Making Learning the Object: Using Cultural Historical Activity Theory to Analyze and Organize Student Teaching in Urban High-Needs Schools

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Background/Context: Student teaching represents a critical component of most teacher education programs. However, there is significant variation both in the contextual factors that preservice teachers (PSTs) encounter in their field placements and in the ways that teacher educators mediate PSTs' learning in relation to those placements. In this article, Cultural Historical Activity Theory (CHAT) provides the theoretical framework for considering this complex endeavor.

Purpose/Objective: This article unpacks a salient excerpt from an interview that was conducted as part of a larger qualitative study focused on situating student teaching in urban high-needs schools. The authors use one participant's description of her student teaching experience as a starting point for mapping the contextual factors that appeared to mediate her practice—and her learning about practice—in her placement. The authors then consider how teacher educators might have better supported the student teacher, thereby enhancing her own and her students' learning.

Conclusions/Recommendations: The authors conclude that conceptualizing student teaching through an activity system lens affords teacher educators the opportunity to think about student teaching in more contextualized ways, to set clearer,

Teachers College Record Volume 115, 030309, March 2013, 36 pages Copyright © by Teachers College, Columbia University 0161-4681 context-specific learning goals, and to strategically re-mediate PSTs' learning in relation to those goals. Implications include recommendations for deepening collaboration with cooperating teachers and otherwise working to build coherence across university-based and field-based settings in an era of high-stakes accountability.

"So I just let it be.... So it was like they were really on their own and also culturally working together and all of that." These words concluded the rich description that Cristina—then finishing her first year of teaching—offered in response to the question, "Can you describe a time in your student teaching where, despite challenges, you were able to apply something that you had learned from your teacher education program (TEP)?" Although the description of practice that preceded those words offered cause for cautious optimism, the words themselves offered cause for personal and professional concern. Over the past 2 years, they have stayed with us—a subtle indictment of the preservice experiences that had socialized and ostensibly prepared Cristina to enact rigorous, culturally relevant, and socially just teaching practices in and for contemporary urban high-needs schools.

That said, we want to state clearly at the outset that our intent is not to impugn Cristina, nor her teaching, but rather to call into question our role as teacher educators in contributing to problematic aspects of her practice and that of other TEP graduates. Our intent is to articulate what Cristina's account suggests about our struggles-personal and programmatic-to provide sufficient and sufficiently strategic support for PSTs' field-based learning. It is precisely because Cristina was such a capable, committed, hardworking PST that her practice, and her explanation of that practice, stands as an especially powerful example. It would be far easier to write off as "not our problem" the failings of a less diligent and dedicated prospective and practicing teacher. Cristina's account, therefore, forces us to hold the mirror to ourselves and to ask why and how she emerged from teacher education-and specifically from student teaching-with a clear sense of herself, ontologically speaking, as a social justice teacher, but with only a vague understanding of how to actually teach for social justice in the context of an urban high-needs school.

In the pages that follow, we re-introduce Cristina and revisit the aforementioned account of her student teaching in greater depth. Specifically, we highlight promising and problematic aspects of her practice. We then turn to cultural historical activity theory (CHAT) as a learning theory that takes seriously historicity and the mediating role of context, community, and culture and therefore holds special potential for illuminating complex social interactions within and across TEP and K–12 settings. Using CHAT, we highlight mediating features of the local context, and we explore connections between Cristina's practice and her TEP's approach to student teaching. We then re-imagine how her practice might have looked and sounded had she experienced student teaching as teacher educator *mediated* and culturally and historically situated *guided* practice rather than mostly *independent* practice—a distinction to which we return in the next section. As such, Cristina's account serves as a springboard for our efforts to reconceptualize and reorganize student teaching as a form of guided practice that supports PSTs in developing the specialized knowledge and adaptive expertise they will need to navigate the complexities of context—particularly the complexities of the contemporary policy context—and enact equity-minded teaching practices in urban high-needs schools.

BACKGROUND: STUDENT TEACHING IN AND FOR URBAN HIGH-NEEDS SCHOOLS

Almost two decades ago, Cochran-Smith (1991) argued that student teaching in and for urban high-needs schools ought to provide PSTs with opportunities to "teach against the grain"-to develop critical inquiry skills and become reform-minded-under the mentorship of cooperating teachers who are struggling themselves to reform their classrooms and schools. Since then, a number of literature reviews (e.g., Clift & Brady, 2005; Guyton & McIntyre, 1990; Hollins & Guzman, 2005; McIntyre, Byrd, & Foxx, 1996) and empirical works (e.g., Grossman, Hammerness, McDonald, & Ronfeldt, 2008; Valencia, Martin, Place. & Grossman, 2009) have explored the role of field experiences, and student teaching specifically, in teacher education. Among pieces that focus on the role of student teaching in preparing teachers for work in urban and/or high-needs schools, a number of studies tend to reflect oversimplified views of culture that emphasize superficial traits over repertoires of practice (e.g., Fry & McKinney, 1997; Leland & Harste, 2005; Rushton, 2000, 2001, 2003, 2004), views of teaching that emphasize performance over facilitation of student learning (e.g., Barnes, 2006; Proctor, Rentz, & Jackson, 2001; Rushton, 2004; Weiner, 1990), and views of student teaching that emphasize immersion and independent practice over guided practice (e.g., Mason, 1999; Rushton, 2000, 2001; Weisman & Hansen, 2008; Wiggins, Follo, & Eberly, 2007). That said, some focus with detail and depth on the role of field experiences in preparing teachers to enact equity-minded teaching practices, while also situating urban schools within larger sociopolitical and economic realities (e.g., Lloyd, 2007; Luft, Bragg, & Peters, 1999); some among these also include careful attention to and actionable insight concerning the role of teacher educators in mediating preservice teachers' learning in the field (e.g., Brock, Moore, & Parks, 2007; Buehler, Gere, Dallavis, & Haviland, 2009).

In light of this research, we have grappled with questions concerning how to best support student teachers in developing the specialized knowledge and adaptive expertise needed to teach in contemporary urban high-needs contexts where educators have the honor of working with youth who possess tremendous cultural and linguistic wealth, and where educators must also contend with well-documented challenges (e.g., resource shortages, overcrowding, staff turnover) and well-known but less studied obstacles (e.g., the pressures that accompany schools' lowperforming labels). In practice and previous studies, we have tried to better understand how to maximize student teachers' learning in these contexts despite disproportionate numbers of new or uncertified teachers (Ingersoll, 2003), subsequent struggles in identifying qualified cooperating teachers (Lane, Lacefield-Parachini, & Isken, 2003), and instructional constraints related to "underperformance" on high-stakes standardized tests (Gutiérrez, Asato, Zavala, Pacheco, & Olson, 2003; Gutiérrez, 2006). Our own practical experience and empirical works have led us to acknowledge that some PSTs seem to emerge from student teaching experiences in urban high-needs schools with a compromised, rather than specialized, view of professional practice (Darling Hammond & Bransford, 2006), and with all the implied meanings of that term: an inability to function optimally; exposed or vulnerable to danger; unstable or reduced in quality, value, or degree; having accepted something less than what one originally wanted or sought, often because what was wanted was unattainable; and so on (Anderson & Stillman, 2010, 2011).

Thus, like others, we have called for teacher educators' strategic *re*mediation of PST learning—the kind that some scholars have begun to document in their own work as teacher education practitioners and researchers (e.g., Brock et al., 2007; Gutiérrez & Vossoughi, 2010; Merino & Holmes, 2006; Parks, 2008). In using the term *re*-mediation (rather than *mediation* or *remediation*), we aim to emphasize both (a) that complex and dynamic contextual factors mediate our PSTs' learning, particularly their field-based learning; and (b) that for student teaching to be educative in alignment with the learning goals that we hold for it, we, as teacher educators, must *re*-mediate according to our understandings of those mediating contextual factors. Such re-mediation—what we might also think of as the reorganization of PST learning—necessarily involves rethinking where and when we place student teachers, as well as how we support them within and across settings. We have claimed that more strategic re-mediation—informed by analysis of context and culture and anchored by clearly defined learning goals—offers great potential to support PSTs in building a specialized (rather than compromised) knowledge base that will anchor their equity-minded teaching and ensure that intended enduring learnings do not merely "wash out" once PSTs enter new and challenging teaching assignments (Zeichner & Tabachnick, 1981). In essence, then, we have argued for something that we have yet to document ourselves. Thus, although neither of us was charged with supporting Cristina when she was a student teacher, we take Cristina's account as an opportunity to consider our roles as teacher educators, to take responsibility for our PSTs' learning, and to interrogate our own remediation of PST field-based learning.

CRISTINA IN CONTEXT

The interview from which this article's focal excerpt was taken occurred as part of a study that asked a group of about 30 PSTs across two TEPs to reflect on their preservice field experiences, the learning experienced therein, and the degree to which (and how) those experiences contributed to their experiences as first-year teachers working in urban highneeds schools. Among other things, participants-of which Cristina was one-took part in 60- to 120-minute semistructured interviews just as they were completing their respective TEPs. One TEP was located in the Northeast and the other in the Southwest; both were situated in large metropolitan areas with pervasive public school "failure," aimed to prepare teachers with a commitment to equity-minded or "social justice" teaching, and placed PSTs almost exclusively in high-needs urban schools for the duration of their student teaching placements. Interviews asked participants to provide examples of what and how they had learned from student teaching the prior year and pressed them to emphasize opportunities (or constraints) that they thought contributed to (or detracted from) their preparation to teach in high-needs schools. Cristina's responses and the specific account unpacked in the next section speak to larger themes that cut across the data and have been reported elsewhere (Anderson & Stillman, 2010, 2011); however, because of who Cristina is, how she was prepared to teach, and where she ultimately taught, her account in particular presents an opportunity to explore crucial themes with greater depth.

CRISTINA

Cristina, a first-generation bilingual Latina and product of California K-16 public schools herself, does not fit the "typical" demographic

profile of a teacher, according to the near constant accounts of demographic divide that pepper the first few paragraphs of most scholarship on the preparation of culturally responsive teachers. Indeed, whereas the majority of teachers nationwide remain overwhelmingly White, monolingual, and from middle-class and/or suburban backgrounds (Zumwalt & Craig, 2005), Cristina's cultural and linguistic background and lived experience represent a departure from that profile and also more closely mirror those of the students she sought to and ultimately did serve. As such, she represents the kind of teacher candidate for whom scholars have clamored (Sleeter & Thao, 2007; Villegas & Lucas, 2002).

Cristina grew up in the city where she sought to teach and became a teacher. She attended its schools, and she recounted in detail the feelings of alienation and joy that those schools brought her in equal measure. She recalled the long distance—literal and figurative—between school and home, and the welcome embrace of a few teachers who made an extra effort to support English Learners (ELs) like herself. Reentering elementary schools as an adult, Cristina was struck by how young her second graders were, and therefore how young she must have been when she and her older sister rode a yellow bus 2 hours across the city because of overcrowding in their neighborhood school, and when she first realized her parents' commitment and struggle to support her education despite language barriers. She quoted Sonia Nieto (2003) in the rationale for focusing her culminating master's project on writing and parent engagement:

Teachers do not leave their values at the door when they enter their classrooms . . . In fact, teachers bring their entire autobiographies with them; their experiences, identities, values, beliefs, attitudes, hang-ups, biases, wishes, dreams, and hopes. It is useless for them to deny this; the most they can do is acknowledge how these may either get in the way, or enhance, their work with students (p. 24).

Cristina came to teacher education with—and in many ways, because of—a degree of personal understanding about the global struggle for educational opportunity waged by immigrants, particularly Latinos, in the Southwest. She brought with her knowledge of and abiding respect for the community she would ultimately serve as a teacher, its history of persistence in the struggle for social justice, and its awesome bicultural and bilingual capacities. Although it would be wrong to assume that her background would automatically make her a culturally responsive educator, it would also be wrong to deny the particular assets that Cristina brought to her work.

CRISTINA'S TEP AND STUDENT TEACHING PLACEMENTS

Cristina's two-year TEP, which espoused a commitment to preparing teachers to work with culturally and linguistically diverse students, required that future teachers student teach and pursue first-year teaching employment in local, "low-performing" urban public schools. In the year prior to the study, Cristina had completed course work,¹ classroom observations, and two student teaching placements. At the time of the interview, she was a month shy of completing the TEP's second and final year, during which she taught full-time and conducted the aforementioned culminating master's project focused on an area of her teaching practice that she deemed problematic and/or interesting. Given her firsthand teaching experience and the master's project requirement to revisit theoretical readings and reflect on and amend one's teaching practice, this was an opportune time to engage Cristina in critical reflection on the opportunities, affordances, and constraints present in her student teaching placements of the prior year.

In keeping with the TEP's requirements and her own commitments, Cristina's two student teaching placements and her first-year teaching placement were all situated in urban high-needs schools serving large populations of ELs, students of color, and low-income students. Each was deemed "low-performing" because of scores on high-stakes standardized tests. Like other PSTs pursuing cross-cultural/bilingual credentials, the highest level of state certification for those interested in serving ELs, Cristina had to complete at least one of her two student teaching placements in a bilingual or "Structured English immersion" classroom. Thus, before earning her full-time position as a second-grade teacher, Cristina had student taught in a transitional bilingual kindergarten classroom and then in a mainstream second-grade classroom. In some sense, she was fortunate to have experienced one student teaching placement (i.e., her second) that was compatible, in terms of grade level and mandated curriculum, with her eventual full-time first-year teaching assignment.

Although discussions of context could fill many pages, it seems important to note here at least a few particular aspects of the broader policy and political context surrounding Cristina's placements. First, Cristina's placements were all situated within and serving predominantly Latino, bilingual, and bicultural immigrant communities. Second, these placements were all situated within one large urban school district, which, like many others nationwide, had recently mandated the use of specific curricular programs in alignment with federal guidelines and had also established a series of district-monitored assessments intended to gauge progress toward higher performance on statewide high-stakes standardized tests. Third, these placements were all situated within California, notable for a number of distinctions, including: the nation's most populous and diverse state; the fifth largest economy in the world; home to millions of immigrants, millions of families living below the poverty line, the global technology mecca of Silicon Valley, and Hollywood, producer of our most popular cultural exports; bellwether for education reform, given the state's early development of, and heated debates around, content area standards; and site of some of the country's most vitriolic antiimmigrant, xenophobic policies and "backlash pedagogies." California's teachers necessarily encounter both students and schools that are shaped by the material realities and ideological complexities of this particular social, cultural, historical, economic, and political context. In turn, teacher educators face an increasingly urgent charge: to equip teacher candidates, like Cristina, with the adaptive expertise needed both to recognize students' knowledge and experiences and to leverage them for learning in spaces where notions of what constitutes "real" knowledge and "real" experience are hotly contested.

CRISTINA'S INTERVIEW

Cristina's interview took place in her classroom at the end of a midweek school day. It spanned almost 2 hours and was full of rich detail, much of which could be subject to scrutiny for learning, but some of which stuck with us, cycling back into our consciousness and conversations. The specific account that serves as the focal excerpt for this manuscript came midway through the interview, following conversation about the challenges that Cristina faced during her first year. Most of those challenges focused on lingering confusion about what seemed a murky definition of "teaching for social justice."

Even to this day, it's kinda like, what is social justice? I kept on waiting for the answer. . . . But as I'm teaching now I'm figuring out what it is based on the needs of your students. What is justice for them? What's going to serve them and help them succeed is what I have come to . . . whatever I need to do to get there.

To this end, Cristina believed that her TEP had deepened her understanding that teachers "really need to know your students and need to know the community and the curriculum so that you know how you can modify and make it relevant to students."

Yet given her confusion about how to teach for social justice, she admitted that she struggled to imbue her teaching with authentic opportunities for students to "learn about their surroundings and what's going on in their community" and "social themes" more broadly related to globalization, liberation and struggle, justice and peace, human rights and dignity, and equity and fairness. As she put it, "I didn't know how or when the right moment was. So it would just happen sporadically with different content areas," and she lamented that she was leaving her TEP with so few "practical ideas of how you can go into the classroom and bring it down to their level without lowering expectations."

At one point, midway through the interview, Cristina was asked, "Can you think of a time in your student teaching where, despite these challenges, you were able to apply something that you had learned from your TEP?" She began,

In the second grade ... it was during the [mandated literacy program's] camouflage unit.... At that time, we [TEP students] also had a history, arts, and social studies class at [the university lab school], and from the beginning we all did a really large mural where we started off with a pencil sketching, and we traced it with black oil pastel and then we went in and painted. And I really wanted to do that with [the students in my student teaching placement].

Cristina then articulated how she connected this particular mural project to content being covered in the aforementioned mandated curriculum unit: "Since we were doing desert life and wildlife. . . I just got three large pieces of butcher paper and cut it in half and said OK, this side will be . . . like a tropical rain forest . . . then the other side was a desert. . .

As she continued, she described how she proceeded to engage students in creating the mural and commented on students' observable enthusiasm.

I brought in groups, and I said, OK, on this side we're going to draw—, what do you see in a tropical rain forest? . . . They started drawing trees and leaves. I had them sketch and then I had them trace. They loved it. And then it was like they'd be waiting for their turn. Then on the other side we put the desert.

At this point, Cristina explicated how students appropriated the mural as a space to convey experiential and scientific knowledge, how that knowledge surprised and enlightened her, how she responded to students' ideas, and how the project concluded. I thought of doing pyramids and drawing camels. . . . Then on the second day I started seeing them drawing crosses and rest in peace. I was like, rest in peace? I was really curious; why are they doing crosses and rest in peace? And at the same time I was hearing in the news about the immigration, how people were going through the desert and they were dying and there was no water. ... I started making sense of it, and I asked them, "Why are you doing crosses here?" [I responded,] "Oh for the people that are dving because they want to come over here." And I didn't want to stop it, but I didn't want to steer the direction and the focus of the mural. I just let it be. But at the end it was wonderful. . . . They got to draw their own animals too. I had animals and I showed them how to sketch the animals; step one, step two, and they loved it and they did that. And then they got really creative and started saying, Oh well a snake can be in both places.... So it was like they were really on their own and also culturally working together and all of that.

When asked to provide further detail about what happened before and after this event, it became clear that Cristina had not been supported to see this as an opportunity to leverage students' understandings of the desert in order to extend and deepen their content knowledge and skill development. Cristina explained that her cooperating teacher generated with her some basic ideas for connecting the mural to the class content (e.g., "I pretty much just brainstormed ideas with him about what type of mural I could do with the kids to tie it in with what they were already doing. He's like, 'Well we're doing camouflage,' and that's what that was really all about."). He also advised her on some basic logistics (e.g., "He said, well, maybe during-it was like his version of independent work time-the rotation of their groups"), and he praised her for her successful implementation of the creative project (e.g., "At the end when he saw it, he said that's really good. You got like the whole Picasso going! ... Give vourselves some credit"). However, she mentioned nothing to suggest that he had provided any constructive feedback or reflective coaching; as she characterized it, "We talked about it very minutely . . . yeah, it was very minute." And apart from the initial reference to the TEP from which she had drawn the activity, she mentioned no one else who supported her to plan for, enact, or evaluate the instruction she provided or the learning she facilitated via the mural.

UNPACKING THE MURAL PROJECT AS ACCOMPLISHMENT AND MISSED OPPORTUNITY

One of the most striking features of Cristina's account was the degree to which she seemed to view her practice as successful, but also relatively unremarkable. In reality, her account suggests that she had a done a number of impressive things despite her inexperience and the apparently limited teacher educator re-mediation of her learning.

First, her account suggests that she was courageous in experimenting with a complex project that she had never seen put into practice and that she recognized as convergent with her TEP's espoused vision, but divergent from the dominant modes of practice in her placement. It also suggests that she planned and managed a materials-intensive, multistep, multilesson project, which required organized cooperative grouping and offered an unscripted space for students to make meaning and generate authentic knowledge through joint productive activity (Rogoff, 1990; Tharp & Gallimore, 1988). Second, Cristina's account suggests that she further imbued the literacy unit with science content-often marginalized in high-needs schools where tested subjects take precedence by mandate or default-as she pressed students to construct and compare whole habitats. Though not substantially fleshed out, the connection she recounted having drawn between the mural and the science content embedded in the literacy unit was *potentially* robust; indeed, her account suggests that students located points of commonality and contrast across habitats as evident in, for example, their placement of the snake and its habitat-specific camouflage. Third, the mural, as described, provided viable entry points for diverse learners and could serve as a resource for students, like ELs and others, who benefit from visual representations of academic content and social interactions around that content. And fourth, Cristina's account suggests that she engaged students in a project that revealed to her a number of things about their prior knowledge, learning preferences, information processing, and personal concerns and interests. When compared with more scripted instruction, Cristina's account of the mural project-and her own tendency to consider and question rather than "correct" unexpected contributions-ultimately helped to reveal much about students as learners in a social, cultural, and historical context.

Yet Cristina's account also corroborated her stated confusion about how to "teach for social justice" despite believing in her responsibility to determine "what is justice for them?" and then do "whatever I need to do to get there." Though not connected in the narrative of her interview, the mural project represents one potential example of addressing returning to Cristina's own words—"what's going on in their community" and "social themes" mostly "sporadically," but struggling to do so while also maintaining a high level of rigor and "without lowering expectations." In other words, although Cristina's account suggests that she was able to present a potentially powerful *occasion* for learning about students and for student learning, it also suggests that she did less to actually facilitate students' learning in relation to rigorous academic goals.

In fact, as we examined Cristina's account, it became evident that she never articulated specific learning goals, neither in relation to her instruction overall, nor in relation to the mural, in particular. She emphasized a general interest in engaging students around content-in this case, concerning camouflage-and providing an opportunity for students to work together, potentially enabling them to make meaning on their own terms; yet she did so absent specific content- and skill-related learning goals, whether in literacy, science, and/or social studies, all of which might be relevant here. Specifically, Cristina also missed an opportunity to use students' cultural and experiential knowledge-in this case, their knowledge of immigrants dying in the southwestern desert-as a bridge to academic content knowledge. Instead, Cristina's primary approach was to create a space that students navigated "really on their own," and her primary response to students' contributions was to "just let it be" or to ask questions to "make sense" of the situation, but without using that sense of the situation to refine instruction moving forward and scaffold students' academic development. In other words, what could have been dynamic formative assessment; fodder for further curriculum adaptation, integration, or creation; and/or the springboard for culturally relevant skill and concept development was ultimately a standalone project and unit-culminating repository.

What we see here is that Cristina struggled both to articulate what she had learned from her TEP and to independently bring that learning into conversation with the norms and practices she encountered in the field. This is not particularly surprising given Cristina's location along the learning-to-teach continuum (Feiman-Nemser, 2001). In fact, it would be inapproriate to fault Cristina for her struggles, given that, as stated at the outset, we recognize those struggles and subsequent "failings" as endemic to TEP ecologies, structures, and practices more so than to individual teacher candidates. Indeed, research shows that university- and field-based teacher educators often lack shared understanding about what and how PSTs should learn (e.g., Borko & Mayfield, 1995; Smagorinsky, Cook, & Johnson, 2003; Zeichner, 2005), and, as a result, PSTs struggle to

navigate discrepancies between TEP expectations and student teaching realities (Anderson & Stillman, 2010, 2011; Smagorinsky, Cook, Jackson, Fry, & Moore, 2004; Smagorinsky et al., 2003).

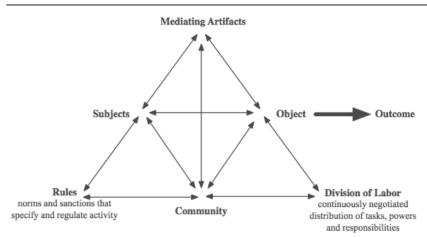
Given the demands of high-stakes accountability, new and potentially wider discrepancies have emerged. As mentioned earlier, such discrepancies are perhaps especially significant when student teaching placements, like Cristina's, are situated in schools labeled "low-performing," where manifestations of the policy context often stand in stark contrast to TEP-espoused theories and practices (Anderson & Stillman, 2010, 2011; Margolis, 2006; Valencia et al., 2009). So, how might teacher educators maximize PSTs' learning in light of such discrepancies? How might we equip PSTs with the adaptive expertise necessary for both recognizing students' knowledge and leveraging it for learning in these contexts? And, how might we use Cristina's account to inform our thinking and practice moving forward?

THEORETICAL FRAMEWORK: CULTURAL HISTORICAL ACTIVITY THEORY

Given the complexity of learning to teach, we draw on learning theoryspecifically cultural historical activity theory-as a lens for structuring and analyzing what and how PSTs learn from field experiences. Certainly, we are among many looking to CHAT as a generative framework for reconsidering some of the persistent challenges and unanswered questions in teacher education (e.g., Gutiérrez & Vossoughi, 2010; Peck, Gallucci, Sloan & Lippincott, 2009; Smagorinsky et al., 2004; Valencia et al., 2009). Like others (Valencia et al.), we argue that conceiving of student teaching as an activity system better positions us to address the complexities of PSTs' learning processes in relation to schools' contextual factors (e.g., variations in the degree to which external policy mandates manifest in classrooms) and cultural features (e.g., variations in the repertoires of practice within and across communities). Departing from others, however, we focus on student teaching as an opportunity to learn in and for urban high-needs schools specifically. And we argue that CHAT provides a set of tools that is particularly useful given our concerns and the tendencies-reflected in research, policy, and practice-toward reductive and fetishized views of urban schools and the communities and students they serve (Bartolomé, 1994; Cross, 2003, 2005).

From a CHAT perspective, learning does not simply occur in one's head, but requires "additional cognitive resources that are to be found in the sociocultural milieu" (Cole & Engeström, 1997, p. 3). In other words, CHAT views learning as necessarily *situated* within consequential social,

cultural, and historical contexts—contexts wherein relations between subject (i.e., learner) and community are mediated by artifacts and rules, and wherein participants negotiate the distribution of tasks, powers, and responsibilities. Figure 1 depicts the common triangular heuristic for this collective and contradiction-rife notion of learning and human activity, also referred to as an "activity system."² Because an activity system is "by definition a multivoiced formation," it acknowledges the dynamism of context and culture and thus offers a theoretical lens on learning that can attend more complexly to the historicity and situatedness of human activity (Engeström, 1999, p.35).





Applying this heuristic to student teaching helps to make visible the various people (individuals and communities) and artifacts that (might) mediate PSTs' contextualized learning processes and outcomes. It also helps to highlight the inherent potential for tension and discoordination as actors—local school staff and students, university-based faculty, and PSTs themselves—negotiate practice across multiple activity settings (e.g., assignments, classrooms, schools, university). Indeed, activity theorists make plain the incompatibility of human interaction, as dynamic and situated, and therefore problematize the notion of complete intersubjectivity (about rules, roles, and so on) or truly "common" objects (goals) (Hakkarainen, 1999). Engeström, for example, referred to objects as "horizons" that offer direction for joint activity but are "never fully reached or conquered" and are constructed and redefined as action unfolds (p. 380). In some sense, then, this view challenges the very

notion of coherence as an attainable goal in teacher education, particularly across TEP components and placements. In other words, CHAT would suggest that although social actors can negotiate "working consensus" (Goffman, 1959), tensions, contradictions, and discoordinations necessarily remain constant as targets of elusive reconciliation within and across activity systems.³

As we will show in analyzing Cristina's account, considering student teaching through the lens of activity theory assists us, as teacher educators and researchers, in addressing the dynamism and complexity both of PSTs' learning processes, and the contextual factors (i.e., prevalence of high-stakes accountability demands) and attendant culture(s) of high-needs urban schools and the communities they serve. If indeed student teaching is to remain a common component of teacher education, and if student teaching placements are to be considered important contexts for PST learning, CHAT has much to offer in helping us deepen our thinking about learning, context, history, and culture—as a verb, something people *do*, rather than a noun, something people *are*—in university-based TEPs and K–12 schools (Gutiérrez, 2009; Gutiérrez & Rogoff, 2003).

VIEWING CRISTINA'S STUDENT TEACHING THROUGH AN ACTIVITY SYSTEM LENS

As mentioned previously, viewing student teaching through an activity system lens helps to reveal the myriad actors and artifacts that mediate PSTs' field-based learning. Accordingly, the aforementioned discrepancies and tensions that tend to exist between TEPs and student teaching (and teaching) placements are also brought to the fore. In Figure 2, we map some of the mediating factors at play in Cristina's student teaching. Although we discuss the links between Cristina's experiences and the six elements of the activity system triangle in the text that follows, Roth and Lee (2007) reminded us that these elements should not be thought of as individual entities, but rather as interwoven and dialectical features of the whole of the activity for which the triangle serves as a heuristic.

Using the activity system heuristic, we identify Cristina as the learner or "subject"; we also identify what Cristina's TEP names as an overarching learning goal or "object" for its graduates: to "teach for social justice" in ways that recognize and honor students' assets and interests, offer students multiple forms of participation, encourage critical thinking, employ culturally relevant pedagogies, and reflect high academic and personal expectations (TEP Mission, 2010).

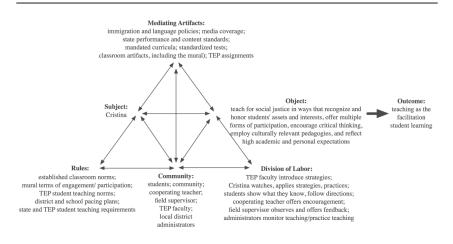


Figure 2. Cristina's student teaching experience as an activity system

Multiple "artifacts" or tools likely mediated Cristina's development of these capacities. As is the case in most California public schools, Cristina and the practicing teachers at her school site were expected to align their instruction with the skills and subject matter knowledge laid out in the state's standards documents and measured on the state's English standardized tests-the Standardized Testing and Reporting (STAR 9) exam and the California Standards Test (CST). In addition, Cristina was expected to implement a district-mandated, skills-based English reading program-SRA McGraw-Hill's Open Court Reading (OCR). Together, pressure to teach the standards, raise test scores, and use OCR with fidelity impacted both what and how Cristina taught as a student teacher (and ultimately as a first-year teacher, too), and the instruction (content and pedagogy) she observed her cooperating teacher delivering on a daily basis. Additional artifacts included state (and to some degree, federal) immigration and school language policies that framed Cristina's work with Spanish-speaking ELs and surfaced in the content of the mural project.4 We might also consider media coverage about immigration as a mediating artifact.

Various individuals—represented in "community"—also mediated Cristina's learning. First, Cristina's students, as well as her students' local and cultural communities, comprised the social context wherein Cristina was learning to teach. In addition, Cristina interacted, although to varying degrees, with her assigned field supervisor and cooperating teacher, as well as with members of the TEP faculty. Local and district administrators, who monitored the fidelity of teachers' curriculum implementation, likewise played a role in Cristina's learning to teach.

Numerous "rules" or norms also regulated Cristina's participation in this activity system. For example, Cristina was expected to fulfill particular student teaching requirements established by the California Commission on Teacher Credentialing and her TEP (e.g., a specified number of hours in classrooms, a specified number of hours teaching, and so on), as well as adhere to her TEP's norms surrounding student teaching (e.g., interact with cooperating teacher on a regular basis; interact with assigned university field supervisor before and after formal observations, conducted approximately every 3 weeks; complete field-based TEP assignments; and so on). At the level of the school, the mandated reading program's pacing plan-designed to ensure that teachers cover specific lessons over a specific number of days-additionally regulated Cristina's field-based participation. The classroom's established norms for group work (e.g., cooperating, sharing) and the lesson's terms of engagement (e.g., turn-taking; working within the two-sided desert/rainforest graphic structure of the mural) could also be regarded as rules.

These rules helped to define the "division of labor" among the various community members identified previously. For example, Cristina's central responsibility was to observe her cooperating teacher and engage in practice teaching (in accordance with parameters laid out by her cooperating teacher, TEP, and the state). In this project, Cristina's students were expected to demonstrate, through collaboration, talk, and drawing, what they knew about camouflage in two different ecosystems. Based on Cristina's completed TEP coursework and comments, it would be fair to assume that the TEP introduced Cristina to a variety of theories and practices geared toward working with historically marginalized students. We know with more certainty that one particular TEP professor provided Cristina with an instructional strategy (i.e., mural making) that she attempted with her students. Although Cristina did not mention her field supervisor, nor was her field supervisor present during the mural project, we nevertheless also include him in the activity system because the university had designated him to conduct observations of, and provide feedback on, Cristina's student teaching. Only Cristina's cooperating teacher offered feedback on this specific project, which, as mentioned previously, mostly took the form of vague encouragement. Finally, district- and school-level administrators maintained a consistent presence in Cristina's placement as they monitored practicing (and student) teachers' instruction, particularly preparation for standardized tests and implementation of OCR and state standards.

IDENTIFYING TENSIONS WITHIN AND BETWEEN CRISTINA'S TEP AND STUDENT TEACHING PLACEMENT

Conceiving of Cristina's student teaching experience in this way sheds considerable light on the discrepancies and tensions that existed within and between Cristina's TEP and her field placement-tensions and contradictions alluded to in related literature (e.g., Grossman, Smagorinsky, & Valencia, 1999; Roth & Lee, 2007).⁵ To begin, although Cristina's TEP aimed to prepare teachers who could enact the types of instructional approaches articulated in their mission statement, this "object" was not necessarily shared by various "community" members and thus reflects a kind of "common object problem" (Hakkarainen, 1999). For example, when administrators visited classrooms at Cristina's placement school, they tended to focus exclusively on teachers' fidelity to the mandated reading program and/or on efforts to explicitly raise test scores. Generally speaking, administrators paid little attention to whether teachers were connecting instruction to students' prior understandings or structuring learning opportunities that allowed for increased student engagement, participation, or critical thinking. Though Cristina's cooperating teacher offered her the space to experiment with different instructional strategies, data offered nothing to suggest that he really understood what Cristina's TEP expected her to learn and/or saw himself as responsible for strategically scaffolding her learning in relation to those expectations.⁶ That TEP faculty and school administrators tended to differ in their notions of how teachers might treat nondominant students' experiential and cultural knowledge in their instruction added to these tensions.

Various artifacts and rules also appeared to contribute to this "common object problem." Although Cristina learned from her TEP that instruction should be responsive to students' needs and interests and had been granted by her cooperating teacher some instructional autonomy, she was still required to privilege OCR, which emphasized students' decontextualized skill development, and often—because of the strict pacing calendar—left little opportunity for Cristina to respond to students' actual needs, uncover and build on students' experiential and cultural knowledge, or engage students in critical thinking. In addition, with pressure to teach to the standards and raise test scores, Cristina recounted in her interview and culminating master's project that she felt pressured to "cover" mostly "official" material at a quick pace, which often led to more whole-class, teacher-centered instruction and the exclusive use of externally determined content—approaches that generally opposed those advanced by her TEP. That Cristina's supervisor only visited her classroom every 3 weeks revealed yet another tension: how, despite infrequent classroom visits, teacher educators gain an accurate sense of Cristina's (and other student teachers') strengths, struggles, and developmental needs (i.e., identify their zones of proximal development), as well as features of the local context and culture, in order to re-mediate accordingly.

Although it is certainly possible to identify additional tensions, the following section moves on to consider how teacher educators, and field supervisors in particular, might have supported Cristina to navigate more productively some of the tensions named thus far—how they might have re-mediated Cristina's learning so that she would be better equipped to design and deliver TEP-coherent instruction within the policy constraints of her second-grade student teaching placement. We emphasize these particular tensions because Cristina's account and prior research indicate that they engender the most persistent challenges for novice teachers in urban, high-needs schools (Achinstein & Ogawa, 2006; Barrett, 2009; Picower, 2011) and that PSTs in particular are often not yet equipped to navigate them without the thoughtful guidance of a more experienced other, who can help them to develop and potentially act in relation to "images of possibility" under such conditions (Anderson & Stillman, 2010, 2011; Falk, 2008).

RE-IMAGINING RE-MEDIATION

So how might we—keeping in mind the complexities and tensions that CHAT helps to illuminate—re-mediate Cristina's learning, particularly in relation to her mural project? For example, it might be important first to remedy the fact that field supervisors have relatively infrequent access to student teachers' practice teaching efforts and therefore miss important opportunities for meaningful re-mediation. Because it can be challenging for TEPs to garner the resources to enable more field supervision, Cristina's account suggests that TEPs ought to provide PSTs with additional means (e.g., journals, weekly meetings, video logs) for conveying detailed accounts of their student teaching experiences to field supervisors and other TEP faculty. Of course, just having more contact would not necessarily constitute meaningful re-mediation.

Assuming that someone gains access to details about Cristina's mural project, we would hope to see that person press Cristina to acknowledge and leverage the assets for learning already present in her instruction, namely (1) students' mural contributions, which had imbued her curriculum with age-appropriate "social justice" themes (e.g., immigration, injustice, human rights); and (2) the mural itself, within which she could now situate meaningful concept and skill development, with which she

could begin creating a coherent whole out of seemingly fragmented OCR units, and around which she could build interdisciplinary inquiry, even if only in relation to the required statewide content standards. Most important, we would hope to see Cristina being supported to identify specific learning goals that could serve as the basis for cohesive, culturally responsive, and transformative curriculum development.

Since Cristina's lesson—and students' ideas—grew out of the mandated reading curriculum and also reflected science (i.e., camouflage) and social studies (i.e., immigration) themes, were we to do this work ourselves, we would likely press Cristina to explore the state standards to see where natural connections might occur. We would then work with Cristina to help her articulate learning goals that both reflected grade level expectations and took into account the mandated curriculum, while simultaneously privileging students' prior knowledge. Next, we provide one extended example of what it could look like to engage Cristina in such a process. Importantly, we want to acknowledge that the possibilities are numerous; different emphases on the part of teacher educators, in relation to their specific expertise and learning goals, could (and should) produce various curricular and instructional adaptations.

Looking together at state standards, for example, we might help Cristina take note of the California social science (SS) standards' yearlong theme for Grade 2, "people who make a difference," which encourages teachers to support students' learning about "actual people who make a difference in their everyday lives" and to explore "stories of extraordinary people from history whose achievements have touched them, directly or indirectly." Indeed, one of the rationales for this theme-that the "the study of how contemporary people who supply goods and services aids in understanding the complex interdependence in our freemarket system"-might, in and of itself, help Cristina to make authentic connections between students' experiential and cultural knowledge and the state-sanctioned curriculum. It is worth mentioning here that we, like others (e.g., Genishi & Dyson, 2009), do not regard state standards as neutral and have at times taken direct issue with their content and the perspectives they privilege (Sleeter & Stillman, 2005). We would therefore be reluctant to suggest to Cristina that the standards define or drive her instruction. That being said, it is evident how, in this case, teacher educators might use the standards as a generative mediating tool in conversations pressing Cristina to consider how she might use students' everyday understandings as a bridge to state-sanctioned content specifically, and to academic knowledge more broadly.

We can imagine that one possibility would be to scaffold Cristina's development of an integrated social studies unit—perhaps with a focus

on immigration-that would draw and build on students' knowledge of "people dying in the desert" to explore who these "people" might be (i.e., many are Spanish-speaking Latino immigrants from Mexico and Central America), why they might risk their lives to cross the desert into the United States (e.g., to find much-needed work, to make a better life for their families, and so on), and how these particular people make vital contributions to our society and economy even though the treatment they experience (e.g., dangerous border crossings, difficulties in gaining legal status, predominantly stereotypical, negative media representations) might suggest otherwise. We might then press Cristina to consider how she might teach students about the variation in immigrants' journeys to, and experiences once they arrive in, the United States. One possible approach would be to have students contrast this particular immigration story (i.e., crossing the desert) with other immigration stories-including students' and their families' own stories (SS Standard 2.1: "students trace the history of their own families and important events ... and compare their own daily lives with those of their parents and other family members"). Here, it might be productive for Cristina to work with a more experienced other, such as a teacher educator, to design a set of learning experiences that would support students to research and document their families' or other community members' immigration experiences and then to produce writing that reflects the voices of local immigrants (E/LA Writing Standard 2.1).

Importantly, this could also present an authentic opportunity for teacher educators to engage Cristina in critical reflection about how instruction might unintentionally alienate, discomfort, or put at risk some students-in this case, for example, students who have undocumented family members and/or are undocumented themselves—and to support her in charting intelligent instructional action that offers all students, regardless of immigration status, equitable, respectful, and safe opportunities to learn. Given the limitations and potential risks of examining only the perspectives provided by students' families, we might also press Cristina to select a variety of books that reflect the incredible diversity of immigrants' experiences, which she could use in multiple ways (e.g., read-aloud, guided reading, literature study), depending, of course, on her cooperating teacher's established language arts instructional approaches. By helping students to bring these texts into conversation with their own writing, Cristina would arguably be well positioned to help students make sophisticated connections between immigrants' experiences and their countries of origin, race, class, and languages.

À next step might involve engaging Cristina in dialogue about how this line of inquiry could link with other state standards, leading, for example, into a contextualized study of maps and the development of "map skills," such as labeling geographical landmarks (e.g., rivers, deserts, and mountain ranges) and "locating on a map where their ancestors live(d), telling when the family moved to the local community and how and why they made the trip." All these ideas, which are included in SS Standard 2.2 and Standard 2.3's call for students to understand "how the United States and other countries make laws, carry out laws, determine whether laws have been violated, and punish wrongdoers" and "the ways in which groups and nations interact with one another to try to resolve problems in such areas as trade, cultural contacts, treaties, etc.," might additionally provide rich fodder for culturally relevant instruction in which students could make connections between their own lives and knowledge and more generalizable social science themes (e.g., related to politics and economics)—connections that might span, for example, the pattern of an older cousin's military fatigues, the palette and climate of the desert, and the topology, technology, and economic value of oilfields nearby and abroad.⁷ Perhaps the unit would culminate with an exploration of how immigrants from different groups have made and continue to make a difference in students' lives and in broader society. All this is possible without considering with Cristina the potentially fertile connections to other social studies themes or to the second grade science content area standards (e.g., Life Sciences LS2: Plants and Animals have predictable life cycles) and state-mandated science curriculum units (e.g., Foss Kits focused on Insects & Plants and Pebbles, Sand & Silt).

Because the social science themes just presented reflect guidelines for a year's worth of study, we can also imagine how Cristina might find ways to make authentic and ongoing connections between these ideas and OCR. Indeed, we might first point out that OCR suggests to teachers that they give students opportunities "to activate relevant background knowledge" and even encourages teachers to have students make a "science connection" by "drawing animals in their natural surroundings to make a mural." Acknowledging these OCR suggestions takes on special importance given the tendency of the TEP's prevailing discourse to dismiss wholesale the mandated program—a dismissal that would prove impossible and/or unwise in practice for many new and untenured teachers. Equally important, it helps illuminate opportunities for curricular adaptation and assures Cristina that at least some of her TEP-derived instruction already falls within the purview of the mandated program, a point she might be called on to make if questioned by administrators.

In terms of content, there are a number of ways that Cristina might support students to draw connections between their everyday knowledge, the immigration unit described earlier, and the various OCR units. Students' prior understandings and explorations of immigrants' journeys—and particularly undocumented immigrants' journeys—would support students to construct culturally relevant understandings of human camouflage that could then be applied to the study of animal camouflage in picture books, including several of those endorsed by OCR. In fact, OCR's teacher's edition offers similar suggestions—for example, to have students "compare animal to human camouflage"—but offers limited direction concerning how one might do this in ways that extend beyond tacking on superficial instructional supplements and/or stand-alone activities. Ironically, Cristina's efforts to enact the mural project, and students' efforts in contributing to it, represent impressive, if somewhat unintentional, first steps toward integrating some of OCR's discrete suggestions.

The unit development process would offer a forum for supporting Cristina to realize more intentionally and systematically the special promise that her mural project holds for facilitating robust, interdisciplinary understandings of camouflage and for contextualizing literacy instruction in meaningful academic content. Through this process, we can imagine encouraging Cristina to identify the OCR unit's stated goals-for example, for students to "develop vocabulary related to conceptually challenging selections of text," to practice specific reading comprehension and "word knowledge" strategies, and to understand "elements authors use as they write expository prose"—and then encouraging her to consider how an integrated unit might ensure that these goals, and others, are met in authentic, student-centered ways. Certainly, by providing students with opportunities to read student-generated and additional texts about immigration and camouflage alongside mandated OCR stories, the unit could provide Cristina with meaningful opportunities to support students in making predictions, summarizing, and using other targeted comprehension strategies. By incorporating authentic oral and written communication tasks. Cristina could embed discrete skill and "word knowledge" instruction-including attention to things like phonics, dipthongs, prefixes and suffixes, and closed and open syllables-in meaningful, accessible academic content. In addition, by offering students opportunities to examine features of their own expository texts alongside those included in and/or endorsed by OCR, Cristina's unit could support students to make authentic meaning of the expository writing genre.

In sum, and most important, by supporting Cristina to develop an integrated unit like the one described earlier, we could provide her with a meaningful opportunity to learn about "what's possible" under pressure, and in doing so support her to envision how one might go about designing instruction that can facilitate deeper student learning within and beyond this particular unit ("the camouflage unit") and particular mandated reading program (OCR). In fact, one of Cristina's core—and, in our opinion, sage—critiques of OCR centered on what she considered its fragmentation and lack of internal coherence, or even resonance, across units. Interestingly and ironically, its units—Sharing Stories, Kindness, Look Again (i.e., "the camouflage unit"), Fossils, Courage, and Our Country & Its People—can be, it seems, more meaningfully tied to the mural than they can be to one another in sequential order. In this sense, we end with the profoundly important realization that Cristina and her students generated a classroom artifact that not only was rich and culturally relevant, but also held potential for re-mediating some of the perceived failures of the mandated reading program and for enabling robust connections between students' prior knowledge, the mandated reading program, and the state social studies and science standards.

DISCUSSION AND IMPLICATIONS: TURNING THE MIRROR ON OURSELVES

In this section, we present what we view to be some of the affordances of the preceding analysis and imagined re-mediation. First, however, it is important to acknowledge that this article does not focus on activity in the traditional sense. For one, we do not address in depth historicity, a critical component of CHAT, even though we see the potential value in framing investigations of student teaching in this way. CHAT, for example, might serve as a framework for exploring critical issues concerning the implementation and implications of TEPs' field components (e.g., the history of and potential for TEPs' exploitation of urban schools, students, and communities); this framing might also support analyses of the changing nature of cooperating teachers' work in urban high-needs schools, including shifting definitions of professional practice and attendant changes in expectations and demands (e.g., increased district pressure on teachers to demonstrate their "value-added" based on student-level standardized test scores and to implement mandated curricula with fidelity, alongside TEPs' requests to turn over their classrooms and yield instructional time to student teachers). Second, it is worth noting that our analysis centers on recounted activity—an approach that we recognize as distinct, given CHAT's emphasis on (actual) activity.

Nonetheless, we find great value in having used CHAT to unpack Cristina's account because of the tensions and contradictions to which it draws our attention, the complex relationships it illuminates, and the paths forward that it suggests. Looking at student teaching through an activity system lens, for example, prompts and supports us to set clearer learning goals about what student teachers *ought* to learn. Using this lens helps us notice and understand when and why particular goals are not being met, and it guides our thinking about how to re-mediate (e.g., through coursework, particular assignments, university supervision) so that goals can be attained and/or reconfigured. In this sense, we find ourselves better poised to make student teaching a meaningful guided experience, rather than an exercise in independent practice. We also find ourselves better poised, programmatically, to cultivate greater resonance between courses and field placements by considering how learning goals are advanced (or not) and re-mediated (or not) across TEP components, particularly in the face of the ecological conditions present in many field placements.

Given these cultural and contextual conditions, which an activity system lens renders more visible, we can begin to ask ourselves a number of questions—questions that are different and, we think, more productive than those we might have posed in the past. Whereas we might have previously asked questions such as: What types of cooperating teachers can best prepare our students to navigate these contexts? Should we seek cooperating teachers who use mandated curricula, as will likely be expected of our graduates? and Should we secure placements with teachers who are adapting and resisting mandated curricula in favor of more robust literacy instruction? a CHAT perspective alternatively compels us to ask questions about the organization and potential reorganization of student teacher learning in relation to whatever classroom context they find themselves in, questions such as: Given the range of possible/likely language arts approaches employed by cooperating teachers in "low-performing" schools largely comprising ELs, how can we, as a TEP, best mediate PST learning to design and deliver robust language arts instruction? What kind of supervision would best support student teachers whose cooperating teachers follow the mandated curriculum with fidelity? How might supervision differ for student teachers whose cooperating teachers reject the curriculum, yet offer little transparency about the language arts instruction they deliver? and How can we align coursework in such a way that it scaffolds PSTs to navigate this political and instructional terrain? In other words, conceiving of student teaching as an activity system requires that we think of student teaching in contextually sensitive ways, set clearer learning goals, and remediate in relation to them so that PSTs will be able to do the same for the students they serve. Certainly, at a basic level, we owe it to PSTs to provide models of what it looks like to set clear learning goals, account for the complexities of context and culture, and re-mediate accordingly.

MAKING LEARNING THE OBJECT . . . BUT *WHAT* LEARNING AND *HOW* AND *WHERE*?

When we began this exercise, we were relatively convinced that, in the name of coherence, the re-mediation of student teachers' learning ought to occur in relation to the TEP's overarching goal or object. We also assumed, as many TEPs do, that student teaching should serve as an opportunity for PSTs to "put theory into practice." Ironically, we now find ourselves wondering about the implied directionality of those goals—pushing TEP learnings into schools as laboratories for practice—and wondering what burdens student teaching can reasonably shoulder, especially given the tensions, contradictions, and discoordinations discussed earlier.

For example, as we contemplated how we might support Cristina to analyze and adapt the mandated curriculum in relation to TEP goals, we were reminded of the complexity inherent to robust curricular analysis and adaptation, and that even the most experienced teachers tend not to do this type of work during the demanding teaching day. Most teachers we know do this "heavy lifting" away from the classroom, when they have the time and energy to think hard about how to make curricula more responsive to students' needs. This realization suggests that although PSTs might begin to reflect (with field supervisors and cooperating teachers) on the tensions at play in their student teaching placements, it might be more appropriate to expose PSTs to, and engage them in, curricular analysis and adaptation in a different-though ideally linked-TEP course or courses (e.g., a literacy methods course in which PSTs draw on learning theory to analyze mandated language arts programs). By reorganizing goals and structures, even in fairly "simple" ways that redistribute tasks across settings, teacher educators might better provide student teachers with space and guidance to do this work well. Drawing again on CHAT, we can imagine looking across multiple activity systems-representing specific TEP components like student teaching or a literacy methods course, and representing the TEP as a whole-to understand the degree to which the goals of any one activity system either support or undermine the goals of the other, as well as to see how the tools, community members, and division of labor across activity systems might also support or undermine the attainment of these (nested) goals.

MAKING THE CONNECTION BETWEEN IDEOLOGICAL CLARITY AND PEDAGOGICAL CLARITY

In addition to highlighting the overall need for potential reorganization across TEPs' constituent activity systems, unpacking Cristina's account also brings attention to a particularly critical and problematic aspect of our PSTs' learning-namely, the degree to which PSTs develop ideological clarity about teaching historically marginalized youth and develop pedagogical clarity grounded in that ideological clarity. That this ideology-pedagogy connection proved troublesome for Cristina signals that it is likely problematic for many other teacher candidates, especially those who do not come to teacher education with Cristina's well-developed critiques of deficit and assimilationist ideologies, critical assessments of schools' role in perpetuating inequality, and/or commitment to serve students, especially ELs, in academically rigorous and culturally responsive ways. In fact, one could reasonably argue that Cristina's experimentation during student teaching reflected her effort to avoid what Bartolomé and Trueba (2000) described as "blindly following lock step methodologies and promulgating unexamined beliefs and attitudes that often compound the difficulties faced by immigrant and U.S.-born lowstatus minority students in school" (p. 279). Cristina's account reflected her tendency to craft innovative instructional experiences that recognized and honored students' cultural, linguistic, and experiential knowledge—one of the TEP's espoused goals. Yet it also revealed her struggle to design academically rigorous and culturally responsive, not just culturally relevant, instructional experiences-in other words, experiences that recognized and honored, but also responded to, students' cultural, linguistic, and experiential knowledge and *leveraged* that knowledge in the service of rigorous learning. This is particularly problematic because although cultural recognition and relevance are crucial preconditions for learning, without ambitious and inspired pedagogies, they alone will not ensure intended learning, even if they ensure classroom ecologies that preserve students' linguistic, cultural, and spiritual personhood.

As a result, what we consider most promising about curriculum development projects like the one described earlier is their potential to provide pivot points around which teacher educators can mediate both PSTs' development of ideological clarity and their learning about what to do *with* that ideological clarity—how to ground pedagogy in it and allow pedagogy to spring from it. Such projects generate opportunities for teacher educators to help PSTs move ideological clarity from the realm of the abstract to the realm of the concrete by tethering it more explicitly to teaching practice. They likewise offer opportunities for teacher educators to simultaneously support the development of political clarity and skill, which PSTs may need upon employment, particularly in urban high-needs schools, where research suggests they may be called on by local administrators and others to explain curricular adaptations in clear and politically palatable terms (e.g., Stillman, 2011). Finally, such projects shift the directionality of TEP goals by encouraging PSTs both to "put theory into practice" and to "bring practice into theory"; in other words, they invite PSTs to put TEP learnings into practice during student teaching, while also bringing placement practices and artifacts into other TEP settings, where teacher educators can (a) scaffold PSTs' critical analysis of methods that might otherwise be "fetishized" (Bartolomé, 1994) and (b) bring the moral and ethical dimensions of teaching into conversation with PSTs' technical and material concerns by asking "What content, against what, for whom, and against whom?" (Bartolomé & Trueba, 2000, p. 290) and "What to do about it?"

MAKING COOPERATING TEACHERS PART OF THE TEP COMMUNITY

One of the core concerns that emerged as we hypothesized about the remediation of Cristina's learning in relation to her TEP's stated goal was that her cooperating teacher was not involved in the TEP goal development process. Cristina's interview suggests that some of her cooperating teachers' values and practices cohered with TEP goals; however, her interview reveals her sense that her cooperating teachers were mostly unaware of TEP goals, and her accounts of cooperating teacher practice offer little confounding evidence, thereby suggesting that it would be imprudent, inappropriate, and unfair to expect cooperating teachers to skillfully re-mediate in relation to those goals. As a number of researchers have argued (Beck & Kosnik, 2000; Bullough & Draper, 2004; Stanulis & Russell, 2000), student teachers are likely to profit most when cooperating teachers and TEP faculty (including field supervisors) collaboratively define learning goals and work together to meet them, and also when TEPs support cooperating teachers to develop their capacities as teacher educators who are equipped both to model effective instruction and to mediate and re-mediate student teachers' development (Borko & Mayfield, 1995; Feiman-Nemser & Buchmann, 1987).

Our previous research, as well as our re-imagining of Cristina's mural project, suggests to us that now more than ever university-based teacher educators must work with cooperating teachers to co-construct contextually specific responses to policy mandates and to the dynamic social, cultural, historical, political, and economic realities that inform students' understandings of the world. Although a CHAT framing discourages us from assuming that cooperating teachers and university-based teacher educators would share one or a even set of truly "common" objects, we can imagine co-constructing goals that are both common enough and specific enough to serve as what Engeström (1999) would refer to as the "horizons" toward which variously positioned community members (e.g., cooperating teachers, field supervisors, and course instructors) could orient themselves and re-mediate learning accordingly.

MAKING PRACTICE TEACHING MORE VISIBLE TO TEACHER EDUCATORS

Our analysis also raises questions about how, in light of limited resources, we might make the intensive work of student teaching, and in particular, accessing student teachers' developing practice, more manageable. As we have suggested elsewhere (Anderson & Stillman, 2010, 2011), approaches such as placing student teachers in pairs or groups might alleviate some of the time and resource demands associated with visiting and re-mediating in relation to so many placement classrooms and might also help us to fully capitalize on the capacities of cooperating teachers who have been open to working on the kind of collaborative goal-setting efforts described earlier. Likewise, we maintain that the development of new technologies that can make practice more transparent-for example, video portfolios, multimedia journals, artifact archives, and linked online discussion forums-hold promise as a means of supporting the work we have described in this manuscript, without necessarily requiring more resources. If student teachers were required regularly to collect classroom artifacts and videotape aspects of their developing practice, for example, teacher educators might then be able to engage with them in reflection that would be both educative for student teachers (e.g., helping them to identify clearer learning goals for their students, and supporting them in analyzing their actual interactions with students in light of policy pressures and other contextual factors) and for those teacher educators responsible for supporting PSTs' development (e.g., providing insight about the contextual features of a given placement, offering detailed information about PSTs' developing practice in context, and presenting examples of practice that could be explored with individual PSTs and/or revisited with a group of PSTs during class discussion).

MAKING LEARNING AND ITS RE-MEDIATION THE OBJECT . . . OF RESEARCH

Using CHAT as a theoretical lens necessarily makes learning and the contexts within which it occurs the focus of investigation. Given the findings of various literature reviews (Clift & Brady, 2005; Guyton & McIntyre, 1990; Hollins & Guzman, 2005; McIntyre, Byrd, & Foxx, 1996; Stillman & Anderson, 2009), this alone represents enormous potential for addressing important knowledge gaps, namely, questions about what PSTs learn from field experiences in urban high-needs schools, how they learned (or what led to their learning), whether teacher educators' re-mediation was connected to explicit learning goals, and whether PST learning and teacher educator re-mediation made sense given the specific cultural and contextual factors at play. Because CHAT additionally emphasizes dynamic notions of culture and context, we are hopeful that this lens might support more careful and critical accounts of learning—student teachers' learning and students' learning. This, in turn, might equip us as teacher educators and researchers to recognize and better navigate the challenges of the contemporary policy context, to avoid oversimplifying urban schools and the students they serve, and to ensure that our PSTs' learning needs are met so that they may meet the needs of their own students.

Notes

1. Among other things, courses emphasized sociocultural perspectives on learning (e.g., Lave & Wenger, 1991; Moll, 1990; Vygotsky, 1978) and explored theories and practices pertaining to cultural and linguistic diversity (e.g., Delpit, 1995; Valenzuela, 1999), language acquisition (e.g., Cummins, 2000; Valdez, 2001), multicultural education (e.g., Banks & Banks, 2003; Nieto, 2004) and critical pedagogy (e.g., Freire, 1970; Sleeter & McLaren, 1995).

2. For an extensive discussion of CHAT, see Cole and Engeström, 1997. For a discussion of CHAT's use and applicability in education research and praxis specifically, see Roth and Lee, 2007.

3. For the sake of clarity and concision, from this point forward, we often use the term tension (or tensions) to encompass to the various tensions, discoordinations, and contradictions we identify and discuss.

4. For more than a decade, numerous propositions related to immigrants and language use have appeared on California's ballots. Proposition 187, which passed in 1994 only to be determined unconstitutional several years later, attempted to prevent undocumented immigrants from receiving any health or public educational services. In 1996, Californians overwhelmingly voted for Proposition 209, eradicating affirmative action programs from public schools, colleges, and universities as well as other state agencies and state-sponsored organizations. Proposition 227, also known as the English for the Children Initiative, was voted into law in June 1998 and virtually eliminated the use of any language other than English for instructional purposes.

5. Tensions and contradictions identified here span four levels articulated by CHAT scholars (Cole & Engeström, 1993; Roth & Lee, 2007). At the primary level are contradictions internal to one entity—or point on the triangle—of the activity system, as reflected, for example, in the differing norms/rules for participation put forth by Cristina's cooperating teacher during "typical" classroom interaction and by Cristina during the mural project. Secondary contradictions, on the other hand, exist between entities (e.g., the difference between Cristina's goal of making instruction responsive to students and the district's rules emphasizing adherence to a mandated curriculum and pacing calendar). Tertiary contradictions, meanwhile, exist between "the object (motive) of the dominant and the object of a more culturally advanced form of the activity" (e.g., the difference

between the mandated reading program's object that students learn about camouflage exclusively from texts about unfamiliar animals and plants, and one that takes into account students' prior knowledge to make learning more relevant and enduring). Finally, the fourth level of contradiction exists between "the central activity and one of its neighboring activities" (e.g., between activity central to Cristina's student teaching placement and activity central to her TEP; Roth & Lee, p. 203). Although we acknowledge the value of this typology for analytic purposes, our aim here is to explore tensions and contradictions in ways that would be of greatest familiarity, accessibility, and utility to those working in teacher education; in this sense, we argue that full use of the typology would not necessarily clarify and could very well confound.

6. Notably, the same held true for the cooperating teacher in Cristina's first placement; there was nothing in Cristina's interview to suggest that she really understood what Cristina's TEP expected her to learn and/or saw herself as responsible for strategically scaffolding Cristina's learning in relation to those expectations.

7. Such connections potentially take on special relevance given that California has, for example, contributed more casualties than any other state to the "global war" on terror waged in Afghanistan and Iraq (Lebling, Jean-Louis, & Kirsch, 2011), where Latinos have been found at greatest risk for death in combat among American troops (Preston & Buzell, 2006) and where more than 4,269 service members have been naturalized as U.S. citizens since September 11, 2001 (US Citizenship and Immigration Seravices, 2011).

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