

Critically Reflective Thinking in Urban Teacher Education: A Comparative Case Study of Two Participants' Experiences as Content Area Teachers

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Abstract

As teacher educators, we explored the impact of a range of teaching approaches to encourage the development of critically reflective thinking (CRT) in teacher candidates. Our study, the second in a series of three investigations, examined differences in two preservice secondary teachers' responses to CRT as part of a teacher licensure program. We discuss the influence of content area conventions and views on curriculum when preservice teachers are exposed to tools that promote CRT. Our study includes data analyses of the experiences of preservice teachers' work in urban student-teaching classrooms, along with the university coursework in a teacher preparation program.

Our research questions examine the perspectives of two preservice teachers and address the following: On completion of a year-long teacher preparation program focused on encouraging CRT, what are the differences between two preservice teachers in their critically reflective thinking as evidenced by their reflections on teaching? In what ways do the perspectives differ between two content area teachers? And after a first year of teaching, what are these same teachers' CRT perspectives? Our study is designed to produce usable knowledge—that is, findings that other teacher educators should consider in the design and implementation of field-based experiences and curriculum development for preservice teachers working with diverse student populations.

Theoretical Framework

Students' success in school hinges in part on the teachers' views of children's language, race, gender, and socioeconomic status (Comber & Simpson, 2001). These differences may, for teachers newly faced with a diverse group of students, evoke notions of deficit or deficiency (Milner, 2008). If teachers adopt deficit views of students' cultures and languages, they strive to "fix" students they see as the "problem," rather than the curriculum, society, or school policies that result in segregated classrooms and exclusion from success in school (Banks, 2002; Hollins & Guzman, 2005; Sleeter & Grant, 1999). Likewise, deficit thinking adopts a "blame the victim" stance that can prevent students in urban contexts from reaching their full potential, as teachers may not adequately challenge students of diversity (Milner, 2008; 2010). In this study, CRT is explored to examine the impact of pedagogical and field-based practices that challenge deficit thinking, and to question assumptions.

While CRT typically prompts examinations of how teachers reflect on question identification and their understandings for problem solving, researchers have conceptualized CRT in a variety of ways (Loughran, 2002; Rodgers, 2002; Shandomo, 2010). Similar to what some researchers call “critical reflection,” CRT involves problem identification or framing, reflection on the basis of that identification (perhaps historical, social, or cultural in nature), and action planning to address the perceived problem (Brookfield, 1995; Shandomo, 2010). The CRT process is complex in nature, requiring introspection about how one’s beliefs, assumptions, and experiences influence perceptions of self and the social world (Shandomo, 2010).

Many preservice teachers enter their education programs with unexamined beliefs and assumptions of students, as well as problematic conceptions of the role of schools in society; yet it is imperative that educators develop stances that allow them to view “problems” from multiple perspectives and actively question assumptions, routines, practices, and standing explanations that are taken for granted (Carrington & Selva, 2010; Loughran, 2002). That is, teacher educators must help preservice teachers identify why a problem exists and examine the factors that have influenced its identification.

Like problem framing, seeking solutions requires a reflective process from educators that extends beyond strategy implementation. Educators must consider the factors that influence why problems occur, examine why problems are identified as significant, and develop strategies for responding that reflect an open-mindedness that is informed both by other educators and theories of practice (Dewey, 1933). The intensity and mindfulness of reflective thinking extends beyond problem solving in terms of depth and focus (Dewey, 1933), requiring what Larrivee (2008) suggests is a complete paradigm shift from “viewing problems as needing to be dealt with to seeing them as opportunities for self-reflection and the emergence of new possibilities” (p. 101).

Van Manen (1977) defined critical reflection as using criteria of justice and equity to consider the political, moral, and ethical consequences of teaching practice. Larrivee (2008) similarly suggests that critical reflection is an opportunity for teachers to “reflect on the moral and ethical implications and consequences of their classroom practices” (p. 90), a process that requires examination of how one’s personal and professional belief systems might impact students and their learning

For teacher educators, efforts intended to promote critically reflective practice have been limited in terms of the impact on teachers’ thinking. For example, case analyses and discussions, reflective journaling, and action research provide tools for staging reflective thought (Carrington & Selva, 2010; Gore & Zeichner, 1991; cf. Harrington, Quinn-Leering, & Hodson, 1996; Leland, Harste, & Youssef, 1997; cf. Moje & Wade, 1997; Nolan, 2008; Risko, Roskos, & Vukelich, 1999; Wade, Fauske, & Thompson, 2008). However, findings have indicated that the degree to which reflective thinking takes place by teachers is often limited.

Like others, we assumed a combination of approaches to teaching critically reflective thinking in connection with field experiences would provide support for the development of CRT and teaching practices. We hoped adopting a contextual approach would enable our preservice teachers to engage in CRT in meaningful ways by connecting coursework and fieldwork (Shandomo, 2010). Specifically, we included opportunities for problem-framing activities, critical analyses of literature through in-person and online discussions using scenario prompts, and investigations into real-world teaching experiences coupled with action research projects.

Teacher Development and CRT

The implementation of CRT and the manifestations of practice within teacher education programs is not a simple effort infused with fool-proof strategies or tools. An historical review of curricular and field-based trends in teacher education illustrates how attention to how crucial reflection on topics such as diversity and multiculturalism have developed in nuanced ways over time, reflecting changes in content and course-related experiences (Castro, 2010). While these developmental dimensions of program changes document the evolution of depth in program delivery, focus, and intent, the outcomes for preservice teachers in their daily practices have varied considerably.

In his article on analyses of documented research on approaches to increasing preservice teachers' understandings of cultural diversity in teacher education during the past 30 years, Castro delineates the success with which programs have addressed student teachers' engagement and understanding of cultural diversity. This in-depth review of previous research challenges teacher educators to consider how various program-based pedagogies, curricula, and field experience move teacher thinking beyond more superficial understandings of diversity.

While an increased awareness of the complexity of multicultural understandings have been fostered among preservice teachers through a range of efforts, the results for most preservice teachers have been rather narrow (Castro, 2010). Although iterations in course- and field-based experiences that included direct work within communities, personal reflections, and examinations of beliefs and backgrounds have been infused within teacher education programs over time, the impact has not been significant. More substantive change has occurred, however, within programs that tap into what Castro describes as a greater awareness of and acceptance of diverse communities. He cites these changes in groups he identifies as among the "millennial" generation of students. He reports that while this group tends to be more interactive and engaged within diverse communities, deep understandings of diversity are still quite limited. In addition to maintaining relatively simplistic views of diversity, analyses of these research findings indicate a lack of critical consciousness regarding fundamental beliefs about diversity.

Some might argue that more superficial beliefs and teaching practices among preservice teachers are simply a feature of teacher development (Dreyfus & Dreyfus, 1986; Zeichner, 1992). That is, teacher development takes place along a continuum where the early stages of learning to teach are often based upon gaining general knowledge about teachers' work (Ball & Cohen, 1999; Putnam & Borko, 2000; Rosenholtz, 1989). With time, researchers argue, the "sensemaking" (Coburn, 2001; 2004) takes place among educators based upon interactions between the knowledge about teaching and the knowledge gained through experience. A give-and-take between these levels of knowledge is refined over time into the praxis within a teacher's repertoire.

In addition, to influence of general growth in learning to teach, others argue that the conventions of content areas may also lead teachers to adopt teaching practices and beliefs about student learning that align with more commonplace practices in their content areas regarding the ways in which curriculum and instruction are typically approached, ultimately socializing teacher behaviors in K-12 classrooms (Gossman, 2008; Neumann, Parry, & Becher, 2002).

Our study is designed to foster a greater understanding of the impact of critical reflective teaching for two content area teachers, with an examination of similarities and differences regarding their perspectives on teaching as it relates to diversity. We address direct efforts using critical reflective

teaching designed to move beliefs and attitudes to the more advanced developmental levels cited by Castro (2010).

The literature is replete with arguments for practices in teacher education that examine issues of power, privilege, and multicultural awareness (Sleeter, 2001; Thompson, 2003). Current research advances teacher educators' understandings of diversity through examinations of content area preparation that explore social justice and equity in ways that are explicit and defined (Adair, 2008). Through emphases that embed critically reflective thinking and practice within content area discussions, our study examines the underpinnings of content area curriculum and traditional student-teacher roles and their impact on teachers' daily activities. Without deliberate efforts to broaden our understanding of the influence of content area conventions on curricular and instructional decision making, efforts to address equity and access through CRT become generic, superficial, and predictably formulaic. We explore how content area preparation informs CRT, including teachers' receptivity and their ability to implement CRT, highlighting the influence of content area curriculum and instruction on CRT thinking.

Research Methods

We used case studies (Merriam, 1998; Stake, 1994) employing both qualitative and quantitative data to study the professional development of two teacher candidates enrolled in a Masters of Arts (MAT) secondary teacher licensure program within an urban teacher education program.

The case studies focused on two preservice teachers in their third and fourth semesters of a four-semester program. During this time, project participants completed three courses, including curriculum studies, assessment, instruction, and classroom management. These courses accompanied field observations and a semester-long student-teaching experience. Following this coursework, study participants completed student teaching in an urban high school rich in cultural and ethnic diversity. A 20-year partnership in teacher preparation with this specific school provided a school-based setting for our preservice teachers in ways that aligned with our program goals.

Data sources focused on candidates' work samples, including a content biography, study of school cultures in urban schools, a classroom diversity study, a classroom management plan, a unit plan, action research projects, teaching reflections, course surveys, and personal teaching texts (Bullough & Gitlin, 2001). We collected data on curriculum themes related to access and equity for a range of urban learners. Additionally, a graduate assistant conducted interviews with each participant about their preservice experiences at the end of their licensure year and during their first year of teaching. Interview questions and prompts included general reactions to their course and field experiences (e.g., "Tell me about your licensure year"), as well as discussions on perceptions of diversity, reactions to course-specific assignments, and learning opportunities. The interview questions also asked participants to consider how their third semester coursework and experiences with critical reflective practices influenced their teaching practices and approaches to reflection within the context of action research projects. The graduate assistant conducted, recorded, and transcribed these interviews prior to our analysis.

Because of the numerous data sources, we constructed a complex matrix to facilitate data analysis. Independently, research team members read the interview transcripts and work samples through a process of constant comparison (Glaser & Strauss, 1967), identifying initial categories for coding (Miles & Huberman, 1994). We used the codes to create an improved matrix, which was helpful

in revealing similarities and differences between the two focal candidates, as well as in keeping data organized and manageable.

Participants

We selected two project participants, Donna and Tanya (pseudonyms), because their stories represent divergent views on how they reflect and act on learner differences in teaching in a diverse urban high school. We selected the differing content area expertise to investigate the influence of field of study on teaching attitudes and beliefs (Stodolsky, 1988).

As part of her licensure requirements, Donna, a White woman in her late twenties, student taught Spanish. In addition to her Spanish degree and coursework affiliated with her teaching license, Donna completed a minor in painting and drawing, and she self-identified as an artist. She openly shared with others her drawing and painting competencies.

Tanya, a White woman in her early twenties, completed her student teaching in a chemistry classroom. Tanya self-identified as being from a lower middle-class suburb, and, in high school, as having excelled in math and science and competed as an athlete.

Participants were interviewed immediately after their year-long licensure program and during the winter of their first semester of professional teaching. Donna, after her urban high school student-teaching experience, spent her first year teaching Spanish at a suburban junior high school. Tanya accepted a high school chemistry teaching position in a predominately White, upper-middle class community. Initial interviews investigated views about teaching for diversity in the following areas: planning, instruction, classroom management, motivation, assessment, and working with English language learners. Follow-up interviews addressed these same elements, allowing the researcher team to explore changes in perspective over time and to investigate the intersection of thinking and practice within their first-year teaching context.

Findings and Discussion

Our data reveal significant differences between our two teacher candidates. While the structures for CRT were in place, examinations and analyses unearthed interesting findings. Specifically, our data revealed critical differences in the impact of content area curriculum, conventional pedagogy, and the composition of students in classrooms on preservice teachers' critically reflective thinking and in their overall ability to examine practice.

Analysis of the qualitative data revealed that Donna and Tanya both entered their teacher education program with a shared commitment to developing as educators. Their approaches to teaching resulted from their individual life experiences, including family background, school-related experiences, and social encounters. Both relied heavily on their previous experiences with diversity and used their backgrounds to interpret and make sense of their student-teaching experience. Donna's examinations of the Spanish language and culture and her awareness of diversity through art provided a foundation that informed her reflections on learner diversity within her student-teaching classroom setting.

Tanya often referred to both her background and her content area as lacking in diversity and "mostly White" (Tanya, Interview 1, p. 2). While not always sure of how she would diversify the curriculum in her teaching, she consistently voiced an awareness of the potential to broaden its scope. She expressed an awareness of potential linkages between cultures and individuals that would allow

her students to think about science where "...not just the old dead white guys do science. There are other people out there" (Tanya, Interview 1, p. 4).

CRT: More than Thinking Hard

Based upon our data, participants' conceptions of critically reflective thinking centered on "bringing everything together" (Tanya, Interview 1, p. 9) and "broadening definitions" (Donna, Interview 1, p. 9) of how knowledge is defined and valued. Both reported that CRT resulted in changes in their practice. Tanya noted that the tools of critically reflective practice affiliated with her action research project (i.e., problem identification, reflection, examination of influences, and action planning), changing her understanding of student differences, which she described as "a good thing" (Tanya, Interview 1, p. 9). Tanya reported that her diversity study, completed as part of her coursework, pushed her to examine the perspectives of a range of learners within classrooms through her examination of how language and culture impact curriculum and pedagogy. She commented positively that a general understanding of learner needs increased her awareness of the importance of relevant curriculum as a way of creating a "sense of unity" among diverse students (Tanya, Interview 1, p. 9). For Tanya, her perceptions of diversity were clarified through strategy identification designed to make her a better teacher. Her action research project provided a technical format for CRT, using a formulaic approach to addressing the curriculum based upon learner needs. Following general skill assessment, Tanya created a series of layered curriculum assignments based upon typical ability levels for her students.

Donna found that CRT allows teachers to build on student strengths and "come at it [teaching] from a different perspective"... one that moves away from a deficit view of diversity (Donna, Interview 1, p. 10). For Donna, the skills affiliated with CRT practices, such as action research, provided an invitation for greater depth in her understanding of the factors that impact student learning and well-being in classrooms. While Donna, like Tanya, recognized the technical elements of her teaching within the context of her action research study, she also considered broader issues related to the type of classroom culture she hoped to create. Her use of "resident experts" utilized the native language skills of students in her classes as a way of engaging all students in her lessons and valuing them as individuals.

CRT: Not a Panacea

Looking at the data in more depth revealed two major themes. First, critically reflective thinking is closely tied to the way preservice teachers view their content area, their students, and the pedagogy within their classrooms. Tanya viewed hers as a subject in very stark terms where there "isn't much multicultural education in it naturally" (Tanya, Interview 2, p. 2). She described her students as "about as white as you can get" and felt that "everyone's basically the same ability" (Tanya, Interview 2, p. 4, p. 1). She believed chemistry is a course that attracts this particular type of student and "scares" others away (Tanya, Interview 1, p. 9). She viewed diversity and multicultural education as social issues that are not essential to her academic courses. Because Tanya viewed her content area and her students as relatively generic in need and ability, she disassociated from broader issues of diversity that related to language and cultures. When asked about her preparation program and its focus on issues of language and cultural diversity, she reported that the emphases prepared her to "deal with stuff like this," and clarified that her experiences with learner differences centered around "discipline problems" and

“students who aren’t turning in work” (Tanya, Interview 2, p. 5). For Tanya, learner diversity was manifest in poor academic skills and related classroom management difficulties.

Tanya’s views of learner diversity were quite narrow and were limited to the context of her classes. That is, the academic struggles of her students defined her understanding of learner differences and tended to override the concepts of diversity discussed in her coursework and related field experiences. Further, the demographic composition of her chemistry student-teaching placement did not reflect the greater ethnic diversity within her school and further reinforced her notion of cultural and ethnic diversity as the “stuff” she experienced in coursework but was absent in her day-to-day teaching experiences. Discrepancies between the demographic composition of her classes and that of the wider school community never appeared to capture Tanya’s attention. When asked about the lack of diversity among her students, Tanya reiterated the accepted homogeneity of typical chemistry classrooms and neglected to think critically about the lack of access for some students.

While Tanya failed to define diversity in terms of race or language, she did distinguish students in terms of achievement, often dichotomizing “general” students and “honors” students, equating general students with “problems” (Tanya, Interview 2, p. 8). She referenced negatively English language learners (pg. 10) and equated “good” with limited linguistic, cultural, or ethnic diversity (p. 9). Tanya’s stance echoed Milner’s (2005) suggestions that teachers who hold these views may “water down” the curriculum or lower their expectations for particular learners because they believe the students are incapable of success in that area of study or in academically rigorous courses in general (p. 771).

Easter, Shultz, Neyhart, and Reck (1999) discuss the dichotomy of diversity—on one side, teachers view diversity as a problem, and on the other, diversity as a resource. These authors suggest that teachers who view diversity as a problem teach as if their classroom is a homogeneous body that shares the teacher’s cultural characteristics. These teachers believe students from backgrounds other than the teacher’s are incapable of success, and they “abdicate any responsibility” for helping students achieve academically (p. 207). Tanya showed evidence of this type of thinking, and her action research project further substantiated her attention to clear-cut problem solving through generalized strategy implementation.

The students Tanya did identify as diverse included only a student with Attention Deficit Hyperactive Disorder (ADHD), a student with an undefined communication problem, and a foreign exchange student. When asked about these students individually, she explained that the student with the communication problem dropped out of her class, and the student with ADHD “manages it on his own” (Tanya, Interview 2, p. 3). The foreign exchange student required no help because she “doesn’t actually show up to class” (p. 3).

Tanya failed to demonstrate evidence of critically reflective depth in her thinking and beliefs regarding students of diversity or in her content area. When asked about reflection, she admitted that “it’s not something I think about very often” and that she “never did a lot of it” (Interview 1, p. 6, 5). When she did reflect, Tanya focused on the “small, everyday things” rather than broader social, political, and moral aspects of teaching (Tanya, Online discussion post #3).

Part of CRT is questioning the status quo and examining the social context of education, which Tanya did not do. She viewed her students not as a diverse group of learners, but rather as a homogeneous group with the same interests, ability levels, academic expectations, and experiences with math and science. And although she mentioned that “with chemistry you don’t get as wide a range” of students (Tanya, Interview 1, p. 1), she did not question the reasons behind the homogeneity

of her classes in comparison to the larger school population. When asked why she thought the population of students in chemistry classrooms are not more diverse, Tanya commented that it “might not be normal for someone from their social class or their ethnic class” to take higher-level science classes. She made this statement as a matter of fact, without critically reflecting on the issues and related implications.

Tanya’s perspective on diversity and reflection, combined with her view of her content area as a static “old, dead, White guy” curriculum where diversity and multiculturalism are not factors (in-class comment, fall 2007) allowed her to center reflection on the technical aspects of her teaching rather than sociopolitical aspects. Her concerns overwhelmingly centered on a traditional view of content area knowledge and on fairly narrowly defined ability levels of students. She addressed perceived problems globally and attacked them through generic instructional and curricular adaptations rather than engaging in critical reflection that might consider the needs of individual students. She felt that she didn’t have the time to “really focus on reflecting on everything” and stated that thinking about the next day’s curriculum was “about the extent” of her reflection (Tanya, Interview 2, p. 5).

At times Tanya’s thinking reflected the potential to look at her students more individually, in terms of their diversity. When commenting on the makeup of some of the chemistry classes at her school, Tanya noted:

The thing that kind of disturbed me is that you don’t get much [sic] minorities in the honors classes, or in the AP classes. There was [sic] two out of thirteen in the AP chemistry class. But I wasn’t teaching—it was my mentor teacher. So I think you need to be able to encourage the people who may not normally go into an AP class, who may just be in your general class—you see that they have the right skills and the right abilities to do it, to encourage them to try something that might be a little bit harder, might not be normal for someone from their social class or their ethnic class. (Interview 2, p. 1)

While Tanya’s observation of the overwhelmingly homogenous composition of the honors and AP classes suggested Tanya’s potential to view classrooms through a more critical lens, the depth of her reflection was rather superficial and perfunctory. That is, she saw students’ ability to achieve as generally within their capabilities (with the help of teachers), and she failed to address connections to the systems of school or to the work of teachers as contributing to limited access to certain kinds of classrooms. Further, she did not show any evidence of CRT beyond a superficial examination of lesson planning and assessment, and she failed to admit potential flaws in her views with regard to students, teaching, curriculum, and learning within the context of an advanced science course.

What is not clear from this study is whether Tanya lacked the ability to think broadly about the impact of language and culture of her students and their personal connections to curriculum, or whether a fixed view of curriculum bound Tanya’s decision making when attempting to support her students. When asked about responding to her students, Tanya commented,

... I set it up so that it was more of a multiple intelligences approach. I had something that addressed every single intelligence, and they got to make models and posters. They got to work in groups; they got to act things out; or dance or write songs, just whatever. And they also could just make their own experiments—whatever worked for them. And I’d print off my PowerPoint notes

for the students so they wouldn't have to try to write it all down. I tried to find any terms that I knew they might have a hard time understanding or they might not be familiar with. (Interview 1, p. 1)

Tanya's reflections did imply potential for an awareness of the need to respond to students' varied needs, though the emphasis still remained pedagogically neutral.

In contrast to Tanya, Donna, a foreign language teacher, saw a connection between her content area and her orientation toward multicultural education and student diversity. She recognized and spoke about diversity in terms of race, class, gender, language, culture, and ability. Unlike her student-teaching setting (i.e., ethnically and culturally diverse) during Donna's first year of teaching, she was employed at a middle school that she estimated to be approximately 90% White and where "most students are upper middle class." She recognized that her students were not a homogeneous group with the same needs, interests, goals, and experiences even though she made the point that there is a "majority of one race and one SES" (Donna, Interview 2, p. 1). She noticed that the culture of the school was such that the "kids that are a little poorer sort of are marginalized and kind of ignored," and she tried to turn that around in her own classroom, emphasizing that "every student matters" (p. 2). She kept individual students in mind when she developed "personalized" curriculum and incorporated classroom structures that allowed success for students of all backgrounds (p. 4). She made efforts to value and incorporate the ethnic and cultural diversity her students bring to the class, allowing them "power in the classroom" (Donna, Interview 2, p. 3). Thus, she saw diversity as a resource to her curriculum rather than a problem (Easter et al., 1999).

Data collected from Donna demonstrated critically reflective thinking that clearly connected her content area and her views of diversity. Donna saw her content area as a platform for making connections between language, culture, experience, and worldview. She strived to help her students learn from other cultures and "see themselves as experiencing the world" (Donna, Interview 2, p. 4). More importantly, Donna engaged in regular, systematic reflective thinking and writing, and all of it as an interactive, cyclical process that "will pay for itself tenfold" (p. 10). For example, within the context of her curriculum, Donna examined diversity through the integration of literature, culture, and language. While it may appear that Spanish language instruction would naturally lend itself to this approach to curriculum, we cannot assume that this is the case. Many language teachers focus solely on the mechanics of language instruction. Donna's critical reflection on issues that affected her students, both those in and outside of the majority helped her become an agent of change. She consciously worked to disrupt the normalization and dominant culture that she believed is perpetuated by schools, making her own classroom a place where power hierarchies are deconstructed and students are seen as "experts" with a voice in their learning process.

In addition to Donna's awareness of her students' impact on her curriculum and instructional choices, as well as how these choices impacted students, Donna also considered the broader impact of school contexts on her work. When reflecting on her school site,

[At my school] there were a lot of different cultures and everything. So there were English language learning needs.... And they [the school] wanted to embrace them, but it didn't ever come into the mainstream of the curriculum. From what I saw, it was just—it was always on the sidelines. Always "We accept you" instead of ... so it was always the us/them division. "This is our school, and we're

welcoming you to our school. Of course, that's better than 'we're not welcoming you,' but for the kids who were always the ones who were the accepted rather than the acceptors, they never seemed to feel that was their school. (Donna, Interview 2, p. 2)

Donna's analyses spoke to the broader culture within her school that enabled systemic barriers to access to remain intact. While there were clear efforts that seemingly embraced the diversity within her school, the message was clear, you are here, on our turf. Welcome! For Donna, this ethos had an impact on her students' lives, in ways that extended beyond the impact of her course curriculum and instructional practices.

Donna's perceptions of the nuanced knowledge of schools and school systems were clearly impacted by her preservice experiences and how her instructors viewed and modeled reflective practices. When asked to comment on the impact of her course experiences, Donna reported:

I think it [reflection] was huge for her [course instructor] too. She always threw out this quote that was Dewey—that you just act and reflect and act again with revised action based on your reflection. And you could tell that she always reflected. You can just sort of tell people that do and people that don't. (Interview 2, p. 7)

I: How can you tell?

It's almost like, people ... are a little bit more sensitive ... you can tell that they know that they're not perfect. And you can tell that they are not trying to be perfect, but they are just trying to do better and better and better. Because she always talked about how teaching wasn't about just memorizing the right techniques, but about being able to react in the moment, in the right way. Which if you don't know what the moments are, if you're just planning on learning a technique or something, it's not going to work. So, in order to be able to react in the moment, you have to be aware, and I think that awareness comes from reflecting on past experiences. (Interview 2, p. 8)

Donna's experiences and observations as part of her preservice teaching modeled a depth of reflection that moved beyond more superficial technical skill implementation. Her commitment to examinations of institutional practices, using the tools as of part of her preservice experience, were somewhat difficult pursuits during her first year of teaching:

It is very hard, because that is how the students have been, all of their years of schooling, thinking it's been like that ... where they've dominated the whole class ... the ones that have the power, or their parents have the power in society. (Interview 2, p. 5)

Her action research project during student teaching provided an opportunity to explore microcultures within her classroom using native language speakers as content experts. Critically reflective thinking helped her recognize the power structures that existed among students in her school and work to disrupt those in her own classroom. In addition, she reported that engaging in CRT as a practicing teacher helped her understand her own role in the perpetuation of dominance and power in the past, and she subsequently made efforts "to go against it as much as I can, try to offset it" in the

way she approached classroom management, curriculum, assessment, and interactions with students (Donna, Interview 2, p. 5).

Making CRT a Priority for Novices

Our analysis of Donna and Tanya revealed a second theme. CRT among preservice teachers may be linked to their levels of professional maturation and exposure to diverse perspectives. As we prepare teachers for diverse school contexts, it may be necessary to consider how the immediacy of technical skill development can be coupled with more in-depth reflection on practice while embedding “diversity” within those school experiences. Specifically, Milner (2005) suggests that preservice teachers who have had few interactions and experiences with diverse individuals and contexts may not yet be “in spaces, developmentally” to engage in CRT and may not show significant change in beliefs and practices over the course of a teacher education program (p. 777). Likewise, Garmon (2004) studied factors that influence a prospective teacher’s “readiness (or lack thereof) to learn from their intercultural and educational experiences” (p. 211). Courses in diversity and multicultural education and fieldwork in diverse contexts are widely regarded as important in teacher preparation (e.g., Milner, 2005; Milner, Flowers, Moore, Moore, & Flowers, 2003; Taylor & Sobel, 2001; Weisman & Garza, 2002). However, these experiences may be insufficient if students are not “ready” to receive the instruction and experiences presented to them. Further, readiness must be cultivated through exposure to the manifestations of diverse topics as they relate to the specific curriculum and pedagogy within daily classroom settings. Our study of Donna and Tanya supports these suggestions and may account for the vast difference in the way they reflect on diversity in their teaching.

Tanya, despite coursework and field placements that specifically focused on diversity and promoted critically reflective thinking, continued to hold deficit views of students and very narrow definitions of learners’ abilities, interests, and backgrounds. Her beliefs stemmed mainly from her own educational experiences in which she was a successful student in math and science. These unexamined beliefs influenced the expectations she had of students and the way she approached her curriculum. In addition, based upon her experiences as a student of chemistry, multicultural education was not inherently part of her experiences with science curricula, but rather something she would have to add to her course to “promote tolerance” and give students a “different perspective” (Tanya, Interview 2, p. 1). However, when asked about specific ways she teaches for diverse learners, she stated that she did not “have time to sit there and go through all that kind of stuff” (p. 4). Students were expected to have “basically the same ability” and the same “basic understanding” of math and science to take her class, making accommodations and individualized instruction unnecessary (Interview 2, p. 2, 3). For Tanya, there was a narrow band through which she defined diversity. That is, her ability and willingness to imagine how diversity might manifest itself beyond a very prescriptive formula were challenging, at best, resulting in limited interest or investment in the principles and practices of CRT.

The knowledge and experiences Tanya gained in her teacher education program were only vaguely helpful, something she saw as a “good idea” (Interview 1, p. 2). The process of problem identification was certainly a “tool” in her repertoire. However, her ability to examine the factors related to her problem framing was shallow and predictable. When interviewed during her first year teaching, she had difficulty remembering anything specific about her coursework. She felt much of it had too little focus on her content area and that it was too generalized and irrelevant for her specifically. She viewed student teaching and affiliated coursework related to diversity as “just good practice” that “makes me a

better teacher anyway” (Interview 1, p. 5), an attitude countered by Ladson-Billings (1995) who insists “just good teaching” is neither as simple as it sounds nor an effective way to educate in urban contexts. Despite her assertions, when asked specifically for examples, Tanya stated that it [coursework in diversity] helped her “deal with” problems (Interview 1, p. 5). For Tanya, diversity is a component of teaching that requires, when necessary, a formulaic process of plugging in strategies for problem solving. These solutions are generally predictable and generic in focus. While Tanya’s practice is not devoid of problem framing and identification, it lacks an awareness of the big picture and the critique necessary for reflective and in-depth decision making.

Tanya’s comments, both as a teacher education student and later as a practicing teacher, showed that a program centered on diversity and critical reflection cannot guarantee a teacher will emerge with transformed, or even recalled, beliefs and practices. For Tanya, unexplored beliefs resulted in “perpetuating antiquated and ineffectual teaching practices” (Tanya, Interview 2, p. 1) despite our best efforts to foster the habits of critical reflection and provide meaningful experiences with diversity (Easter et al., 1999, p. 209). Perhaps Tanya was simply not developmentally ready to benefit from the opportunities her education program afforded. That is, her student-teaching experience, while positioned within the context of an urban school, did not provide in-depth opportunities to tease out how her practices moved beyond pro forma strategy implementation. Further, perhaps as suggested by Castro (2010), her preparation did not reach the levels of exposure to and support for CRT that might have allowed her to see the related curricular and instructional applications—issues that require further study.

Donna, on the other hand, spoke often of the impact of her knowledge of Spanish culture, coursework, and field-based assignments in diverse contexts on her current views. Her past experiences with diversity, as part of her teacher education program, provided a broader view of her students and an appreciation for what all students bring to the classroom as individuals. A broader worldview allowed for greater depth and informed her CRT practices as a student teacher and in her first year of teaching. She preferred settings that were heterogeneous, commenting somewhat apprehensively that her first year teaching position in a white, upper-middle-class school “sort of bugs me” (Interview 2, p. 13). She admits, “I would have rather worked with kids that are more like me,” self-identifying as from a lower, marginalized socioeconomic population (p. 13). Donna’s admission reflects a preference to working in settings that mirror her experiences as a student. She sees the power differential among students from varied backgrounds and works to rectify her own involvement in it—“I was part of, I am part of this culture too. So, I go against it as much as I can ... try to offset it” (Interview 2, p. 5).

For Tanya, her experiences with “diversity” are her membership in a working class community and, while she is cognizant of the general need to respond to learners, her methods are generalized and generally prescriptive. Specifically, her action research project included the integration of a layered curriculum that was intended to diversify assignment options for a range of students based upon general ability. For the most part, the assignments varied only in terms of required reading and writing. While clearly an attempt to be responsive, her project was developed largely prior to working with her students directly and was limited in its attention to the specific needs of students in her classroom. Rather, her efforts were what she considered “just good teaching.”

Upon entering her teacher education program, Donna already had a range of experiences with diversity in life, in school, and in her prior experiences as an artist. Yet, she still showed change over

the course of the program. Milner (2005) suggests that change in prospective teachers' beliefs and practices are linked explicitly to their interactions in and experiences with diverse contexts in their teacher education programs. Milner (2005) reports specified experience allows students the opportunity to "visualize the 'big picture' of diversity" as it applies to their particular content, experiences, and students (p. 782). Students who had prior experiences with diversity, either as learners or as teachers, "got more out of our discussions in class, the assignments, and readily recognized the importance of studying such issues" (p. 782). Donna was cognizant of clear connections between her perspectives as she gained experience working with diverse communities. As a result, her practice changed. In her teacher education coursework, Donna recognized the emphasis on diversity and critical reflection. Donna reported that her coursework "didn't have specific meaning for me until now" (Donna, Interview 2, p. 5, 6). Likewise, she only later appreciated the field component of her program—"it was so valuable, and I didn't realize it" (p. 7). At first, she knew only that "they emphasized it [critically reflective thinking], so I knew it was important for some reason, but it didn't have as much meaning as it does now.... And they really can't tell you the reason; you have to discover it for yourself" (p. 10). She came to understand experience and CRT as a cyclical process. She would experience something in her coursework or fieldwork, write about it, "and then I see everything sort of relates" (p. 9). For Donna, coursework and fieldwork made evident the connections between critically reflective practice and its applications in her daily work. While the connections were not always apparent within her time in the program, she was later able to see applied connections. For Tanya, the CRT was limited to a generic view of lesson planning and assessment that constituted a "one size fits all" view of the students in her classes. Tanya rarely reflected on individual needs that failed to meet her preconceived understanding of learners struggling with the chemistry curriculum. Our study failed to address, however, Tanya and Donna's long-term practice. Further study in this area is essential as beginning teachers are absorbed into the contexts of contemporary school communities.

Implications

Findings from this study underscore teacher preparation where future teachers possess practices that are responsive to the diversity of students in today's classrooms. Our findings speak to the work of others who have emphasized that to be critical, results must transform curricula and practice or alter the status quo (cf. Brookfield, 1995; Larrivee, 2008). Where past research speaks to the need to advance basic problem solving in ways that go beyond questions of immediacy to consider why something works and for whom (Zeichner & Liston, 1996), our study highlights the need for an awareness of the embedded impact of content area conventions on how teachers reflect, for what reasons, and how the consequences of this reflective thinking impacts teaching and learning. Being critical, thus, "has the power to change the pedagogical process from knowledge transmission to knowledge transformation" (Leonardo, 2004).

To begin, our work suggests the value of examinations of critically reflective practices embedded within contexts that provide opportunities for problem framing and solution identification in linguistically and culturally diverse student communities (Shandomo, 2010). For teacher education, our findings inform practices that guide students through experiences designed to foster culturally responsive teaching practices over time. One implication of our findings is that experiences with diversity should permeate all courses so that it is not viewed as additive, and so that time is not wasted convincing students of its importance (Milner, 2005; Sleeter, 2001, 2008). Ideally, this level of infusion

allows us to help teacher candidates develop pedagogical approaches that respect and validate future students.

A second implication of our work is the need for exposure to diversity that moves from sweeping reviews of best practices that lack depth and application to content-specific curriculum (Castro, 2010). Instead, we argue for examinations of curriculum deliberately coupled with the problem framing of CRT. Adair's (2008) work emphasizes the need for deliberate discussions of equity and justice within content area preparation in secondary teacher education programs. Mensah's (2009) work focuses on preservice teachers confronting their assumptions and biases within urban science classrooms. Through well-planned examinations of equity and social justice, preservice teachers are exposed to discussions that consciously illuminate and focus attention on the realities of critically reflective thinking and practices embedded within broad-based content area discussions. Not only do these practices illustrate embedded connections between content areas and social justice, but in-depth critical reflective examinations increase opportunities to explore curriculum through culturally responsive lenses.

Our findings support those of Milner (2005), who found that prospective teachers often "separated diversity from the subject matter they were teaching" (p. 781). Only when students were explicitly prompted to articulate their pedagogy and curriculum as related to diversity did they make those connections. Like Milner (2005), we argue that more time and effort be spent to infuse content area investigations as part of teacher education programs focused within diverse, urban school contexts. And like Mensah (2009), we believe that teacher education courses must utilize "strategies that 'force' preservice teachers to change taken-for-granted notions" about their particular content areas (p. 1058).

Thoughtful problem framing and conscious reflection are essential components of teacher preparation, using a critically reflective stance. We caution, however, not to assume exposure to pedagogical practices and curriculum examinations are generic in focus, and that there are prescribed ways of teaching teachers regardless of the content areas in which they teach.

We would be remiss in our conclusions to assume that critically reflective thinking and practice are either enhanced or inhibited by traditional conventions of curriculum and pedagogy across content areas. While the histories of some content areas may provide more obvious opportunities for exposure to issues of critically reflective thinking through examinations of equity and social justice, this stance may not be valued as necessary or fully understood in other areas. That is, all teacher educators must assume ownership in their receptivity to and awareness of issues of social justice and critically reflective practices. Placing the responsibility of CRT on one group, such as generalists, only assigns some teacher educators the responsibility, while absolving others. Without concerted efforts among all teacher educators to examine beliefs and practices, our commitments to issues of social justice are superficial at best (Sensoy & DiAngelo, 2009). As our data imply, there are clear "cultures" within academic disciplines that define the roles of learners, teachers, and curriculum.

Programs must actively link school-based experiences and curriculum studies specifically devoted to examinations of equity, social justice, and multicultural awareness (Carrington & Selva, 2008; Castro, 2010). Without concerted efforts to unearth and make public the manifestations of these goals within daily practice, teacher education becomes uneven and, in some cases, stagnant in approaches that are generic and all-encompassing. The stories of two preservice teachers illustrate where inroads are possible and where additional work is needed.

We are hopeful that our findings challenge teacher educators to move their students' thinking beyond what Tanya described as seemingly inert "old, dead, White guy" curricula where sociopolitical factors are viewed as detached and irrelevant. Without conversations in teacher education that cross through barriers that often exist when content areas are entrenched, the impact of teacher licensure coursework remains in silos of isolation. Perhaps the more challenging task is to invite opportunities that extend discussions with content area specialists in ways that allow for new perspectives, taking on how the cultures of content areas impact CRT.

Our data present a rich qualitative view of the participants' thinking as it developed and changed, both within the context of their teacher licensure program and into their first year teaching. Our findings offer a more complete picture of the views of teacher candidates as they grapple with the reality of their classroom contexts while simultaneously developing their teacher identities, mature in their content knowledge, and learn (or not) to incorporate critical reflection as both a habit of mind and an artful and necessary teaching practice.

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