EQUITY

Resisting Student Labeling in this Era of Testing

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N THIS ARTICLE, WE EXAMINE perspectives that prospective elementary school teachers (PTs) noticed their mentor teachers held with regards to classifying students by their achievement or behavior. Unfortunately, many PTs noticed deficit mathematical discourse in their classrooms and expressed concern about how such discourse could lead students to develop unhealthy and often times negative views of themselves. Attaching labels such as "Unsat" to students who achieve a score of unsatisfactory on a standardized test promotes exclusionary learning environments that negatively impact the identity of groups of students as well as individuals (Kitchen, Anderson Ridder, & Bolz, 2016). We will explore labels and forms of student labeling that PTs experienced as part of their school placements. We argue for the need to move away from deficit discourse to intentionally work to establish asset-based mathematical discourse in one's classroom. Such discourse supports students to develop a positive mathematical identity.

Deficit narratives and labels such as "culturally deprived," "disadvantaged" and "at-risk" have historically been assigned to P-12 students by teachers and researchers in the United States. These narratives and labels perpetuate viewing students, particularly students of color and low-income students ("underserved" students) from deficit perspectives (Carey, 2014). Both academic and non-academic labels have been found to have lasting damage to how underserved student populations perceive themselves (Brendtro & Brokenleg, 2001; Duckor & Perlstein, 2014; Gergen & Dixon-Román, 2014). Kitchen et al. (2016) found that students at a low-income, diverse public high school were routinely labeled based upon their test performance, that these labels tended to persist, and that instructional decisions were made based upon these labels. The practice of attaching a label to students based upon their performance on a

high-stakes test led some students to be constructed by teachers as less capable in mathematics than others. Categorizing students by their achievement on standardized tests can also "reinforce feelings of marginalization that already impact the achievement of many students of color and others ill-served in schools" (Duckor & Perlstein, 2014, p. 27).

A student's mathematical identity is how the student thinks about her/himself in relation to mathematics (Martin, 2000). The notion of mathematical identity considers issues related to "affect," such as students' persistence and interest in mathematics and their motivation to engage in learning mathematics (Cobb, Gresalfi, & Hodge, 2009). Recent research in mathematics education has expanded the notion of mathematical identity to include the study of the relationship between learning and the larger learning environment of the classroom (Boaler, 2002; Boaler & Greeno, 2015; Cobb, Gresalfi, & Hodge, 2009; Cobb & Hodge, 2007; Martin, 2000; Nasir, 2002; Nasir & Hand, 2008). Martin (2007) shows the important role that mathematics participation has on students' mathematical identities. He describes the experiences of students of color, as they are discouraged from pursuing high-level mathematics.

In a study we briefly describe here, we examined what prospective elementary school teachers noticed about how their mentor teachers used labels and forms of labeling to discuss their students in their school placement. We focused in particular on how labeling was used with regards to underserved students. We used a sociopolitical lens in this investigation. Such a lens affords an examination of structural inequities and injustices in education in general, as well as specific classroom-level arrangements that may limit students' opportunities to learn at high levels (Kitchen, 2003). A sociopolitical lens places the social, cultural, and political context of learning in the vanguard when examining phenomena such as how tracking affects learning mathematics (e.g., Boaler, 2011; Zevenbergen, 2005), whether underserved students have access to a standards-based mathematics curriculum (e.g., DiME, 2007; Kitchen, et al., 2016), and how race and class influence mathematics instruction (e.g., Martin, 2013; Gutiérrez, 2008). In this orientation, educational policies and practices are considered from the perspective that differential access to educational opportunities are rooted in differences based on race and class (Battey, 2013; Martin, 2009).

The 25 participants in the study were all students in an elementary mathematics methods course at the University of Denver in the fall of 2016. To conduct our research, we facilitated a 45-minute conversation with the PTs during a class meeting that took place on October 21, 2016. The conversation was part of a lesson that focused on exploring issues related to student diversity and inclusion, equity, and multiculturalism. The lead author was the instructor of the course and the second two authors served as teaching assistants in the class. We asked three broad questions about the PTs' experiences with respect to how their mentor teachers were attaching labels to their students in general, but specifically during mathematics lessons. During the whole class discussion that took place, responding to a particular question was strictly voluntary and PTs were not penalized in any way for not responding to questions posed. All names were kept confidential. Throughout the discussion, participants also highlighted assetbased labels as well. We recorded and transcribed the conversation then coded the transcription for both significant statements and broader themes (Creswell, 2013). The following themes emerged following our compilation of data into three categories: deficit labels, shifting blame, and students' mathematical identities. We briefly discuss each of these themes and give examples to illustrate each of them. We will then share some ideas related to teachers moving away from deficit discourse to intentionally work to establish asset-based mathematical discourse in their classroom.

Deficit Labels, Shifting Blame, and Students' Mathematical Identities

Deficit Labels: The prospective teachers identified deficit-oriented labels that many of their mentor

teachers used routinely when discussing students. The labels highlighted in our discussion concerned school readiness, language, and classroom behaviors. One PT described how veteran teachers used the label "immature." "...They are just immature. You know, they can't do the math." Other participants noted how her mentor teacher talked about some students "needing another year" or were "maladaptive". The students given these labels were often students of color. For example, the students labeled as "maladaptive" were two African American students and a Hispanic student:

...It's a behavioral thing. It pains me that two of them are black and one is Hispanic. And there are other kids that are bad in the class too, but those three... math is the second to the last period of the day, by the time that we get to math, they're in the Dean's office, the Vice Principal's office, doing their worksheets. And so they're never in there for math by the end of the day.

The PTs identified other student labels as well such as "lazy," "unfocused," or "need medication." These labels were commonly attached to students who are multilingual. A number of the PTs discussed how English language learners (ELLs) were being mislabeled as "lower level," "needing an IEP" or just "lazy." PTs argued that these students were not necessarily "lower level" students; they were just challenged by language barriers. The PTs communicated their frustrations about their mentor teachers' misunderstandings regarding multilingual students' abilities. One told us, "So in my school, it's also largely Hispanic. I have noticed that for a lot of the lower kids, it's more of a language barrier than an actual math problem."

Shifting Blame. Another major theme that emerged was that PTs believed their mentor teachers often placed the blame for poor student achievement directly on their students. PTs were frustrated that blame had been placed on students, while teachers were reticent to take responsibility for their students' academic challenges. In general, there was agreement among PTs that student blaming and labeling led to lowering the academic expectations for certain groups of students. They also believed that the use of deficit language and labeling of students had become normalized, which led to students' perceptions of themselves in mathematics being impacted negatively. PTs highlighted problems associated with their mentor teachers placing blame on students rather than examining how they were teaching mathematics. In referring to the labels placed on students, one PT said, "while they [labels] can be useful to get students the help they need, a lot of the times they're [teachers] shifting responsibility that they need to be taking on themselves." Another PT echoed this idea, stating, "He [the teacher] puts it back on the students again. Instead of, 'Well, maybe I didn't teach this right.' It's always 'they weren't paying attention to my teaching and that's why they didn't do well.""

Students' Mathematical Identities. PTs described the negative impact of labeling on students' mathematical identities. For example, one PT described a female student's perception of her mathematical abilities:

There's this one girl in my classroom who struggles with math. And she's always in my teacher's small group. I was working with her one day and I was like, 'You are smart, you can do this.' She goes, 'No, I'm not.' I'm like, 'yes, you are.' She just didn't believe that she was smart and she could do it. It was really sad to see.

Another PT described her experiences working with students who were placed in groups according to ability, impacting students' mathematical identities, "[Students were asking] 'Are we the highest group?' Because they just couldn't handle being anything but the highest group."

In summary, PTs described for us how their mentor teachers commonly expressed deficit narratives and attached pejorative labels to their students in the classrooms where they had been placed. Deficit perspectives held by mentor teachers led to student blaming and lowering of expectations, which many PTs were convinced negatively impacted students' mathematical identities.

Working to Establish Asset-Based Mathematical Discourse

Though student labeling was common, PTs also provided examples of mentor teachers who refused to attach degrading labels to their students. One PT told us about the high expectations that her mentor teacher held for her students. When the mentor teacher's students struggled in mathematics, she refused to attach labels to them and frequently ques-

tioned whether the curriculum was well designed to support the learning of her students. Another PT explained how her mentor teacher engaged in a practice in her classroom in which the focus had shifted away from ability grouping and toward allowing students to choose who to work with: "So, she's splitting them up by like different things, so that they can be with people that gravitate towards the same type of learning style as them. And what she's finding is that kids will gravitate [toward who] they like to learn from and not necessarily the level that they're at." This PT believed that this practice held promise for promoting student agency and sending the message to students that they, like the teacher, had ideas about how best to group students to enhance learning.

During our class conversation, it became clear to us that some PTs were starting to question and combat deficit perspectives and student labeling. These PTs were also beginning to critically reflect on educational practices that had become normalized for many of their mentor teachers. Many of the PTs made comments about how their mentor teachers generally failed to teach in ways that supported their students' mathematical learning. Yackel and Cobb (1996) provide insights into what an elementary school classroom can look like in which teachers support students making sense of mathematics and work to create a community of learners. In such a classroom, teachers position every student, not just some students, as mathematically competent (Turner, Celedón-Pattichis, & Marshall, 2008). Doing so entails viewing every student as having mathematical ideas to contribute in a community of learners (Staples, 2007). Students' mathematical ideas can be incorporated in instruction as the teacher makes a point to include and build on students' ideas to help students make meaning of concepts and experience mathematical success (Kitchen, 2015). Such an approach contrasts with deficit approaches in which the perception is that students, oftentimes underserved students, have little to contribute (Moschkovich, 2012). To combat such viewpoints, teachers can work to create learning environments in which they intentionally build on the mathematical assets that their students bring to learning mathematics (e.g., students' prior mathematical knowledge), resist engaging in deficit-based student labeling, and work to foster positive mathematical identities

among their students.

In this era of testing, labeling students based upon their performance on a high-stakes test has become normalized (Kitchen, Anderson Ridder, & Bolz, 2016). Such labeling leads to deficit perspectives in which students are viewed as less capable in mathematics than others. More research is needed that explores how teachers can work to combat such deficit-oriented student labeling and how to move toward asset-based perspectives and discourse. Student labeling in an era of testing highlights the political nature of teaching mathematics (Gutiérrez, 2013; Kitchen, 2005). From this perspective, teachers reproduce notions of who can and who cannot do mathematics. Deficit narratives and student labeling are central aspects of the historic legacy of underserved students having less access to a challenging education in mathematics than more privileged students (Kitchen, et al., 2016; Kitchen & Berk, 2016). Understanding and ultimately engaging in work intended to confront this legacy suggests the need for teachers to take a political stance in their work to resist attaching disparaging labels to any learner.

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