes been used with the aim of countering the deficit views of children and families from nondominant groups that many North American teachers, who are largely White and female, seem to hold. Groundbreaking work in this area is that of the anthropologist Ruth Landes (1965), who trained under Boas and Benedict. In the early 1960s, as an instructor at the Claremont Graduate School in California, Landes developed courses for teachers and social workers that used anthropological theories and field methods to aid public servants in understanding cultural differences of students from nondominant cultural groups in California. Students were charged with a wide variety of projects, including examining their own family backgrounds and socialization in cultural terms and observing teachers and students in classrooms and writing field notes. Landes's work with teachers was barely acknowledged and poorly received in the field of anthropology at the time, however (Jewett & Schultz, 2011; Spindler, 1967). The

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application of an anthropological approach to preservice teacher-training programs appears mostly neglected until a more recent impetus in this direction from projects drawing from the funds of knowledge tradition (see Buck & Sylvester, 2005; DaSilva Iddings, Combs, & Moll, 2013; Reyes, DaSilva Iddings, & Feller, 2015). Our approach follows in this anthropological approach by orienting teachers to view children and their lives beyond the classroom. Specifically, we ask apprentices to look closely at how children learn on their own terms with peers and adults across multiple settings, and we support the apprentices in making connections from theory to their observations. In this regard, we bring to the forefront children's agency in our framework, which others have suggested is often lost in the funds of knowledge approach (Rodriguez, 2013).

Our Innovation

Our innovation in teacher education involved working with first-year preservice teachers in ways that tightly linked theory and practice and that offered new ways of seeing children, teaching, and learning. Our aim was to make children's viewpoints and their learning visible for apprentice teachers and to use the knowledge they gain from this newly acquired visibility as a starting point for their learning about teaching.

Our 2014–2015 cohort of apprentices met in an off-campus seminar for discussions about what we were experiencing and observing in the field, linking these to theory. (Meeting off-campus was designed to disrupt the university-field and theory-practice binaries.) Key readings for the course centered on sociocultural learning theory, social justice in education, and teaching in diverse contexts that serve students from nondominant groups; these readings were supplemented with texts that discussed ethnographic methods, including the reflexive role of the researcher. The cohort and the instructors/authors then spent 2 hours together every Wednesday afternoon in an after-school program serving 35 K–5 students in an urban public school. We worked together to design and implement the activities of the program, to discuss and work through challenges that arose, and to share what we learned from looking closely at how children learn in an informal, play-based, free-choice learning environment.

Students wrote open-ended field notes, detailing their observations in this setting as well as in classrooms, where they engaged in more traditional forms of observation and participation. As well, we encouraged students to observe children in other informal settings of their choice. We knew that they could not possibly detail everything they had observed during the course of the week—or even during their 2 hours in our after-school program. Our intention was not to train them as ethnographers as much as “kid-watchers” (Frank, 1999; Owocki & Goodman, 2002); we wanted to empower them to see through their own unique professional lenses and to make their ideas more visible to themselves. Thus we encouraged them

to focus on what was most salient and interesting to them. We further urged them to look comparatively across contexts and to use the theories they were reading as interpretive guides.

The team of authors—the lead instructor of the course, Author A, and graduate student research assistants (Authors C to E)—read and responded to the students’ notes, asking questions and raising points for consideration. Starting from each person’s interests and observations, we guided teachers to integrate theory and practice and to expand their own repertoires of understanding. This work was dialogical, as readers sifted through notes and wrote comments to the apprentices that built on previous observations, notes, and interactions, as we supported their developing understandings of what they were seeing in the field.

We illustrate this with an example taken from Cassandra’s field notes. (Instructor comments are in italics and bracketed; all names are pseudonyms.)

I go to the tinkering table and sit next to Naznetor. I ask her what she is making and she says she does not know. [*What else could you ask her, rather than what she is making, as if there has to be a finished idea in mind? Could you ask her about the process? Like how is she making choices about what materials to use and how to put them together? What does she think she will do/use next? Helping her to articulate her process could be helpful for both her and you—and more doable than asking her to “know” what she is “going to make.”*] She wants to make something for her mom. To my right is Martha, sitting with Katty. Katty is making something as well, and she also says she does not know what she is making. Katty has a stuffed elephant and begins to put buttons on the elephant. While I am talking to Katty and Martha, I hear Naznetor saying about four times that she is not good at making things. [*This idea that one has to be good at “making things” also could get interrupted if we focus on the process more than the product.*] She does not direct the comment to me, so I do not respond. (I wonder if I should have intervened, instead; maybe she wanted somebody to tell her she was good at making things. At the moment, I was thinking of what we have been learning (in our arts class)—I was afraid of saying something that would not validate her feelings or that would have her depend on my/an adult’s approval.) [*Can you think of other things you could say, other than countering her assertion (e.g., telling her that she IS good at things)? What about drawing out her feelings about WHY she thinks she’s not good at making things, or, what kinds of things has she made that she’s proud of? Or what about just exploring the materials, do you have to “make” something? How could she use the materials to experiment and explore?*] Naznetor continues to work, and I begin to work with different materials, showing them to Naznetor. [*Did you show the finished products to her? Next time, try talking aloud about the process, the choices you make, not the end goal.*] Naznetor looks at the things I make and doesn’t react. I make a flower, and I show it to her, and tell her it’s for her. She looks at it and then returns to her activity. I leave the flower lying in front of me and Katty takes it. Martha asks her who made it and she looks at me with a smirk on her face. Naznetor leaves the table and I keep talking to Martha, Katty, Arela, and Jenny.

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It is through this "praxis model" (Gutiérrez & Vossoughi, 2010) of teacher preparation, through which teacher learning is linked to pedagogical practices and student learning, that we situate our study of the development of apprentice teachers.

Research Methods

Data and Analyses

For this article, we present a case study of one apprentice teacher, whom we call Cassandra, following her journey in seeing learning over the course of her preservice year. An explanation of Cassandra's educational history is relevant here as we explain our selection of her analytically "telling case" (Merton, 1973). As an undergraduate, Cassandra took a course on ethnography and sociocultural learning theory, similar to the teacher education course we detailed earlier but oriented for undergraduates who were minoring in education. In this course, which was taught by the first author, students learned to write ethnographic field notes about their experiences with literacy, language, and learning through their participation at B-Club. Because of this anthropological training and, undoubtedly, an authorial penchant for making text reflect her experience observing in the world, Cassandra's field notes are expansive in tone, in description, and in reflection.

Cassandra's rich, reflective field notes are the core data for this study. They total 19 documents that describe and reflect on her observations from the fall through the spring academic quarters. This corpus of notes is supplemented with our own field notes about the process, audio-taped and written notes from our team meetings, and Cassandra's assignments (e.g., her philosophy of education paper and her classroom ecology plan).

In our initial reading of Cassandra's notes, as part of the instructional feedback loop, we saw the salience of sociocultural learning theory in her notes. This focus is not surprising, as sociocultural theory was a primary topic of the seminar. We thus began our later coding by identifying where and how she reflected on sociocultural learning theory. (Cassandra also included critical reflections on race, language, and gender roles in her notes, which correspond to other topics in the seminar. We chose not to code for these reflections for the present article.)

Terminology from this theoretical orientation peppers her notes. She wrote of "community of learners," "legitimate peripheral participation," "transformation of participation," "zone of proximal development," "identity of a learner," "mediation" and "scaffolding." She used these terms in relation to behaviors, activities, and developments she observed. In other words, she did not use this vocabulary superficially, as jargon, but rather thought deeply about central aspects of sociocultural learning theory (Lave & Wenger, 1991; Rogoff, 1990, 2003; Vygotsky, 1978). One issue she centered her observations and reflections on was relationships—what positive relationships look like between teachers and children, children and peers,

and the school and family and how these relationships were established. She also closely examined teaching moments, with an interest in the roles various parties played, how one moved another's learning along, and how learning was assessed. She observed and contemplated how authority was achieved and sometimes negotiated by both adults and children, and she considered ways students' strengths and interests were drawn on in classrooms as well as where opportunities to do this were missed.

In these observations and reflections, a number of tensions and questions arose about how sociocultural theory related to practice and what good teaching looked like. We gave particular attention to these moments at different points in time so as to make sense of Cassandra's journey in observing student learning. For example, we looked at how she viewed the role of a teacher in creating a community of learners in the fall and compared it to similarly coded instances in the winter and spring quarters. This change across time was then constructed as a narrative account of Cassandra's growth in making theory and practice connections, following Erickson's (1982) "natural history" approach involving narratives of learning:

The objects of the narratives, learning and teaching, would be conceived as verbs rather than as nouns. For learning, the narrative would recount the story of changes in thinking broadly construed as "mental life," changes that occur across time as the organism interacts with its learning environments. The individual would be at the center of the story. The content of the story would present, within the narration itself, a theory of the events described. (p. 150)

As a last step of the analysis process, we discussed our findings with Cassandra, who agreed with our interpretations.

We next introduce Cassandra and then follow with the narrative account of her journey in seeing learning.

Introducing Cassandra

At the time of her entrance into the preservice teacher program, Cassandra was 25 years old. A first-generation Mexican American woman reared in a working-class neighborhood in southern California, she was youthful and composed in appearance, with dark, straight hair parted to the side and gathered up in a ponytail or an occasional French braid. Her large, framed eyeglasses complemented the smile we became familiar with as her lips turned up to greet a peer, acknowledge a joke, or express pleasure with the learning process, whether her own or a child's. In class she listened attentively to teachers and peers. When she spoke, she did so softly but insistently, often to bring up issues related to inequality and to teaching as a social justice mission.

Cassandra described her family as close-knit; she lived at home and helped with the care of two younger siblings. She kept in contact with extended family in California and Mexico. On several occasions, we met her parents, who expressed

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how proud they were of Cassandra's accomplishments. In her philosophy of education statement, Cassandra claimed to have internalized her parents' belief in the opportunities education can provide that they had not had.

In her statement, Cassandra further described how her immigrant background is an asset in teaching in urban schools. She planned to draw on her cultural awareness and experiences to "create a comfortable, culturally conscious and asset-based community of learners, where all have the opportunity grow as learners and as conscious citizens of our society."

Cassandra took seriously our instructions to observe across multiple settings, and we were able to follow her ethnographic gaze into the activities of her home and neighborhood. She observed, for example, a neighbor's birthday party for a 5-year-old, giving careful attention to roles of adults and children in "piñata time." She also observed a futsal game of her brother's at a neighborhood park, marveling at how well orchestrated the game was, with agreed upon rules and systems for managing players and plays. Cassandra looked at diverse activity settings in several schools and at B-Club. These latter settings are our focus for the case study.

Case Study in Seeing Learning

After reading the community of learners piece, I was confused as to my role. I feel like I was letting it all be a more student-centered setting around me and wasn't sure what I had to do to change it into a community of learners style. I was afraid to step in and make teacher or adult-centered interactions.

The preceding excerpt from Cassandra's field notes, written early in the fall of 2014, voices Cassandra's interest in building a learning community (Rogoff, 2003). On this day, Cassandra was sitting with three boys: two brothers and a friend. Cassandra described the youngest boy's frustrated attempts to write his name on the journal cover with a gel pen. The boy repeatedly touched the cover and his name smeared. Cassandra told him not to touch the wet ink. He did it again. The boy grunted, threw his hands up in the air, and walked around mumbling. The boy's older brother made a comedic impression and said, "He's always like this." Meanwhile, Cassandra observed the older boys talking. One doodled in his journal, and the other began writing a table of contents. The second boy frequently paused when he talked, however, and when it was dismissal time, Cassandra noted that none of the boys had accomplished much journal writing.

This interaction led to the concern voiced in the opening excerpt: that she was allowing things to be too child centered rather than community oriented. She wondered how she might step in without changing the dynamics to a teacher-centered interactional style. Similar concerns turned up repeatedly in Cassandra's fall field notes. She debated about whether she should correct a child:

I decide not to point out the error to avoid discouraging her, instead, I praise her for her accomplishment, "*has hecho un buen trabajo.*" I wonder if this was the

best approach. I am afraid that by not pointing out the error, I may be giving her the wrong message that it is correct. I also found myself constantly thinking about using praise for effort vs. praise for “innate intelligence,” as we have been reading in our psychology course. I want her to have a growth mindset of her abilities rather than a fixed one, which is what she seems to have in her at such a young age.

Another time, when she observed children looking at pictures and talking about them in Spanish, Cassandra pushed the girls to decode the text. She reflected in her field notes,

I wonder if what I did was the right thing. Maybe I should’ve let them discover it by themselves instead of pushing for it. Maybe I was looking at it from a deficit point of view. Yes, they weren’t necessarily reading the words, but they were reading the pictures, and they understand the connection between the pictures and the words.

This “pendulum swing” between teacher-centered and child-centered instruction that Cassandra grappled with is one that teachers in the progressive movement have also found difficult to reconcile. John Dewey (1938) critiqued schooling that lacked adult guidance in children’s learning activities: “I have heard of cases in which children are surrounded with objects and materials and then left entirely to themselves, the teacher being loath to suggest even what might be done with the materials lest freedom be infringed upon” (p. 84).

Cassandra was aware of this conversation from her course work. In both the undergraduate course on sociocultural learning theory, mentioned previously, and in the teacher education seminar that she was taking at the time of this observation, she had read an article by Barbara Rogoff (2003) about communities of learners. This article challenged the polarity of teacher-centered versus child-centered models and suggested instead that children and teachers can work together in cooperative activity.

The question Cassandra raised about her role in creating a community of learners becomes an interesting starting point from which to examine Cassandra’s field notes across the school year. Does a preservice teacher-training model, where she acts both as an ethnographer and an apprentice teacher, offer Cassandra a window into “seeing” theory and putting theory into practice? And if it does, what does the trajectory of learning look like? We focus our examination around these questions as we look at Cassandra’s field notes from fall to spring.

***Cassandra’s Fall Field Notes:
Observations of “Community” in a Seventh-Grade Classroom***

On the same day Cassandra chronicled her frustrated attempts to help the three boys with writing in their journals, she observed in a seventh-grade classroom. In looking at her notes from these two different contexts, it is evident that although she was uncertain about her own role within the B-Club community, she was, nevertheless, able to recognize aspects of a learning community where a master teacher was leading a class.

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On that day, Cassandra was observing a carefully orchestrated seventh-grade lesson by a teacher the students referred to as "Mister." Her detailed notes, which spanned more than five pages, captured traditional teacher-initiated questioning sequences as well as the teacher's directions on how to carry out activities; his casual joking with the students; his praise of students for being one of his favorite classes; his apologies, greetings, and politeness tokens (e.g., please and thank-you statements); and aspects of the environment, including students' artwork on the walls. She described students working in groups, episodes of peer teaching, and a gallery walk, where students milled around examining one another's projects.

Reflecting on these interactions within the classroom, Cassandra wrote that it seemed the teacher had "built a community in the classroom" and that he had established "good rapport" with the students. She elaborated,

This classroom is different from most I have seen. The students are given a lot more opportunities to talk and this specific lesson revolved around a lot of movement. . . . I liked the kind of relationship the teacher seems to have with the students. The fact that some went to visit him before class shows that the students like being in his classroom.

In this statement, Cassandra did not specifically reflect on how the teacher's frequent "stepping in" to direct or help students related to her quandary, indicated in her field notes at B-Club, about whether a teacher can be authoritative in a community of learners approach. It appears, nevertheless, that she viewed Mr. Borjan as taking a community-oriented approach, in comparison with other classrooms she had observed.

In summary, in her fall field notes, Cassandra made concrete observations, along with reflections, about what a positive learning environment looks like. She seemed driven to understand the theory of community of learners by considering what such a community looks like in practice and what role a teacher plays in establishing one.

Cassandra's Late Fall and Winter Field Notes: Changing Participation in B-Club

In her observations of children's interactions at the club, Cassandra considered how learners moved from more peripheral places in the program to more central ones. This *transformation of participation* of learners is a central notion Lave and Wenger (1991) described in their theory of learning and is an idea we had discussed frequently in our seminar. In five sets of field notes across a period of 3 months, Cassandra looked at the changing participation of one young girl, Laila.

In November, Cassandra described Laila as a shy, timid girl who observed from afar as Cassandra played Jenga with another girl. She reflected on how much she should cajole Laila to join or, alternatively, how much she should let Laila determine her own level of participation:

While we are playing, I notice Laila watching us play from a distance. I have tried talking to Laila before and have never succeeded. I'm not sure if asking if she wants to play would make her feel uncomfortable and have her leave, but I take the risk. I ask if she wants to play and she says, "no." To my surprise, she stays and keeps watching us. After a while, she begins to get closer to us. I decide not to ask her again because it seems like she is making progress by herself.

Eventually another teaching apprentice convinced Laila to join the game. Cassandra saw this as Laila's curiosity overcoming her shyness:

A few minutes later, Mariluna passes by and sees Laila watching us. She asks Laila if she wants to play and Laila says no again. Mariluna keeps trying to convince her, and I am surprised when Laila is finally next to us at the table. (I think it was a good time to try to persuade her. If I had tried to do that earlier, it may have not been as successful. By this point, Laila had had more time to think and her curiosity about the game had developed enough to be greater than her shyness.)

Cassandra's notes carefully documented the adults' and children's talk and interaction as they played games together:

We all decide that we will begin a new game so Laila can join. We destroy the current tower and instead of building a new one, Laila and Naznetor begin to put the pieces up in lines. Naznetor says she is going to do a domino effect. Laila watches and helps her put the pieces in line with enough space in between but not too much. When they finish putting all the pieces up, Naznetor tells Laila it will be her duty to push the first domino down. We count down, 3, 2, 1, and Laila pushes it. All the pieces fall, and the girls cheer. This is the first time I see Laila's face light up like this. They both say they want to do it again, and this time, Laila decides they will make a giant circle. Laila is very excited. She reaches for one piece after another very quickly and manages to put up more pieces than Naznetor.

In class we suggested looking for places where children lit up. These moments suggest an outward expression—what is often glossed as engagement—of an inner stirring (see Orellana, 2015). In this observation, Cassandra recognized the adults and peers nurturing this animation in Laila.

Cassandra continued to follow Laila's participation into the late fall. Her field notes from December 5, 2014, described how Laila's older sister Dakota helped her in a variety of activities: "Dakota was holding my right hand and Laila was to her right. Laila did not say her name. After a few seconds, Dakota put her face close to Laila's and said her name for her while raising Laila's hand." Later that afternoon, Cassandra observed Dakota and another child, Catherine, encouraging Laila to write on her own:

Laila also wants to write a note. Catherine is sitting in front of her and encourages her to write. Laila says she is going to copy what Dakota writes. Catherine tells her she should try writing. Laila says she cannot write. Dakota tells her she needs to practice, that she is going to have to do it by herself this time. Catherine tells

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her she doesn't have to spell everything correctly. Later, I see that Laila is telling Catherine what she wants to write while Catherine acts as scribe.

In this field note (which continues immediately in the following paragraph), Cassandra compared her observation of Dakota and Laila to an interaction she had documented months earlier in her field notes:

This interaction is very different from the ones I usually see between Laila and Dakota. Dakota has told me before that her sister can't write, and she has told me so in front of Laila. Laila has agreed. This time, she is pushing her sister to practice and try it out. I wonder what pushes Dakota to approach this instance in this manner. Also, I have seen a lot of progress made by Laila in the way she interacts with people. She used to be very reserved, and although it still takes her time to talk to others, she did not do so before, she always used to have Dakota as her mediator. I think of what we have been learning in Psych Ed with regards to learning through participation. Before, she was engaged in Legitimate Peripheral Participation, now she is beginning to take a more central role in the way she participates in B-Club.

Here Cassandra explicitly connected her observations of Laila across the year to her understanding of the notion of learning as changing participation in a community (Lave & Wenger, 1991) and referred to Dakota as her sister's "mediator," a reference to seminar discussions about teaching as *mediation* (Díaz & Flores, 2001).

Cassandra's Spring Observations: Evidence of Cassandra's Own Transformation of Participation in Her Journey as an Apprentice Teacher

Where did Cassandra's journey take her? Did she resolve the questions she posed in her early field notes about what her role should be in a community of learners? The intentionally open-ended nature of the field notes does not allow us to fully answer this question. Cassandra explored many lines of interest—her notes followed what caught her attention—as she participated across multiple settings in a variety of roles, some more active, such as her participation in her home with siblings and with students in B-Club, and some less active, such as her observations from the sidelines in traditional classrooms.

There is, nevertheless, a hint of growth in Cassandra's field notes. She began to connect sociocultural theory to practice—specifically to her role (along with other adults and children) in creating a community of learners in B-Club. Consider the following excerpt from her observations at B-Club on April 29, 2015. In this observation, she was working with children in painting Cardboard World, a construction the children had built from salvaged boxes. Cassandra observed more "blending" of paint colors happening than actual painting, so she decided to model:

I saw a lot of blending happening and in an effort to maybe model, since we had in mind that they would be creating murals . . . I had the idea of painting a white

backdrop and then painting in different creatures and to title it Cardboard World. I was able to paint the white backdrop and then the kids put their handprints on it. Afterwards, I simply painted black squiggly lines on a piece of cardboard and painted different sections in with various colors. Laila and Molly saw me doing that and asked if they could help. I told them yes, and showed them how I was painting different colors inside the lines. They started to help me with this. I asked Laila to just make sure not to paint over the black lines. She told me she was not good at staying inside the lines. I told her it was okay, as long as she tried her best. We finished this and then put it under the sun to dry. The girls went back to blending different colors of paint. I realize through modeling I was trying to tell them what to do, or somewhat influence what they were doing. However, what I intended and wanted to happen did not happen. I realized what I had in mind was not going to happen, and that instead of trying to influence what they were doing, I should look at why they were doing what they were doing, see its value and what it meant. They maybe were not creating the type of “murals” that come to mind when I think of murals, but they were decorating Cardboard World in way that made it very colorful. Although they weren’t creating explicit images, they were creating a colorful world. . . . Overall, I think it was interesting how the kids engaged with the materials we gave them. . . . Today, when we provided them with paint, they engaged in a lot of paint exploration. Every time we have had something in mind and the kids give it a twist of their own.

In this excerpt, Cassandra recognized the value of adult modeling. If she had left the children alone without direction, they might have only accomplished making big mud-colored puddles from blending paints. Cassandra began to paint (what she termed modeling) and allowed them to join on their own initiative. Like a skilled sociocultural mediator, she suggested some parameters and pointers for how to participate in a collective effort—specifically by not painting over the lines she had drawn. She accepted their own contributions even when these did not fit with her vision. In her observer comments, she reflected on their painting as a valid contribution to the larger effort. She also reflected on past activities with the children and saw how, in these collaborative efforts, children’s ideas did not necessarily conform with the adults’ ideals but demonstrated accomplishment and competence as well as children’s ownership of the work. Additionally, her comment that she “should look at why they were doing what they were doing, see its value and what it meant,” showed that Cassandra learned what we set out to do with this teacher education model: see learning so as to better understand children and their ways of making meaning.

Discussion

In this article, we have examined one preservice teacher’s reflections on her observations of children in different settings, recorded in field notes over the course of a year. We focused our analyses on how Cassandra connected theory to practice,

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especially her struggles around if, when, and how to mediate children's learning in particular ways, and on the challenges of building and acting within a community of learners and of guiding children's efforts without imposing her ideas on them; we also looked at her efforts to identify and build on spaces where children "lit up." We considered how Cassandra's notes revealed changes in her understanding of what it means to teach and shifts in how she came to see children's activities.

Cassandra's insights into children's changing forms of participation in the club suggest a depth of understanding of sociocultural learning theory not often seen in novice teachers. In schools, teachers rarely identify learning/development through qualitative (and subtle) changes in how participants engage in a learning context and orient themselves to each other and to literacy activities. Rather, a more valued practice in schools is assessing a child's incremental steps toward mastery of discrete skills. To see learning as changing forms of participation in a community demands looking closely at children as they operate within particular learning ecologies over an extended period of time. This is quite different than looking only at students' work products, how they respond to the delivery of discrete lessons, or how their activity is "managed" or "controlled" within a space, as is more typical in teacher education classroom-based field experiences.

In her observations, Cassandra adopted the anthropologically oriented lens that we promoted in our discussions of integrating theory and practice. Specifically, we encouraged students actively to counter deficit perspectives by noticing what kids *were* doing, not just what they were not, and to see children not just as students, learners, or objects of adults' socialization efforts but as full human beings and active agents in their own processes of development, with their own ideas about what they want to learn and do and create. Seeing children in informal learning contexts as well as in classrooms seemed key to this.

We recognize that Cassandra is a single case, selected from our cohort of 17 students, and that she is arguably an exceptional one, given her own prior experiences with an undergraduate version of this course and her B-Club experience as well as the personal qualities she brought to this work. We do not assume that her reflections are typical of the group as a whole. Indeed, because we encouraged students to write about what was salient and of interest to them, their observations varied widely, as did their reflections on them. In future work, we will consider these variations and what they reveal about the range of ways in which students make sense of theory in practice as they grapple with particular ideas. Although we see value in more guided observations as well, by setting students free to notice what they notice, and then reflect on it, we learn what is most interesting to them, and they have the opportunity to work through tensions and contradictions in personally meaningful ways, as Cassandra seemed to do as she thought deeply about her own role in a community of learners over the course of this year.

We share our work with the field of teacher education in the hope of promoting dialogue about the kinds of field work that will support teachers not just in learning

to teach but in thinking deeply about children, teaching and learning, and perhaps coming to reimagine possibilities for educational practice.

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References

- Au, K. (1980). Participation structures in a reading lesson with Hawaiian children: Analysis of a culturally appropriate instructional event. *Anthropology & Education Quarterly*, 11(2), 91–115.
- Buck, P., & Sylvester, P. S. (2005). Preservice teachers enter urban communities: Coupling funds of knowledge research and critical pedagogy in teacher education. In N. González, L. C. Moll, & C. Amanti (Eds.), *Funds of knowledge: Theorizing practices in households, communities, and classrooms* (pp. 213–232). New York, NY: Routledge.
- Cole, M. (1991–1994). *Capitalizing on diversity: The distributed learning consortium*. New York, NY: Andrew Mellon Foundation.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51, 166–173.
- Darling-Hammond, L. (2008). Teacher learning that supports student learning. *Teaching for Intelligence*, 2, 91–100.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1–2), 35–47.
- Darling-Hammond, L., & Bransford, J. D. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. Hoboken, NJ: Jossey-Bass.
- Darling-Hammond, L., & Bransford, J. (2007). *Preparing teachers for a changing world: What teachers should learn and be able to do* (2nd ed.). Hoboken, NJ: John Wiley.
- DaSilva Iddings, A. C., Combs, M. C., & Moll, L. C. (2013). English language learners and partnerships with families, communities, teacher preparation, and schools. In H. R. Milner IV & K. Lomotey (Eds.), *Handbook on urban education* (pp. 188–196). New York, NY: Routledge.
- Delpit, L. D. (2006). *Other people's children: Cultural conflict in the classroom*. New York, NY: New Press.
- Dewey, J. (1904). The relation of theory to practice in education. In J. Boydston (Ed.), *Essays on the new empiricism 1903–1906: The middle works of John Dewey 1899–1924* (Vol. 3, pp. 249–272). Carbondale, IL: Southern Illinois University Press.
- Dewey, J. (1938). *Experience and education*. New York, NY: Simon & Schuster.
- Díaz, E., & Flores, B. (2001). Teachers as sociocultural, socio- historical mediator: Teaching to the potential. In M. de la Luz Reyes & J. J. Halcón (Eds.), *The best for our children: Critical perspectives on literacy for Latino students* (pp. 29–47). New York, NY: Teachers College Press.

An Apprentice Teacher's Journey in "Seeing Learning"

- Erickson, F. (1982). Taught cognitive learning in its immediate environments: A neglected topic in the anthropology of education. *Anthropology & Education Quarterly*, 13, 149–180.
- Erickson, F. (2006). Studying side by side: Collaborative action ethnography in educational research. In G. Spindler & L. Hammond (Eds.), *Innovations in educational ethnography: Theory, methods, and results* (pp. 235–258). New York, NY: Routledge.
- Feiman-Nemser, S. (2008). Teacher learning: How do teachers learn to teach? In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (pp. 697–705). New York, NY: Routledge.
- Feistritzer, C. E., & Chester, D. (2003). *Alternative teacher certification: A state-by-state analysis*. Washington, DC: National Center for Education Information.
- Frank, C. (1999). *Ethnographic eyes: A teacher's guide to classroom observation*. Portsmouth, NH: Heinemann.
- Gallego, M. A. (1995). Community based school reform: (Service) learning lessons from La Clase Magica for teacher education. *Journal of the Michigan-Ohio Association of Teacher Educators*, 1, 18–22.
- Gallego, M. A. (2001). Is experience the best teacher? The potential of coupling classroom and community-based field experiences. *Journal of Teacher Education*, 52, 312–325.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New York, NY: Routledge.
- Goodman, J. (1985). What students learn from early field experiences: A case study and critical analysis. *Journal of Teacher Education*, 36(6), 42–48.
- Gutiérrez, K., & Vossoughi, S. (2010). Lifting off the ground to return anew: Documenting and designing for equity and transformation through social design experiments. *Journal of Teacher Education*, 61, 100–117.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. Cambridge, UK: Cambridge University Press.
- Howard, T. C., & Aleman, G. R. (2008). Teacher capacity for diverse learners: What do teachers need to know. In M. Cochran-Smith, S. Feiman-Nemser, & D. John McIntyre (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed., pp. 157–174). New York, NY: Routledge.
- Jewett, S., & Schultz, K. (2011). Toward an anthropology of teachers and teaching. In B. Levinson & M. Pollock (Eds.), *A companion to the anthropology of education* (pp. 425–444). Malden, MA: Wiley Blackwell.
- Knowles, J. G., & Cole, A. L. (1996). Developing practice through field experiences. In F. B. Murray (Ed.), *The teacher educator's handbook: Building a knowledge base for the preparation of teachers* (pp. 648–688). San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (2000). Fighting for our lives: Preparing teachers to teach African American students. *Journal of Teacher Education*, 51, 206–214.
- Landes, R. (1965). *Culture in American education: Anthropological approaches to minority and dominant groups in the schools*. New York, NY: John Wiley.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, 59, 361–373.

- McDonald, M., Bowman, M., & Brayko, K. (2013). Learning to see students: Opportunities to develop relational practices of teaching through community-based placements in teacher education. *Teachers College Record, 115*, 1–35.
- McDonald, M., Tyson, K., Brayko, K., Bowman, M., Delpont, J., & Shimomura, F. (2011). Innovation and impact in teacher education: Community-based organizations as field placements for preservice teachers. *Teachers College Record, 113*, 1668–1700.
- Merton, R. (1973). *The sociology of science: Theoretical and empirical investigations*. Chicago, IL: University of Chicago Press.
- Nieto, S. (2000). Placing equity front and center: Some thoughts on transforming teacher education for a new century. *Journal of Teacher Education, 51*, 180–187.
- Oakes, J., Lipton, M., Anderson, L., & Stillman, J. (2013). *Teaching to change the world* (4th ed.). Boulder, CO: Paradigm.
- Orellana, M. F. (2015). *Immigrant children in transcultural spaces: Language, learning, and love*. New York, NY: Routledge.
- Owocki, G., & Goodman, Y. (2002). *Kidwatching: Documenting children's literacy development*. Portsmouth, NH: Heinemann.
- Philips, S. U. (1972). Participant structures and communicative competence: Warm Springs children in community and classroom. In C. Cazden, D. Hymes, & V. John (Eds.), *Functions of language in the classroom* (pp. 370–394). New York, NY: Teachers College Press.
- Reyes, I., DaSilva Iddings, A. C., & Feller, N. (2015). Building relationships with diverse students and families: A funds of knowledge perspective. *Journal of Early Childhood Literacy, 16*(2). doi:10.1177/1468798415584692
- Rodriguez, G. M. (2013). Power and agency in education: Exploring the pedagogical dimensions of funds of knowledge. *Review of Research in Education, 37*(1), 87–120.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in a social context*. Oxford, UK: Oxford University Press.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford, UK: Oxford University Press.
- Ronfeldt, M., & Reininger, M. (2012). More or better student teaching? *Teaching and Teacher Education, 28*, 1091–1106.
- Rosaen, C., & Florio-Ruane, S. (2008). The metaphors by which we teach: Experience, metaphor, and culture in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, & D. John McIntyre (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed., pp. 706–731). New York, NY: Routledge.
- Sleeter, C. E. (2008). Preparing White teachers for diverse students. In M. Cochran-Smith, S. Feiman-Nemser, & D. John McIntyre (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed., pp. 559–582). New York, NY: Routledge.
- Spindler, L. (1967). Review of culture in American education by Ruth Landes. *Ethnohistory, 14*(1/2), 77–80.
- Téllez, K., & Hlebowitsh, P. S. (1993). Being there: Social service and teacher education at the University of Houston. *Innovative Higher Education, 18*(1), 87–94. doi:10.1007/BF01742199
- Valencia, R. R., & Solórzano, D. (1997). Contemporary deficit thinking. In R. R. Valencia (Ed.), *The evolution of deficit thinking: Educational thought and practice* (pp. 160–210). New York, NY: RoutledgeFalmer.
- Villegas, A. M., & Davis, D. E. (2008). Preparing teachers of color to confront racial/ethnic

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- disparities in educational outcomes. In M. Cochran-Smith, S. Feiman-Nemser, & D. John McIntyre (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed., pp. 583–605). New York, NY: Routledge.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wolcott, H. F. (2008). *Ethnography: A way of seeing* (2nd ed.). Plymouth, UK: AltaMira Press.
- Zeichner, K., & McDonald, M. (2011). Practice-based teaching and community field experiences for prospective teachers. In A. Cohan & A. Honigsfeld (Eds.), *Breaking the mold of preservice and inservice teacher education: Innovative and successful practice for the 21st century* (pp. 45–54). Lanham, MD: Rowman & Littlefield Education.
- Zeichner, K., Melnick, S., & Gomez, M. L. (Eds.). (1996). *Currents of reform in preservice teacher education*. New York, NY: Teachers College Press.
- Zeichner, K., Payne, K. A., & Brayko, K. (2012). *Democratizing knowledge in university teacher education through practice-based methods teaching and mediated field experience in schools and communities* [Issue paper]. Seattle, WA: University of Washington Center for Study of Teacher Learning in Practice.