

The Struggles of Incorporating Equity into Practice in a University Mathematics Methods Course

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This paper examines the challenges that one White teacher educator faced when incorporating an extensive equity agenda in her mathematics methods course. Theories of whiteness and silence were used to uncover these challenges. Four themes were identified; a need to maintain a safe place in class, her own sense of preparedness to discuss equity issues, student resistance to equity conversation, and her comfort level in discussing certain equity topics over others. Two frameworks are provided to support teacher educators' work toward equity. The paper closes with a working definition of equity and implications for mathematics education teacher preparation programs.

One of the important tasks of a teacher educator in mathematics education is to prepare preservice teachers to teach mathematics. The primary goals of a mathematics methods course are imparting the mathematical content needed for specific grade levels and demonstrating to preservice teachers that all students, no matter what their background, can effectively learn mathematics. Educational equity—associated with race, socio-economic status (SES), gender, and special needs status of students—are issues that are expected to be addressed in teacher preparation (Grant & Secada, 1990; Martin, 1995). However, the failure to address any of these may reflect a lack of preparedness or comfort by some teacher educators, in the same way that some mathematics topics get pushed to the side by some teachers. Although some teacher educators have an awareness of equity and believe that it is important for their preservice teachers to embrace, not all are able to attend to it as extensively as they would like when teaching their courses. This dilemma becomes even more pronounced when teacher educators and preservice teachers are predominantly White.

In predominantly White teacher preparation programs, there may be ambivalence by some White teacher educators to interrogate equity or diversity related topics with their preservice teachers, particularly when they feel inadequately prepared to address issues of race and social class. The burdens of whiteness also stand in the way of creating meaningful discussions about sensitive topics when this racial

identity is left unexamined (Hyttén & Warren, 2003; Gillespie et al., 2002; Solomon, et al., 2005). Confronting these issues becomes even more of a challenge in mathematics education preparation programs where there is little room to explicitly address highly sensitive socio-political topics due to the demand to cover mathematical content. Despite these challenges, the critical task remains to prepare preservice teachers for the realities of schools and the increasing diversity of classrooms. Improving the preparedness of preservice teachers to teach mathematics and address equity and diversity begins with teacher educators' ability to attend to these issues first for themselves (Weissglass, 1998).

This study is part of a larger research project which examined the role of equity in mathematics teacher educators' practices. The research project attempted to reveal the challenges teacher educators faced when infusing various aspects of equity across three methods courses taught in one university mathematics education department. The examined courses included one each at the elementary, middle, and secondary school levels. The primary focus of this case study was to better understand the challenges that one White teacher educator faced when incorporating an extensive equity agenda in her mathematics methods course. The research questions that guided the study were the following:

1. What are the personal struggles and challenges that a teacher educator encounters when setting agendas for equity as she plans for her methods course?
2. What are the main equity concerns for a teacher educator in a mathematics methods course? (i.e., the range of equity issues that she feels comfortable talking about, such as issues of gender, race, socioeconomic status, or special needs.)

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3. To what extent is a teacher educator addressing equity issues explicitly versus implicitly in method courses with preservice teachers?

The findings of this research study may have important implications in mathematics education preparation programs as there is an increasing demand to work toward an agenda for educational equity throughout the field.

In the section that follows, I initiate my discussion with what I call the necessary attention to equity in teacher preparation. I give a brief historical overview of this attention to equity in mathematics education by showing how various standards documents and scholars in the field have called for and defined equity. I conclude this section arguing that the call for equity in teacher preparation is insufficient. Teacher educators must be better suited to work with preservice teachers to understand how inequities persist by first interrogating these issues for themselves. The methods section is then presented, with an introduction to the participant and the methods course that she taught, along with method of data collection and the approach to data analysis. I then present the results section, the struggle of infusing equity, which includes four themes: (a) her need to maintain a safe place in class, (b) her own sense of preparedness to discuss equity issues, (c) student resistance to equity conversation, and (d) her comfort level in discussing certain equity topics over others. The discussion section then follows which explores two frameworks: theories of whiteness and silence, and working towards educational change. I finally close the article with the conclusion section which provides a working definition of equity and implications for mathematics education teacher preparation programs.

Necessary Attention to Equity in Teacher Preparation

It has been 2-3 decades since notions of equity first appeared in the mathematics education literature. Although equity was not defined explicitly in their work at the time, Reyes and Stanic's (1988) landmark piece was the cornerstone for looking at broader issues that affected differential achievement among diverse student populations. Their paper called for research that addressed societal influences, school mathematics curriculum, teacher and student attitudes, achievement-related behavior, and classroom processes. Reyes and Stanic urged mathematics educators to investigate these causal factors contributing to achievement differences. Subsequently, the work in mathematics education that followed suggested an equity agenda

that focused on student outcomes for all students "with equality of opportunity and equality of treatment as prerequisites" (Meyer, 1989, p. 19). In *The Curriculum and Evaluation Standards for School Mathematics* published by the National Council of Teacher of Mathematics (NCTM) (1989), authors of the document offered a vision for creating mathematically literate students and setting standards in school mathematics. The 1989 *Standards* also carried very strong language about equity and insisted that as a matter of economic necessity, every student should have the opportunity to learn mathematics because if this was not achieved, we would "face the danger of creating an intellectual elite and a polarized society" (p. x). However, this document did not challenge the widely held belief that marginalized populations of students could not do mathematics.

A decade later, the authors of the 1989 *Standards* published the updated *Principles and Standards for School Mathematics* (NCTM, 2000) that put forth a more refined vision for achieving equity in mathematics education. This vision challenged a pervasive societal belief that only some students are capable of learning mathematics. To achieve this goal, the *Principles and Standards* required "raising expectations for students' learning, developing effective methods of supporting the learning of mathematics by all students, and providing students and teachers with the resources they need" (p. 12). Although *Standards'* writers explicitly state that to achieve this goal, "teachers also need to understand and confront their own beliefs and biases" (p. 13), there is not a framework in the document that suggests how this can be accomplished.

The National Board for Professional Teaching Standards (NBPTS, 2001) also published their version of a standards document that addressed equity for all areas of education. Although this document is not widely used by all teachers, those working toward becoming "accomplished teachers," particularly in mathematics, must attend to equity by "creat[ing] learning environments in which high expectations exist for all students" (p. 11). Furthermore, they state:

Accomplished mathematics teachers are dedicated to meeting the needs of an increasingly diverse student population. They confront issues of diversity proactively to promote academic and social equity. They actively and positively challenge sexist, racist, and other biased behaviors and stereotypical perspectives, including those directed toward various ethnic groups, regardless of the source. (p. 11)

The body of equity-related literature also emphasizes specific kinds of pedagogy and practice that teachers should exhibit in their classrooms. Educators have suggested that mathematics teachers use culturally relevant pedagogy (Gutstein et al., 1997; Ladson-Billings, 1995a; 1995b; Tate, 1995), in their instruction, utilizing students' cultural background when posing mathematically related tasks. As other forms of equitable instruction, some educators also advocate incorporating all students in mathematical discourse (White, 2003) and promoting social justice pedagogy in mathematics to help students become better informed about their day to day realities (Gutstein, 2003). As a result of these varied initiatives, what it means to work for and attend to equity has come to take on several meanings.

The multiplicity of meaning that equity has taken on can be seen in the writings of several mathematics education scholars. One definition that resonates with many mathematics educators and is used widely is given by Fennema and Meyer (1989), who describe equity as composed of three outlooks: equal opportunity to learn mathematics, equal educational treatment, and equal educational outcomes. As they explain it, students should have equal chances to learn mathematics, while their various backgrounds are valued, and this treatment should produce similar outcomes. Allexsaht-Snider & Hart (2001) offer a similar definition and explain the requirements for getting there. They write,

Our definition of equity begins with the premise that all students, regardless of race, ethnicity, class, gender, or language proficiency, will learn and use mathematics. A second premise is that all of the people who are involved with and interested in the education of children must become aware of the social, economic, and political contexts of schooling that can either hinder or facilitate mathematics learning for underrepresented students. Equity in mathematics education requires: (a) equitable distribution of resources to schools, students, and teachers, identifying it throughout the research process (b) equitable quality of instruction, and (c) equitable outcomes for students. (p. 93)

An NCTM Research Committee (2005), while examining the concept of equity, extended its definition and asserted that it encompassed "both the conditions of learning and as well as the outcomes" (p. 93). They describe the conditions of learning mathematics as follows:

Equitable distribution of material and human resources, intellectually challenging curricula, educational experience that build on students' cultures, languages, home experiences, and identities; and pedagogies that prepare student to engage in critical thought and democratic participation in society. (Lipman, as quoted by the NCTM Research Committee, p. 93)

It is reasonable to say that in mathematics education, equity has been reified as an important concept for all mathematics teachers toward which to work. Although there exist some research that offers ways that courses, curriculum, and pedagogy could be structured to serve the needs of all students in mathematics, the scope has been rather limited (Meyer, 1989). Much of the scholarship argues for a focus on equity in a mathematics education context, with a particular emphasis on why teachers need to be more equitable in their practice (Martin, 2003; Schoenfeld, 2002). But what is neglected in the literature is how teacher educators can begin to address sensitive equity issues themselves in practice. Michael Apple (1992) argues that while NCTM's *Curriculum and Evaluation Standards for School Mathematics* (1989) "explicitly point to how schools may now operate to produce inequalities," they fail to address "how one might prepare our future teachers to do this" (Apple, 1992, p. 418). In order for teachers to become critical thinkers about equity, they cannot simply just be exposed to these issues. "Rather," Apple claims, "such an awareness is built through concentrated efforts at a relational understanding of how gender, class, and race power actually work in our daily practices and in the institutional structures we now inhabit" (p. 418). Julian Weissglass (1998) also asserts the following:

Bias, prejudice, and discrimination are transmitted from one generation to the next and incorporated into our educational institutions in varied and complex ways. Curriculum, pedagogy, assessment, relationships, teachers' expectations and practices...have been and continue to be affected. (p. 99)

Kelly (2002) contends that "teaching equity will not only empower beginning teachers, it will also begin to offer more strength to the overall shift in the acceptance and understanding of societal equity issues" (p. 39). She also writes that "educational equity will likely not improve without education equality and this understanding of equality and equity should begin in preservice teacher preparation" (p. 39). This proposal is especially important in view of the changing demographics of our public schools.

Student populations throughout the country are more and more diverse, with a large proportion attending public schools that are majority Black or Latino. Given that public schools are becoming more racially mixed, preservice teachers need to be better prepared to teach students from a variety of backgrounds. The teacher workforce remains predominately White, middle-class, and female—approximately ninety percent (U.S. Department of Education, 1997). In many instances there is a disconnection between preservice teachers' vision of the students they imagine teaching and the students they will actually teach. Consequently, there is a cultural gap that continues to grow between students and their teachers (Sleeter, 2001).

In order to ensure that preservice teachers are equipped with the skills needed to begin teaching mathematics, equity issues should be explicitly addressed in preparation courses, in particular methods courses. As Weissglass (1998) argues, "Educators are an important force in helping many people overcome the effects of societal bias and discrimination" (p. 104). He also argues, "Race, class, and gender bias are serious issues facing U.S. society and education that are usually not discussed. Talking about them is necessary, not to lay blame, but to figure out better ways of educating our children" (p. 104). More importantly, I argue that because the face of the teacher workforce is predominantly White, middle class, and female, a teacher educator's personal and ongoing contestation with equity and related issues will better prepare them to infuse equity into their practice.

Method

This study emerged from my work as a graduate teaching assistant in a mathematics methods course for preservice elementary teachers. As I assisted the course, I learned about teaching preservice teachers, but also became very interested in the planning and decision making of the instructor. My study of her work, reflective discussions, and formal interviews began this investigation.

A Gaze In—Dr. Simms and the Methods Course

For the past 10 years, the participant of this study, Dr. Simms, has been a faculty member of the mathematics education department at a southeastern university. Her work and area of interest is children's mathematical knowledge. She has taught methods courses in the early childhood program quite some time. Although equity is not one of her self-proclaimed areas of expertise, she holds several leadership

positions in her community, attends equity workshops, and continuously engages with colleagues who are more trained in this area to gain new knowledge and insight. As a White female, these experiences have helped her become more sensitive to and wrestle with her own subjectivity¹ while thinking through issues of equity. She is highly respected in the mathematics education community by her colleagues, her faculty peers, and by the preservice teachers in her classes.

As you walk into the classroom before class begins, there is quite a bit of chatter among the preservice teachers. The classroom seats 35 people rather snugly. This methods course is the first of a two-semester fall-spring sequence. The class meets twice a week for 90 minutes each; the preservice teachers know each other fairly well since they are in the same cohort of the elementary education program. Before class begins, preservice teachers are usually in conversation about what happened in their previous class or just regular conversation about their day. According to autobiographies they wrote for the class, all 33 of the preservice teachers are middle-class females from suburban areas surrounding a large southeastern city. With the exception of two preservice teachers, all are White and about 19 or 20 years old. As for the exceptions, two preservice teachers are Latina, one of whom is older and married.

On the first day of class, Dr. Simms asked the preservice teachers to draw a picture of their conception of a mathematician—an exercise she uses to uncover people's perceptions of who is a creator of mathematics. After about 20 minutes of drawing and discussion in small groups, Dr. Simms asked some students to share their ideas with the class. Many students drew old White men with glasses, some drew themselves, and others drew one of their parents. Dr. Simms pointed out that only a handful of students drew women and that no one drew anyone who was non-White (i.e., Black, Latino, Asian, or other). This exercise was Dr. Simms's way of getting students to attend to their own perceptions of who they thought could or could not do mathematics. As the semester progressed, I noticed that in a few cases, Dr. Simms was willing to entertain some conversation on difficult topics in class. I thought that it would be appropriate to engage in additional discussion with Dr. Simms on how she thought about infusing equity in her methods courses. Furthermore, I also thought that it would be a fruitful area for investigation to determine the areas where tensions arose for her in this process. Thus arose the development of this research project.

Research Design

The interpretivist methodology that grounded my orientation to this study is phenomenology (Crotty, 1998). This theoretical perspective reflects my need to move aside and tell the story as best I can of the teacher educator that I studied. As Sadler asserts, “Phenomenology is an ‘attempt to recover a fresh perception of existence, one unprejudiced by acculturation’” (Sadler, quoted in Crotty, 1998, p. 80). Also, this epistemological perspective makes sense as a viable approach to the present case study because it “invites us to ‘set aside all previous habits of thought, see through and break down the mental barriers which these habits have set along the horizons of our thinking ... to learn to see what stands before our eyes’” (Husserl, quoted in Crotty, 1998, p. 80). Quoted in deMarrais (2004), Moustakas explains the goal he has in mind when conducting phenomenological inquiry. He argues that it

is to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general or universal meanings are derived, in other words the essences or structures of the experiences. (p. 57)

Because I sought to understand the participant’s attention to equity, case study methodology was also appropriate for this research. The unit of analysis for this case study was Dr. Simms and her perceptions of infusing equity into her methods course. Stake (1995) reminds us that the case study goal is to explore what specific cases will reveal, not primarily to understand all cases. Case study methodology coupled with phenomenology also served as a viable way of knowing that allowed me to disclose my own biases, bracket them off, and proceed with this work by keeping my subjectivity in check, constantly troubling the sense that my participant made out of her experiences.

Data Collection

Two interviews with Dr. Simms were audiotaped, one during the fall semester that class was in session, and the other as follow-up during the spring semester. These two interviews served as the main data source of the research study. During each interview, Dr. Simms was asked open-ended semi structured interview questions so that she could elaborate freely. The duration of the first interview was 90 minutes. As a form of member checking (Glesne, 1999), once the first interview was transcribed a copy was given the Dr. Simms to review. This served as way for initiating

a second interview, a follow-up that lasted approximately 45 minutes. Dr. Simms commented on her notion of equity, her understanding of white privilege, and tensions of teaching mathematically related and unrelated content to preservice teachers.

I also collected data from the fall semester methods course. This data consisted of four components: the course syllabus, the required course readings, the daily agenda, and my field notes. The course syllabus helped me to understand what the main objectives of Dr. Simms’s methods course were for each semester. Furthermore, it provided data that were instrumental in formulating interview questions about the course and how equity played a role in her planning of the course. The readings assigned to the preservice teachers gave me some insight into what Dr. Simms thought was important for preservice teachers to know and think about as it relates to children’s mathematical learning. Also, I wanted to know if the preservice teachers would be exposed to equity through the course readings. The daily course agenda that Dr. Simms provided gave me a way of knowing what the activities were on a day-by-day basis. I wanted to see whether equity would be part of the agendas or whether it would come up incidentally as the preservice teachers brought up issues. Furthermore, I wanted to see how Dr. Simms would handle equity talk. The agendas also provided insight and ideas for interview questions.

Preservice teachers in this cohort were required to have an off-campus experience with students at a local school for 8 weeks. As a result, I took field notes during the remaining 7 weeks for the 21 classes that met on campus, taking special care during those classes where equity issues were openly discussed.

Approach to Data Analysis

My primary focus was to understand the challenges faced by Dr. Simms as she thought about incorporating an equity agenda into her methods course, so my data analysis was multilayered. Glesne (1999) states that the notion of analysis “does not refer to a stage in the research process. Rather, it is a continuing process” (p. 84). With this in mind, I first went through each transcript and immersed myself back into the data set just to get a general understanding of what Dr. Simms stated in each interview. I also used this preliminary analysis to inform me on appropriate interview questions for the follow-up or second interview with Dr. Simms. I then used thematic analysis, an analytic inductive method (Bogdan & Biklen, 1992) to identify global categories. Eleven preliminary categories were identified in the

data set and were then coded. After several iterations of analysis each category was repeatedly grouped and regrouped until finally all collapsed into four central themes. The next section will demonstrate these themes and connect them to Dr. Simms' actions in the methods course.

Results—Struggles With Infusing Equity

Dr. Simms worked consciously and reflectively about infusing equity into the content of her elementary mathematics methods course. In our interview transcripts and classroom data, I identified four themes that spoke to the challenges Dr. Simms faced in incorporating an equity agenda into her methods course. They are: (a) her need to maintain a safe place in class, (b) her own sense of preparedness to discuss equity issues, (c) student resistance to equity conversation, and (d) her comfort level in discussing certain equity topics over others.

Maintaining a Safe Place

Throughout the interviews, Dr. Simms talked quite a bit about maintaining a safe place in her classroom. She was not certain whether a classroom setting was the appropriate place to deal with sensitive topics that had the potential to be emotionally charged. Although she addressed sensitive issues on occasion, she did not feel comfortable taking them very far. Dr. Simms said, "I feel like I have pretty good classroom management skills in general, but I am not sure if I am competent to manage emotions if students get heated with one another or somebody starts to cry. I am not particularly good at that kind of thing." Dr. Simms thought that a potential crisis might arise out of engaging in conversations about equity, and she did not feel confident in dealing with such a crisis.

Dr. Simms admitted that she did not directly challenge her students' beliefs as much as she would have liked. As far as equity was concerned, in her estimation the role of a methods course was to raise the preservice teachers' awareness of the differential levels of achievement of students from different subgroups, and then to overtly challenge their perceptions of why they thought this phenomenon existed. She also believed that a mathematics methods course was the place to help preservice teachers develop an "alternative set of beliefs," but that was not always easy. It was safe to challenge students' beliefs about mathematically related ideas such as what it means to do mathematics, but as for equity, she did not think that it was safe to explicitly address students' beliefs about race or poverty. Dr. Simms talked about the

difficulty she had in challenging students' beliefs about race and poverty and their perceptions of other groups of people. She said,

You know if they have negative views about Jewish people probably a lot of it...came from their families. And so I don't know how to deal with that kind of thing. It's much easier for me to confront their beliefs about mathematics. It is a publicly acknowledged thing that a lot of mathematics teaching that goes on out there is bad and some of them are willing to say, "Yeah, my seventh grade math teacher was horrible. She did this." But I think it is entirely another thing to realize that, "Gosh, I had this opinion of people who lived in the projects, and it's because every time we drove by them my mother would say lock your doors or whatever." I think it's sort of on a different level for them to confront [this] themselves.

Dr. Simms wanted her class to remain a safe place. By her estimation, the unpredictability of where emotions would go if a class discussion got too heavy was too much for her to handle:

I don't know if I have ever said this before, or thought this before. I think I am genuinely afraid of what would happen if one student says to another something hurtful [or] accuses them. Somebody says, "That's just racist; I can't believe you said that." I think that I'm genuinely afraid of what that would degenerate into in a classroom of people [who] are supposed to be professional colleagues.... I don't have the skills to handle something like that. So yeah on some level it is about keeping it a safe environment both for them and for me.

Finally, one of Dr. Simms's major concerns is what kind of activities can be utilized to facilitate equity conversations. She says, "I guess that goes back to my wanting it to be a safe place in that I want it to come out of an activity. I don't want it to be me with thirty of them staring at each other trying to talk about something that's uncomfortable." She strongly believes that preservice teachers can have a more meaningful experience in the classroom when tough issues are brought out of a task or activity, intentionally chosen to initiate or elicit interaction and honest dialogue.

Own Sense of Preparedness

Dr. Simms distinguished between two types of knowledge that she believes she possesses and feels comfortable sharing with her students—mathematical content knowledge and pedagogical content knowledge (PCK). Using either of these content knowledges and

discussing equity issues are very different in her mind. Much of this distinction has to do with her confidence as to where conversations about mathematical content will lead, whereas that same confidence does not hold true for equity. She argues, “Part of it I think is my own comfort level with [equity]. I don’t yet have, for lack of a better term, pedagogical content knowledge to...foresee where these conversations go, the way I do with other pedagogical issues.” So in some sense, while Dr. Simms has PCK to cover mathematical content, she does not have this same kind of PCK to talk about equity.

During one class, Dr. Simms introduced the concept of *sorting* to preservice teachers and discussed how this concept could be taught to children. Some of the preservice teachers asked whether it would be appropriate to let children sort themselves by hair color or gender. Dr. Simms then asked the class whether race would also be an appropriate way of sorting children, and a lively discussion took place. Simms is not afraid of this type of discussion. Because her prior experience teaching the course, she knows that such questions will come up. In the following two excerpts, Dr. Simms’s self-perceived mastery of mathematical content and lack of mastery when discussing equity issues in her methods course are juxtaposed. She starts off by saying,

[I’ve] taught these courses enough times [and] I’ve been with these students enough times that I could predict that the people-sorting thing is going to come up. I could predict which way that’s going to go, and...ninety percent of the time I can gauge how that’s going to go. Or calculators, I can gauge what their reaction is going to be to with and without a calculator [on a] test. I feel pretty comfortable about where that’s going.

She then goes on to state,

Equity stuff is still sort of a vast unknown in terms of how my students are going to react to it and what knowledge I have to bring to bear [on] the situation. So probably I hesitate from that standpoint. But I think I also hesitate from the standpoint that...these kinds of beliefs are so deeply personal and problematic for people when they start to realize, “Oh, maybe I do have some racist beliefs, or I have some beliefs about people who live in federally subsidized housing, or whatever.”

Dr. Simms then talked about her confidence level when dealing with these issues. She says,

I don’t have the same level of confidence and knowledge with that as I do with mathematics. I’ve

got a pretty [good] grasp of what kinds of readings and what kinds of activities will prompt [discussion], and what kinds of assignments will prompt [reflection], what sort of examination of their beliefs about mathematics teaching and learning and children. I don’t have that same repertoire with regard to equity, so I am still trying things out with that.

In these excerpts we see that Dr. Simms wrestles with three things: appropriate content, her comfort, and her confidence. Although she knows the mathematical content that is appropriate for a mathematics methods course, she does not always have the right content knowledge she feels is necessary for bringing out equity.

Student Resistance to Equity

Because of the intentional cohesive and longitudinal nature of the early childhood program of study at this university, many of the preservice teachers in Dr. Simms’s class are required to take a sequence of prescribed courses. Consequently, they have been exposed to multicultural education and to some issues related to equity and diversity, but not specifically in a mathematics education context. According to Dr. Simms, there may be some potential risk involved with this approach. Some students may get conflicting ideas about equity from different instructors. Moreover, there may also be some reluctance to engage in dialogue as a class depending on who the instructors are and how the instructors try to initiate conversations with students. Dr. Simms explains the danger in students’ perceived over-exposure to issues of equity:

Another struggle that I face is [that] I know, not from my prior experience but from talking to colleagues, that students at some level resist these discussions about equity. They don’t see it as particularly germane to what it is that they are here to learn, and they...feel like they are being beat over the head with it and eventually they just submit and say, “Yeah, yeah, yeah. Equity is important. This is wonderful. Rah, rah, rah!” And they learn how to tell you what you want to hear.

Dr. Simms believes that she could lose the students’ attention and interest if equity talk is not initiated correctly. She even argues that some instructors have been criticized by students who say that “equity is their thing” and that they are trying to make it their students’ things. Some have complained that other instructors have problems with “the whole race thing” and they’re trying to make it the students’ problem as well.

As a White female professor preparing mostly White female preservice teachers, Dr. Simms

understands the power in her position and what it affords her. Unlike non-White instructors who might bring racial issues to the fore with these preservice teachers, who in turn might resist them, Dr. Simms knows that it would probably be easy for her to raise such issues without students readily dismissing her. In some ways, however, she also feels that she is not entitled to discuss equity issues with these preservice teachers: "I am a product of White privilege. How does somebody who is a product of White privilege stand up with just book knowledge about equity issues? I don't know yet how to make that a meaningful conversation and get beyond platitudes about colorblindness."

Preservice teachers differ in their consciousness about sensitive equity issues related to gender, class, and race. Dr. Simms struggles with how deliberately she should provoke and then address these forms of equity. She starts off by saying, "I don't realistically think that there is the time in two classes or that I have the expertise necessarily to help them resolve all of those issues. And I think...some of it is to some extent...it's like beliefs about mathematics." She goes on to say, "People are at different places with [equity issues], and they are going to leave at different places.... They are going to grow at different amounts because they are more or less open to it, they are more or less responsive, they are more or less thoughtful." Dr. Simms also thinks that equity should be addressed throughout an undergraduate teacher preparation program and not just in one or two mathematics education courses. Students should have a holistic notion of equity upon completion of their program. Approaching equity in this way she believes can mitigate student resistance.

Comfort Level With Some Equity Topics Over Others

I asked Dr. Simms if she was more comfortable discussing certain equity topics than others in her methods course. She replied that dealing with gender and the special needs status of students was far less threatening to her than dealing with issues of race or social class. When I asked her to elaborate, she explained that she did not think that gender and special needs status were emotionally loaded or politically sensitive. She also thought that preservice teachers were less likely to find those topics emotionally threatening.

When discussing race, Dr. Simms thought that she was in a self-correcting mode. She was not always sure what politically correct language to use when referring to certain groups of people:

I think it's charged—the language people use and people not knowing where other people stand on issues. I mean even do you say Black or do you say African-American? Or do you say Hispanic or Latino? [You don't know] when you are going to step on somebody else's toes and...how to talk about these issues.... I'm just not comfortable forcing people to talk about that kind of stuff.

Dr. Simms described for me an incident that occurred between her and another colleague during a meeting. She had made a statement she felt was taken out of context. Afterwards, she was compelled to defend what she had said:

My immediate reaction was to go back and edit what [I] had said and try to communicate to her what I meant.... I knew that...she and I were okay with each other and [that] later we would talk about it and it would be fine. But...I think there is a feeling of threat in the same way that I imagine people of color feel threatened when White people say something, and it doesn't quite come out right. Or [it] sounds like they are implying that all Black people are poor or all Black people come from single-parent families, or whatever.... It's like everything that you say is wrong in equity conversations, particularly if there are people who are different from you in the conversation, or particularly if...a person of color is the one who raises the question. The person of the majority race immediately is like, "Oh, I didn't mean that, or let me rephrase that." I have done it myself. There's this feeling [that] you need to revise your speech. And so it becomes a lot more about public appearances and less about figuring out what you really think, and why you think that, and what would be a different way to think about this.

Dr. Simms also worried that although she was still learning how to communicate her ideas about equity she might be doing some overgeneralizing about marginalized groups. As far as social class was concerned, she still felt it necessary to monitor her language. She believed that during the course she might have presented a skewed portrayal of Black and Latino children living in poverty. She thought that a stereotype had sometimes been communicated about these students to her preservice teachers, so she constantly attends to avoiding that. She maintained an ongoing meta-cognitive conversation with herself, much like a list of check points running through her head. She was always asking whether unintended messages had been sent to her preservice teachers and what could be done to correct that if they were.

Discussion

Dr. Simms demonstrated thoughtful consideration of the role of equity in her methods course, as well as a reflective engagement in her teaching practices. While she did intend to bring out issues related to equity in her mathematics methods course, she demonstrated apprehension about the level of engagement and the topics to be addressed. This discussion section is comprised of three parts; silence in whiteness and white women, safeness in silence, and working for equity. I lay out two frameworks. The first utilizes theories of whiteness and silence in order to explain how each of these two notions of equity may stand in the way of Dr. Simms' teaching goals. The second is Julian Weissglass' framework for teacher educators working for educational change as they begin attending to educational equity.

Silence in Whiteness and White Women

There is an emerging body of scholarship that explores whiteness in female educators, investigating how White women educators examine their understanding of their racial identity and how this plays out in their practice (Gillespie, et al., 2002; Solomon et al., 2005). Ruth Frankenberg (1993) writes that White women tend to think of race in one of three ways: essentialist racism, color and power evasion (i.e. the colorblind position), and race cognizance. The first can be considered to be the common conception of racism; the second view acknowledges color but rejects it as a determinant of how people are treated; and the final position acknowledges the difficulties of context—that is, the ways in which race can interact with SES to decide in advance the meanings and realities of one's identity and experiences (Gillespie, et al., 2002).

Some scholars contend that very few White women are race cognizant (Collins, 1995). Moreover, Gillespie et al. (2002) argue that due to gender socialization, "women tend to be socialized to avoid conflict, often remaining silent when they feel their opinions might cut them off from others, or more dramatically, invite physically violent responses" (p. 241). Consequently, for fear of stepping outside the circle of privilege, White women perceive that speaking out about sensitive issues like equity and diversity can be risky and choose to stay silent when it comes up in conversation.

In her investigation of silence in Whites, Mazzei (2004) also writes that Whites are rarely called to examine their racial position. There are hidden assumptions in Whiteness, even when it is not

addressed. When this racial position is examined, "coupled with a cultural taboo learned early by many Whites that it is impolite to notice color or difference" (p. 30), meaning-full silences are produced. Further, for fear of being perceived as different, or impolite, or perhaps even racist, an intentional silence can be evoked in conversations to hide what is underneath the veil. The concept of *veil* is metaphoric in that it hides what we choose not to see, or wish not to see, for to see is sometimes unbearable. Quoted in Mazzei, Cixous states that "'Not-seeing-oneself is a thing of peace.' By looking through the veil of Whiteness, we can avoid what is invisible or unknowable" (p. 30). Mazzei also writes that "silences are not always veiled, nor are they always unintentional, but they can often be deliberate or purposeful—a choosing not to speak" (p. 30). In this sense, there is an intentional hesitation, pause, or non-speak, for fear of saying the wrong thing. As a result, a reproduction of Whiteness occurs through this resolute silence.

Safeness in Silence

Dr. Simms's desire to maintain a safe classroom connects well with Gillespie et al's (2002) thesis on gender socialization in women. Simms was willing to engage her class in certain conversations as long as they were not too emotionally risky for *her* to handle. As we have seen in her statements, Simms does not perceive gender and special needs status of students necessarily as touchy issues. However, she avoids the possibility of emotional conflict with preservice teachers by focusing on mathematical content and by venturing into discussions where she can predict where responses will go. There is a sense of control that Simms wants to maintain over classroom discussions. We see this when she says, "I am not sure if a whole class setting is the right place for people to deal with issues that are potentially emotionally charged" or her need to *correctly* initiate equity through meaningful activities. Unlike mathematical content which can be systematized and prescribed, aspects of equity discussions can end up in uncharted territory. Simms struggles with the appropriate content for bringing out aspects of equity and she would rather push some ideas to the side rather than taking the risk, losing control, and making her class unsafe.

It is important to mention that unlike some of the White teacher educators that Frankenberg (1993) theorizes about who operate with a colorblind perspective; Dr. Simms is indeed race cognizant. But this theoretical position suggests that there are two competing forces operating which hinder her from

finding other appropriate contexts in her class to examine race and social class in mathematics; her white status and the silence that can come from this status.

While the data from interviews suggested that Dr. Simms is a highly reflective White educator who was conscious of her racial position and how race and social class functioned in society and schools, she still struggled with her White position in relation to her mostly White preservice teacher cohort. Whiteness is all around us, but because it is normative and often goes unexamined (Frankenberg, 1993), Dr. Simms was not sure if many of her preservice teachers were open to this type of critical examination of self nor was she sure that because she looked like them she should provoke it. Although Simms understood that many of her students may hold the colorblind position, she was not willing to disrupt their whiteness for fear of stepping outside the circle of white privilege and losing the safety that her class offered (Gillespie et al, 2002). In some ways, Dr. Simms protects preservice teachers from their veil of whiteness because what they might see in themselves about their beliefs may be very uncomfortable, disturbing, or even traumatic. When Dr. Simms was asked to consider that as a White teacher educator, she could challenge preservice teachers in ways that a non-White educator could not, she argued the same point, a non-White educator could challenge them in ways that she could not.

The silence that comes from Dr. Simms is atypical of the one Mazzei (2004) theorizes. Unlike the silence Mazzei describes where sensitive topics like race or social class are avoided completely by some Whites, Dr. Simms has somewhat of an infrequent silence because she was willing to engage some of the time. Simms quite often finds herself in self-correct mode and seems to be more cognizant of this mode when she is around others whose race is different from hers. Her self-monitoring increases along with the need to use politically correct language because she does not want to risk offending another group of people by overgeneralizing. This fits in well with Mazzei's argument that some White educators do not want to "say the wrong thing." Consequently, in Dr. Simms' class she is careful of what she says to her preservice teachers because, as she stated, she may be communicating unintentional stereotypes. Dr. Simms does not want to do this and is not altogether sure how to correct it if it does occur.

Silence and whiteness theory helps us to consider the dilemmas Dr. Simms identifies with in her teaching. In the next section, working for equity, I use

the second framework—working for educational change, introduced by Julian Weissglass to describe what teacher educators like Dr. Simms can do as they confront these challenges.

Working for Equity

The perceptions held by Dr. Simms related to infusing equity into her practice should be of no surprise. Many teacher educators, no matter what their racial background, whether they explicitly articulate it or stay silent, grapple with these same issues. The question remains: How should teacher educators talk deeply with preservice teachers about the inequities of schooling that often go unaddressed in mathematics education courses? The four themes described in this paper connect appropriately with Julian Weissglass' (1998) work, *Ripples of Hope*. Weissglass offers a framework for teacher educators to begin attending to equity and addressing their personal biases with the goal of affecting educational change. Specifically, to address equity in a nurturing educational environment, Weissglass suggests several considerations:

1. Only one form of discrimination is addressed at a time.
2. Everyone in the group is listened to attentively by someone (not necessarily by the whole group) about their own experiences, beliefs, thoughts, and feelings.
3. Participants have the opportunity to reflect deeply on their assumptions about equity by having dyads on and discussing the perspectives on equity.
4. It is recognized that the origin of present interpersonal difficulties between people is often in early distress experiences, cultural and racial biases, and societal discrimination.
5. People who have not experienced a particular form of discrimination listen respectfully (without analysis or debate) to the personal experiences of people who have been discriminated against.
6. Listeners get a chance (in dyads, support groups, and discussions) to talk about how they found out about prejudice toward or mistreatment of the group in question and their own feeling at the time.
7. All participants have the opportunity to talk about their common mistreatment as learners and as children (for example, how their experiences in and out of school affected their confidence, their curiosity, their ability to cooperate with other, their leadership).
8. People have the opportunity to talk or write about what they have learned and their next steps (or goals) in working for social justice in their personal lives, classrooms, or schools. (Small steps are sufficient!) (pp. 122–123)

Although maintaining a safe classroom environment is important and coveted by many educators, *safe* does not always mean the elimination

of risk. We must transcend the safety of our classrooms and take the appropriate risks. By risk, I am referring to the advancement of an idea whether it is accepted or rejected. The classroom is a place where uncomfortable ideas should be explored and there is a great risk to our schools and society when they are not. It is essential that students and teachers cultivate learning environments where their thoughts are expressed and respected, no matter how hurtful they might be—this is the only way that growth can occur.

An educators' sense of preparation is also important in our respective disciplines. Dr. Simms was a highly prepared teacher and prided herself in it. The comfort it provided may have also limited her in some respects. Many educators want to be prepared when they enter their classroom. But preparations can only go so far. We cannot always be completely equipped for difficult areas of our work, nor can we foresee unexpected discussions. It is important that mathematics educators communicate to students that they do not have all of the answers prior to engaging in these discussions. In a classroom each person has a unique experience to share, and there is no guarantee that educators will be able to address everything. But they should at least be willing to keep a dialogue open for everyone to explore.

The greater comfort level that Dr. Simms had with addressing gender and special needs over race and social class also comes as no surprise. First, attending to gender and special needs status of students are easier issues to discuss when preservice teacher cohorts are predominantly female. Second, the perceptions of race and social class in a U.S. context have historically produced disparities among students. The reality of this legacy often goes unexamined, and many teachers continue to shy away from these discussions. As Weissglass (1998) argues, there is risk in doing this work even when we are afraid. But he also argues, "Avoiding the issues through denial or intellectualization will be harmful in the long run" (p. 122).

Student resistance to equity is also an expected obstacle. Many preservice teachers do not understand how race, gender, or social class biases shape their outlook on the world and affect the students they will teach. As mathematics educators working for equity, we must be willing to engage our students in this type of personal learning and self-critique even when there is resistance. Regardless of our racial, ethnic, class or gender status, preservice teachers must become aware that these issues are important. They affect how different groups of student populations are perceived

and how they experience schooling. Preservice teachers must also be encouraged to view inequities not just as one person's problem but as everyone's problem.

Conclusion

I have discussed the challenges that one White teacher educator faced when trying to incorporate equity in her practice. What implications for future work do these challenges have in teacher education? Some teacher educators might discuss equity and related issues in their courses, but as Dr. Simms argued, unless all equity issues are addressed in teacher preparation programs, there is no certainty that preservice teachers will be fully prepared for the realities of schooling. This research offers some insight into preparing teacher educators, namely by providing teachers with space to reflect on their biases, building alliances with other colleagues across disciplines, and expanding our outlook on equity.

Teacher educators must be allowed the space and given the tools to effectively reflect and examine their own biases. Weissglass (1998) conveys some of these same ideas by writing,

Making classrooms more inclusive of children with different backgrounds and needs, without providing support to teachers to work through their biases and prejudices, will not guarantee a better education for anyone. We need to accompany needed policy changes with a program that provides people the opportunity to eliminate individual prejudices and the resources to make changes in their teaching. (p. 103)

For this work to be productive, it is essential that teacher educators also build alliances with colleagues from a variety of backgrounds to expand their outlook and understanding of race, class, and gender issues. Smaller support groups can also be effective so that educators can intimately share their concerns about equity that go unexamined or that they are uncomfortable addressing in larger settings.

Although, there are a number of definitions of equity, educators should first work toward a deep understanding for themselves before adapting any particular one. As mentioned earlier, the most widely held definitions of equity deal with equal opportunity, equal access, and equal outcomes. But as Weissglass (1998) suggests, ideas about equity also encompass political change, and social, psychological and institutional change. Weissglass argues that these five views of equity are important but insufficient. A definition of equity should not be fixed but should be

an evolving process. He offers a working definition of equity that stakeholders can utilize in order to begin a common dialogue toward educational change:

Equity is the ongoing process (not a product) of increasing our own and society's capacity and commitment to completely respect individuals as complex thinking and feeling humans with different sociocultural, gender, and class backgrounds and values, and provide the necessary resources to assist people in learning. This includes overcoming the effects of any mistreatment on their ability to learn—whether it be at the hands of individuals or institutions. (pp. 120–121)

Addressing equity will continue to be a difficult area for many educators. As a teacher reflecting on her practice said, “To be conscious of equity and effectively deal with equity in the classroom, you have to open yourself up and look at yourself” (Weissglass, 1998, p. 122). That is when the real work for change begins.

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¹ The term *subjectivity* refers to the way in which individuals are constructed by cultural practices, language, and discourse. Each person is subjected to language, culture, gender, and race, among other things, which inscribe us and impact the types of experiences that we have. Our subjectivity influences our outlook on the world—an outlook unique to each individual. See St. Pierre, Elizabeth A. (2004) for further discussion.