

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/305000272>

# Nesting in Nepantla: The importance of maintaining tensions in our work.

Chapter · January 2015

---

CITATIONS

0

---

READS

115

1 author:



[Rochelle Gutierrez](#)

University of Illinois, Urbana-Champaign

26 PUBLICATIONS 665 CITATIONS

SEE PROFILE

## **Nesting in Nepantla: The Importance of Maintaining Tensions in Our Work**

Rochelle Gutiérrez, University of Illinois at Urbana-Champaign

In Russell, N. M., Haynes, C. M., & Cobb, F. (2015). *Interrogating Whiteness and Relinquishing Power: White Faculty's Commitment to Racial Consciousness in STEM Classrooms*. New York: Peter Lang.

Every year, I run an activity with my secondary mathematics methods students in which I make them feel uncomfortable. It's called Bungee Barbie<sup>1</sup>. They are assigned a group activity where they are given a Barbie doll, a measuring tape, a handful of rubber bands, and tape. They are asked to measure the distance the doll falls from a fixed point when dropped with one rubber band tied to her ankles. They are to continue this process with two, then three, up until 10 rubber bands are used in a chainlike manner, taking note each time how far she falls. They are asked to collect this data and then, based on their "line of best fit," make a prediction as to the number of rubber bands to use if she will be dropped off of my 3<sup>rd</sup> floor office balcony, fall the maximum distance, and not hit the ground below. The winning team will have bragging rights. They are told that in our next session, each group member will be responsible for explaining how their group collected their data, how they accounted for any error their data might contain, and how they made their prediction.

When they return to class the next day, they are confronted with me running the class completely in Spanish and at a fairly fast pace for someone who is not a fluent speaker. In directing my comments to students, I change their names to their Spanish equivalents (e.g., Mike becomes Miguel; Frank becomes Pancho) or to versions that are pronounceable in Spanish. When individuals are not able to respond to my questions or requests, I mention how not doing the homework is not a good sign and that perhaps they (implying families) need to value education more. When they start to confer with each other, I tell them to pay attention to their own sheet because they were told ahead of time what they would be responsible for and no "cheating" will be allowed. All of this is conducted in Spanish.

After 5 - 10 minutes, they feel they "get it" and smile, "seeing" how difficult it would be to be an English learner (specifically a Spanish speaker) in a fast moving math class. At this point, they expect me to stop. I do not. I continue this activity for 45 – 60 minutes, including calling students to the board and to the document projector to explain their graphs and justify their reasoning around the topics of slope and line of best fit; having them take notes from dictation; and finishing up with a text-heavy pop quiz. Most of these teacher candidates are not fluent in Spanish. Those who took Spanish as a foreign language are usually two steps behind in translation to be able to participate as well as they would like. Even those students who are fairly fluent in Spanish are not prepared for the mathematical terminology I am using. I specifically choose slope as a topic because the Spanish term "pendiente" does not have a Latin cognate or an easily identifiable everyday use of the term. In the non-mathematical context, pendiente can mean anything from pendant to dip, descent, incline, earring, drop, or grade. As time progresses in the activity, I gradually provide more support for students to participate (e.g., a handout with mathematical terminology explained in Spanish, more gestures, less colloquial terms, notes on the board that they can reference, and I allow them to work with a partner). In the end, I ask them to write

---

<sup>1</sup> I adopted this activity after first seeing it on a teacher's website in 2000. Many versions have been posted since, including one you can download from

<http://www.ms.uky.edu/algebracubed/lessons/LinearRegression.pdf>

down on a blank sheet of paper two things: 1) How did you feel? 2) What, if anything, did you do to try to participate in class?

I will concentrate on question #1. Every year, the teacher candidates' responses are more or less the same. They express exactly what the research literature suggests is experienced by English learners in mathematics classrooms across the US. When they do not have adequate supports, English learners (and my teacher candidates) are frustrated, nervous, bored, checked out, or hopeless. They feel their responses do not adequately reflect what they actually know or have prepared for class. Some teacher candidates can explain that they have never been made to feel inferior for something that was out of their control. Most feel unfairly evaluated and as if they were stripped of their identities as "good," "responsible," and "smart" people. Others are able to express clearly how they are so used to being in a position of power, of always having something to say and convincing others, that when they could not, they actually felt angry...and then embarrassed at their self entitlement...and then angry again. Usually there is one student who is able to point out that on the one hand, the experience they just had lasted less than an hour and they all knew it was going to end soon; yet, on the other hand, the anxiety and oppression they felt was real.

The point of this activity is to move beyond reading about students who are "othered" in society and mathematics classrooms or learning particular strategies to use with English learners when teaching, though those are revealed in their answers to question #2. Instead, for a brief moment, I want my students to feel what it is like to be the "other." Rather than an "intellectual" or "cognitive" experience, I want them to have a visceral one. When we reach the end of the activity, this is where I want them—feeling their oppression was both real and not real; uncomfortable with how they are feeling, but also recognizing the potential to learn from being uncomfortable. If I am going to prepare them to deal with the uncertainty and politics that are inherent in mathematics teaching, it is important for me to keep them in this space of tensions, of not feeling they are on firm ground and still being willing to stay in that space long enough to benefit from it. From there, they will have a better chance of addressing the systems of oppression that operate through schooling and in society at large.

### **Addressing Whiteness in Teacher Education**

The idea of addressing Whiteness in teacher education is not new. However, its connection to mathematics usually is less clear or explicit. Often catalyzed by faculty who teach in broader foundations courses that address issues of diversity and social justice, many teacher education programs today include some form of teachers reflecting on the fact that they are not like the students they will eventually teach. Exploring one's racialized identity is one part of this work. With greater awareness of the "achievement gap," more mathematics teacher education programs see value in having teacher candidates who are "winners" of the system that we are trying to reform reflect on their mathematical experiences and the likelihood that the students they teach will not be winners or might not be excited about learning mathematics (deFreitas, 2008; Boaler, 1997).

As such, the problem is not as simple as White teachers (or colleges of education) not interrogating Whiteness. Some are, with differing degrees of success. Yet, interrogating Whiteness is tricky because Whiteness itself is complex. Some of my teacher candidates see themselves living in a post-racial America, denying the concept of race and hopeful that every one else can do the same. Even if not denying the salience of race, many teacher candidates do not identify as White—thereby making Whiteness studies and interrogations of Whiteness irrelevant to them.

Whiteness is not as simple as the color of one's skin. A fair-skinned blonde Cuban is not likely to be racialized as White once she opens her mouth to voice her opinion and her heavy accent is revealed. Some of my teacher candidates view their "Asian American" classmates as "Whites" whereas

those Korean American and Chinese American teacher candidates do not see themselves in that way. It is important to remember that historically, the Irish shared a position with free Negroes in the 19<sup>th</sup> century in America and only later, by embracing racism against Blacks<sup>2</sup>, earned their White identity (Ignatiev, 1995). The situation is even more complex for Latin@s<sup>3</sup>, Chican@s in particular. In the 1930s, we were considered a “Mexican” race; earned our “Whiteness” in the courts by 1940 (though many Chicanos preferred to identify as non-White in the 1960s due to the violence we endured during the Civil Rights Movement); between 1980 and 2010 we were considered part of a larger “Hispanic” category independent of race, (López, 1997; 2004); and more recently were given the choice to identify as White or non-White on the Census bureau. Today, in the US, you can be both white and Latin@ in Florida, but not in Texas (Peterson, 2015). So, the concept of interrogating Whiteness can be confusing to teacher candidates and their teacher educators, many of whom have checked various boxes over their lives (e.g., on census forms, job and scholarship applications, surveys) and not had the luxury of learning the history and complexity of the social construction of race. Of course, from a postmodern perspective, racial identities are not static; they are hybridized and constantly open to resignification. However, postmodernism has its own problems, something I will return to later in this chapter.

The most common form of interrogating Whiteness in a teacher education program is through autobiographies and reflection assignments. Yet, like the teacher candidates in my opening narrative who thought they “got it” after 5 - 10 minutes and wanted closure, many teacher candidates (and their teacher educators) can get excited about (or impatient with) the reflective process and look too early for a sense of closure or resolution—convincing themselves they will know exactly how to address racism in their school. At my institution, we have the luxury of having the same students in a cohort for four consecutive mathematics “methods” courses over two years; I have the same students for a full year. Most teacher education faculty simply do not have that many math-specific contact hours with their teacher candidates. They must do the best they can to address any form of social justice during 1 or 2 semesters while also covering lesson planning, peer teaching, assessment, mathematics learning, pedagogy, the latest mathematics education reforms and professional standards, among other things. As a result, rather than allowing students to grapple in a messy state of uncertainty, many committed teacher educators can unknowingly contribute to this eagerness for students to “get it.” Or, they might simply rely upon their colleagues in foundations courses to help move teacher candidates along in their abilities to interrogate Whiteness.

Another problem with existing approaches to confronting Whiteness in mathematics teacher education is that it can devolve into naval gazing, marveling at the progress one has made, or linger in the phase of the White confession, rather than leading to any real action. Most assignments developed to interrogate Whiteness are written with Whites as their focus. In some ways, that makes sense, as the majority of individuals seeking to earn their teaching credentials are White. However, it raises the issue of how meaningful such assignments are for teacher candidates who identify as Korean American, Filipin@, recent immigrant from the Ukraine, multiracial, or one of many other identities that cannot easily be mapped onto Whiteness. And, while well meaning, some cross cultural discussions end up

---

<sup>2</sup> I use the term Black, as opposed to African American, to highlight the fact that many Black students living in the United States have ancestry in the Caribbean, South America, and Asia, among other places. Nonetheless, Black students who attend schools and live in the United States are racialized in similar ways, regardless of country of origin.

<sup>3</sup> I use the @ sign to indicate both an “a” and “o” ending (Latina and Latino). The presence of both an “a” and “o” ending decenters the patriarchal nature of the Spanish language where it is customary for groups of males (Latinos) and females (Latinas) to be written in the form that denotes only males (Latinos). The term is written Latin@ with the “a” and “o” intertwined, as opposed to Latina/Latino, as a sign of solidarity with individuals who identify as lesbian, gay, bisexual, transgender, questioning, and queer (LGBTQ).

serving as another form of being preoccupied with the master's agenda. That is, students of color are placed in the role of unpaid sherpas, guides for White instructors and peers (Chinnery, 2008).

Perhaps more importantly, many teacher educators, and thus teacher candidates, are not trained to understand how White supremacy intersects with other forms of oppression. Instead of Whiteness, I use the term *White supremacist capitalist patriarchy* (hooks, 2004)<sup>4</sup>, as it allows us to think about the interlocking systems of oppression that we encounter in our everyday lives. That is, as citizens, teachers, and teacher educators, we will not be able to understand and transform our realities if we analyze society only through a lens of race, gender, or class. In fact, framing these issues as “interrogating Whiteness” can inadvertently keep White people at the center of the discussion. By focusing on White supremacist capitalist patriarchy as a concept, we move beyond the idea that White males, alone, protect ongoing systems of oppression and shift the focus to developing a discourse of colonization, decolonization, and the notion of possible collusion by women and people of color. Although the term does not name it explicitly, White supremacist capitalist patriarchy takes up issues of language, religion, and sexuality.

Understanding how White supremacist capitalist patriarchy operates globally, not just in the US, is another aspect of education that rarely gets addressed, particularly in mathematics teacher education programs. Yet, by highlighting practices for school reform from Japan, China, and Singapore (e.g., Singapore Math, Lesson Study, etc.), the field of mathematics education may be reinscribing stereotypes of Asians as good at math, while ignoring what we can learn from other countries whose peoples are racialized as brown, Black, primitive, and/or inferior. To interrogate that form of supremacy, I often introduce to teacher candidates sophisticated algorithms from other countries. See, for example, Gutiérrez (in press) for an algorithm based on number theory that is used in México to check the multiplication of two multi-digit numbers. I also highlight how a US math classroom can look sloppy or confusing to a student from México (and much of Latin America) where the cuaderno (notebook) is used in a precise manner that reflects the discipline and becomes a true resource for students not just in a single math classroom but throughout their lives. In this sense, we challenge the notion that when it comes to doing mathematics, Asia is superior to Latin America and we raise the idea that the US has something to learn from both.

Moreover, the Bungee Barbie activity allows me the opportunity to discuss with my teacher candidates how the countries of origin and the different languages that students speak position them differently in the classroom and in society. As a teacher, I could not as easily have made disparaging remarks about “needing to value education” for English learners from China or India. However, based purely on phenotype, a teacher might apply that stereotype to a recent immigrant Nigerian student. Then, once the student began to speak with a heavy British accent, a vestige of English colonization, that student might immediately be viewed as ‘less Black,’ read less inferior. Another way I attempt to address globalization is through an examination of the Programme of Ethnomathematics (D’Ambrosio, 1990; 2006). This Programme highlights how mathematics is practiced in other parts of the world, decenters a Western view of mathematics, and documents the contributions that different cultures have made to the field of mathematics. I will return to this topic later.

In mathematics education programs that attempt to address systems of oppression, there is often a focus on pedagogy (e.g., culturally relevant teaching, culturally responsive teaching) and/or curriculum

---

<sup>4</sup> hooks later adopted the term “imperialist” in front of White supremacist capitalist patriarchy. However, I find the notion of imperialism can be captured by simply reminding teacher candidates that these interlocking systems inherently seek to dominate. I leave the imperialist term off so that it is less awkward to say.

(e.g., developing lessons that are themed with social justice issues). Both of these approaches are extremely important and both CEMELA and the TEACH MATH group have made considerable strides in this area. Understanding, valuing, and drawing upon the funds of knowledge that students bring to school; creating classrooms that are inclusive and that “assign competence” to individuals who previously have not been viewed as capable of rigorous mathematics; and using mathematics as a lens to analyze injustices in society are all critical steps toward breaking down the structures that perpetuate oppression. However, most mathematics teacher education programs stop there, leaving their graduates with the impression that their work in addressing oppression and White supremacist capitalist patriarchy lies in the content of their lessons and the relationships they develop with students. Yet, it is not enough for teachers to develop deep and flexible knowledge of their field; create meaningful relationships with their students; and draw upon students’ linguistic and cultural knowledge as they develop and implement lessons. Teachers who cannot skillfully negotiate the politics of language, White supremacist capitalist patriarchy, and testing regimes in their working contexts cannot adequately support their students to learn, especially in this era of high stakes education (Gutiérrez, 2012; 2013a).

Elsewhere, I and others have argued that teaching mathematics is a political activity (Frankenstein, 1990; Gutiérrez, 2009; 2013b; Gutiérrez, et al., 2013). Specifically, I have suggested that teachers need to be able to help their students both play the game and change the game of mathematics. Playing the game involves primarily addressing issues of access and achievement (e.g., rigorous course-taking, standardized achievement tests, an emphasis on conceptual understanding) so that students are not penalized later in society. Changing the game includes rewriting the narrative about who is good at mathematics, who mathematics is by and for; valuing home communities and other ways of viewing the world (e.g., indigenous ways of knowing); and doing mathematics in ways that challenge hegemony in society. I argue that in addition to content knowledge, pedagogical knowledge and knowledge of diverse students, teachers need to develop political knowledge (Gutiérrez, 2012, 2013a). And, part of the role of teacher educators is to prepare teacher candidates (and thus their students) to “think more critically about both mathematics and mathematics education so they might become critical citizens rather than mere consumers of a capitalist society” (Gutiérrez, 2009, p. 11).

At a time when public education and teachers are under attack, teacher candidates need opportunities early in their development to: 1) broaden and add complexity to their understandings about teaching, learning, mathematics, and marginalized youth; 2) notice and develop multiple interpretations on situations they would not normally see (e.g., about mathematics, about students, about issues of social justice, about the profession of teaching); 3) develop an advocacy stance on teaching, learning, mathematics, and marginalized students; and 4) become adept at creatively responding to subtractive discourses that position marginalized students as incompetent and/or narrowly define mathematics as a predetermined knowledge base to learn, (i.e., be able to use creative insubordination).

Elsewhere I have described some of the ways in which I have prepared teacher candidates to use creative insubordination (the bending of rules in order to uphold higher ethical concerns), documenting the kinds of things individuals do in their work contexts as practicing teachers, including the risks they take and why they take them (Gutiérrez, 2013a, c; 2015; Gutiérrez & Gregson, 2013; Gutiérrez, Irving, Gerardo, & Vargas, 2013). In general, I have found that teachers need adequate time to reflect on complex ideas within a supportive and critical community of peers, to grapple with uncertainty in a way that they do not shy away from it, and to be provided with lots of examples of everyday moment-to-moment ways of deconstructing and challenging White supremacist capitalist patriarchy (i.e., deficit narratives of students and teachers who are positioned as “other” or “inferior”). Having consistency in the message and language presented to teacher candidates is important for them to revisit issues, scaffold

new issues, and have a way to communicate with their colleagues and other professionals about their work.

Like Bartolomé (1994), my approach does not aim to provide teacher candidates with the “correct” views or help them learn the “best practices.” It is more about becoming critically vigilant about what is being told to us and deciding how we want to respond to those messages. I do not expect teacher candidates to adopt my views. Rather, my approach relies upon a metaphor: “The Mirror Test.” That is, I aim to prepare them with the ability to look themselves in the mirror everyday and to be able to say “I’m doing what I said I was going to do when I entered the profession.” And, if they are not, they need to be asking themselves “Why not?” and “What can I do about that?”

### **Avoiding Typical Stumbling Blocks**

In the previous chapter of this book, Craig and Bonner avoid many of the stumbling blocks that mathematics teacher educators and their teaching candidates face. They recognize that interrogating White supremacy means more than embracing inclusion and diversity; it requires acknowledging that public schooling is a racialized space. Rather than feeling personally attacked when people point out racism, they see it as a new set of eyes to view the world and they work hard to support their teacher candidates to do the same. Rather than speaking “for” other people, they focus on community walks as a way to allow students and community members to speak for themselves. Their assignments require that their teacher candidates follow in suit. Rather than ignoring issues of authority and positionality, they see the value in assigning competence to all students in the mathematics classroom, exposing their teacher candidates to curricula such as Complex Instruction. Rather than allowing Whiteness to occlude their view, they confront it so it can illuminate things. And, rather than doing this work exclusively with other Whites, they work with and learn from people who are positioned differently by White supremacy—their female professors of color and bilingual students. As such, they model for their teacher candidates a way to address these issues themselves. In this sense, Craig and Bonner consistently raise many of the important concepts to be explored by mathematics teacher candidates.

In terms of engaging with the political nature of teaching, Craig and Bonner suggest:

...it is important that we recognize public education, including classrooms, schools, districts, and the overall STEM system as racialized spaces in which structural racism is rarely questioned, and White supremacy is catalyzed.

I completely agree with them. However, while some teacher educators and teacher candidates have become more accustomed to understanding how policies like tracking and standardized testing can relate to racism, they often miss connections between White supremacist capitalist patriarchy to other policies and practices. For example, students in math courses are not just racialized for their learning of math; they are sometimes extracted from the math classroom for disruptive behavior, even when that behavior does not warrant such discipline. Black and Latin@ students, especially males, are overrepresented in disciplinary infractions (Skiba et al., 2002; Fenning and Rose, 2007). If mathematics teachers want to be advocates for their students to participate in rigorous and meaningful mathematics, they must be able to do more than just “recognize public education...as racialized spaces” or control the mathematics curriculum or their own teaching style. They must also develop a voice on larger school structures and policies such as discipline, extracurricular activities, graduation requirements, support for mental and physical health, technology, school infrastructure for testing, and what constitutes proper school dress, all of which contribute to White institutional and capitalistic spaces within the school system (Gutiérrez, 2013a). If not, teachers risk remaining in a missionary state of “helping others” or only supporting their students to “play the game” rather than dismantling systems of privilege and oppression.

Understanding some of the concepts that are important for teacher candidates to reflect upon is critical to moving our field forward. In that sense, Craig and Bonner have nicely outlined some of the issues they considered; how those issues translated into activities and practices they use with their teacher candidates; and have included a healthy list of resources. Even so, the manner in which we contemplate such issues also affects what we notice and how we act on those notions. One strategy that continues to help me grow is to emphasize the tensions and contradictions in our work. I will begin by explaining further what it means to emphasize tensions and then suggest three areas to apply that lens: teaching as a profession; mathematics as Whiteness; and action and coalition building.

### **Seeing Through Multiple Lenses**

I draw on the work of W.E.B. Du Bois and Gloria Anzaldúa to highlight the power of viewing the world through multiple lenses, something that both Blacks and Chican@s have had thrust upon them. For Du Bois, Blacks live in two Americas. They are born both an American and Not an American. As such, they struggle with an ongoing conflict between a spiritual being with roots in Africa and a materialistic being with roots in America (Du Bois, 1897; 1994). In this sense, there is a softening influence that Blacks can offer the US.

The Negro is a sort of seventh son, born with a veil, and gifted with second-sight in this American world, --a world which yields him no true consciousness, but only lets him see himself through the revelation of the other world. It is a peculiar sensation, this double consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his two-ness, --an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder. (DuBois, 1994; p. 3)

By juxtaposing the notion of "gifted with second sight" and a world that "only lets him see himself through the revelation of the other world," Du Bois notes the contradiction that is part of the everyday lives of people who are Black in the US. It is this familiarity with contradiction, this double consciousness, that allows people who are Black to see multiple versions of society rather than settling upon just one. In this sense, they are less likely to be fooled into seeing that the current reality in which we participate is one reality, one truth.

Similarly, Gloria Anzaldúa sees as an asset the multiple lenses that indigenous people bring to bear on society. As a lesbian Chicana poet, Anzaldúa had to deal with the pain of being accepted neither by White feminists who did not understand her indigeneity nor by the Latin@ community who did not accept lesbians/gays (Anzaldúa, 1987). Yet, for Anzaldúa, it is this very sense of not belonging to any one world that can be a sign of strength, as it allows us to birth new realities and to develop unsanctioned ways of knowing. In her writing, she privileges the notion of contradictions, reviving the indigenous word "Nepantla" as a space of liminality and a process of grappling with tensions. Drawing on a Mestiza consciousness, she suggests that being in Nepantla is a necessary and positive state in a cyclical process of knowing and connecting with others (Anzaldúa, 1987; Anzaldúa & Keating, 2002). In terms of metaphysics, the Aztecs conceived of an individual as both "in" Nepantla and "of" Nepantla (Maffie, 2013). That is, Nepantla is the space of neither and both, the space between worlds, between day and night, between being asleep and awake, between male and female, between life and death. So, being "in" Nepantla means being between worlds. Nepantla is also a form of moving through life, a form of being part of the cosmos, a back and forth balancing motion that grounds itself in no single space. Being "of" Nepantla means that one's existence is not stable, but tenuous.



This notion of Nepantla applies not just to Anzaldúa's painful experiences, but to the everyday experiences of Latin@s in a society where White supremacist capitalist patriarchy reigns. In terms of the academy, Latin@ faculty live in a space where we are both highly visible (e.g., seen as quotas and diversity hires; brown skins walking the corridors) and highly invisible (e.g., having little presence in administration or voice at faculty meetings). Similarly, many Black faculty members continue to experience the double consciousness that Du Bois wrote about over a century ago. As such, we have developed the means to be border crossers, to understand things relationally, to deal with multiple realities and uncertainty. Rather than rejecting this uncertainty, we spend a large part of our time in Nepantla and embrace it; we are Nepantler@s. I refer to this process as "nesting" in Nepantla because it requires developing a home and identifying with that place. The ability to hold multiple, conflicting views is an important aspect of being a Nepantler@, something I have argued can help mathematics teachers rethink the concept of knowledge and can help them become advocates for their students (Gutiérrez, 2009; 2012). Unlike Helm's (1990) model of racial identity development that can focus on a "destination" and/or implies a linear trajectory, I seek to get teacher candidates to see this process as organic and relational. However, more than just being able to hold these conflicting views, individuals must also value that contradiction/tension and see it as a "gift of second sight" and as a "place of birthing new knowledge."

Indeed, the notion of contradictions arises in the chapter by Craig and Bonner. However, the "new set of eyes" that they highlight seem to be of a different sort than those that Du Bois, Anzaldúa, or I would argue for. Rather than valuing and maintaining the multiple and contradictory views that can be seen as a strength of people who historically have been oppressed through White supremacist capitalist patriarchy, Craig and Bonner seem to position this "new set of eyes" in place of an old set of eyes, rather than existing alongside of, pushing back against, or offering complexity to a singular view. The value of contradictions is not always clear in the descriptions of their journeys or in their work as teacher educators. For example, terminology such as "The old identity" versus "The new identity" used by Craig implies a sense of advancement and resolution as opposed to ongoing tensions and grappling. It makes me wonder: How does this language help others who may be struggling with interrogating White supremacist capitalist patriarchy? Should others be looking for "aha" moments? Is it always so clear in a given moment that we are changing? Is change permanent? Is there room for setbacks, failures in areas where there was previous success? After all, it is not as if one ever becomes fully non-racist or anti-racist separate from a racist society. Viewing our identities as hybridized and always up for resignification casts a new light on this topic.

There are moments in their chapter where contradiction arises and is embraced, only to be clouded over again. Bonner notes,

In short, this journey has been filled with contradictions and uncertainties that I believe are necessary to becoming a researcher and practitioner whose work is rooted in social justice. Even in writing this piece, I feel a sense of contradiction – haven't stories of people like me been dominant before now?

It would have been wonderful to understand better the particular contradictions and uncertainties that were necessary for Bonner. Laying them out side-by-side would make it easier for the reader to both relate to and analyze them. For example, what is the tension that Bonner feels in stories of people like her? Is it that she simultaneously feels her story is important and not important? Is it that people like her should not dominate but at the same time need to dominate to reach their audience (people like themselves)? Or, is it something else altogether? I am not certain.

Later in the chapter, she notes some of the ways in which she is confronted with contradictions. But, they exist in ways that seem to indicate weakness, not strength. They seem to be a set of questions that need to be answered.

...the social justice classes became one of the first formative, contradictory, illustrative experiences in my journey. For example, I was a White doctoral student who was learning about social justice education from two White professors (my instructors at the time) in classes consisting of largely White doctoral students at a Tier I University. At the same time, I was a researcher in a largely Black school, in a Black community. What I began to realize was, although I was the “researcher,” I was not the expert in this setting. In fact, my role was to listen to the experts (parents, teachers, students, administrators) and allow them to tell their story.

In the end, the reader is given a resolution: *I was not the expert in this setting...my role was to listen to the experts*. This kind of positioning can leave an individual with a false sense of confidence, as if “before I didn’t get my role” and “now I get it,” the unintended implication being that I no longer have to worry about being the expert (authority) because that is not how I am positioning myself. Yet, identity is not something you are, it is something you do, a kind of performance (Butler, 1999). It is partly in our control and partly in the control of others who interpret our actions and project their own ideas onto us.<sup>5</sup> That is, just because Bonner did not position herself as the expert does not mean that others did not see her in that way or that she did not, at times, slide into that role without being aware. I would argue that highlighting how she was simultaneously the expert and not the expert may have yielded a more productive space from which to work.

It is not clear what role contradictions play for Craig. She seems more fixed on the reflective process and advancing past the state of not seeing her own blind spots.

My interactions with students from a background different than my own encouraged me to engage in a constant self-reflection about my own experiences as a White female and about my assumptions of my students and their communities...Once I recognized my own implicit, assumed privilege and opportunities as a White, middle class, female, I could begin my exploration of the issues Latin@s face while learning mathematics.

What I really like about Craig’s process is that it is relational. She recognizes that she cannot think about her students without also thinking about herself. However, her description implies a step-wise process (first focus on myself, then I can focus on others). Although clearly this is not her message, it almost sounds as if this work involves a lot of deep thinking and then after a certain amount of time, you will recognize your assumed privilege and then can get to work on other issues.

In their conclusion, Craig and Bonner note, “We continually struggle with contradictions that arise as we help our PSTs to engage in noticing, challenging, and taking action.” Yet, without sufficient documentation of the contradictions and how they dealt with them, the reader could leave with the unintended message that the majority of the contradictions they faced were surmountable (and should be surmounted) and/or that contradictions are not a primary focus of the work that teacher educators or teacher candidates should do.

For me, contradictions are paramount. The notion of nesting in Nepantla or becoming a Nepantler@ works not just for me in my research<sup>6</sup> and mathematics methods courses, but also for

---

<sup>5</sup> See Gutierrez, 2013b for further explanation of how identity as performance relates to mathematics education.

<sup>6</sup> See, Dance, Gutiérrez, & Hermes (2010) for further description of how tensions and the relational process plays out in my research.

teachers to take into their classrooms. Teachers benefit from being able to seek and maintain tensions in their work. My work as a mathematics teacher educator is about more than just helping teacher candidates obtain the knowledge, skills, and dispositions needed for teaching, it is about helping people become someone, developing into a Nepantler@. In fact, the teacher candidates I have interacted with who develop political clarity and commitment to their roles as advocates are more likely to take risks in their teaching to dismantle systems of oppression (Gutiérrez, 2015). I turn now to three areas to apply this notion of valuing tensions and contradictory views. I begin with the concept of teaching as a profession.

### **Teaching as a Profession**

“Teaching happens in the classroom/Teaching happens outside of the classroom”

Most teachers would agree that their primary role is to educate. The term can mean many things to different people, but most would reject limited views like the banking model where content is poured into the heads of passive learners (Freire, 1970). And, most teachers, mathematics teachers included, would argue that education happens in classrooms in schools. After all, that is where they learned about what teaching is, by sitting in classrooms for over a decade while a young person, something referred to as the “apprenticeship of observation” (Lortie, 1970).

No other professional field apprentices all of society into it. Students who apply to medical school do not really believe they know what it means to be a doctor; that is why they need to attend medical school. The same is true for lawyers, business people, and any other professional field. Yet, because of the apprenticeship of observation in education, many teacher candidates believe they already know what it means to be a teacher, long before being accepted into a teacher education program. In fact, it is not uncommon for me to have teacher candidates in my courses that admit to having arranged to be hired at their old high school once they graduate, even before taking any courses. In some respects, many teacher candidates are not really seeking to understand the profession. They believe they already know what it entails—being in front of students, developing and presenting engaging lessons and activities, giving homework and tests and later grading them, attending some school meetings, and holding parent-teacher conferences.

Schools of education do little to counter the idea that the profession of teaching is primarily about what you do in your classroom with your students. Mathematics methods courses tend to focus on lesson planning, advanced mathematics, assessment, learning and motivation, curriculum, and pedagogy, including the use of technology and ways of differentiating instruction for different types of learners. The power of the apprenticeship of observation in mathematics education has been acknowledged by many researchers who argue that teacher candidates need to “unlearn” what they learned as mathematics students if they are to teach in a different way (Ball, 1988). And, while many colleges of education expand teacher candidates’ views of what constitutes teaching a bit (e.g., including collaboration with other teachers in professional learning communities) by way of portfolios and other documents required by state agencies, the message that teacher candidates receive continues to revolve primarily around the idea that teaching happens in the classroom, or at the very least in the school. This vision about the profession of teaching—what it is, what it takes to be good at it—is underscored by the actions and discourse promoted by the leading professional society for mathematics teachers (National Council of Teachers of Mathematics). One look at the types of sessions offered at NCTM annual and regional conferences highlights the same types of topics that are presented to teachers in mathematics methods course (lesson plans, advanced mathematics, assessment, pedagogy, effective uses of technology, motivation strategies, differentiating instruction for a variety of learners). As such, teaching

as a profession is largely about making that classroom interaction a positive and rigorous one for students.

If teacher candidates who aim to dismantle systems of oppression view the profession of teaching as primarily concerning what they do with their students in the classroom, then approaches like social justice mathematics teaching will be critical for them. In fact, most of what has been documented as social justice mathematics teaching focuses on curriculum<sup>7</sup>—creating lessons that will allow students to use mathematics as a lens to identify injustices in society and to address those injustices (Gutstein, 2006). Teachers interested in engaging in social justice mathematics teaching will find a variety of lessons categorized by topic and grade level at the [www.radicalmath.org](http://www.radicalmath.org) website.

Let us consider the possible impact of current versions of social justice mathematics teaching on dismantling White supremacist capitalist patriarchy. Most of the teacher candidates I have taught fall into one of three typical responses after having been exposed to social justice mathematics teaching: 1) outright rejection because it is too political and will get you into trouble as a new teacher; 2) excitement and naivete in how easy it will be to create such lessons; 3) initial interest but some trepidation as to how difficult it will be to develop rigorous lessons and have enough knowledge of larger social justice issues in society to be able to guide meaningful discussions with students. It is the last response that is most rare but always leaves me hopeful. Without a community to support them, most beginning teachers who seek to implement social justice mathematics teaching become discouraged right away and then back pedal or create a lesson that unknowingly reduces the mathematical rigor or complexity of the experience. Other researchers have observed similar findings (Bartell, 2013). This can leave teacher candidates feeling they are inadequate at addressing White supremacist capitalist patriarchy as a teacher.

At the same time, teaching as a profession is so much more than what happens in the classroom. In fact, what counts as teaching today is largely determined by individuals outside of schools—owners of for-profit corporations, policy makers, and politicians, many who have never taught themselves. The film industry has come on board with recent movies like *Waiting for Superman* that depicts teachers as lazy, unaccountable, and/or as the root of students' failure to learn. The media, rather than helping unveil the problems in education with a society that does not provide adequate housing, healthcare, or employment for its citizens, often promotes discourses about teaching like closing the achievement gap, growth mindset, and helping students to develop grit. The Bill and Melinda Gates Foundation has spearheaded a number of initiatives, including charter schools, that seek to define what counts as good teaching and that can ultimately undermine public education. Pearson Education, the corporation that benefits from sales of Common Core aligned textbooks and the PARCC tests, has developed a system of “badges” that mathematics teachers can earn for promoting the Common Core State Standards. These badges are being promoted as a sign of being a true professional. So, in some respect, in order to engage in the profession of teaching, teachers cannot simply shut their doors and engage their students in rigorous and positive interactions in the classroom. They need to be able to make sense of, buffer themselves from, or defend themselves from the deficit discourses circulated between the media, corporations, politicians, and others.

Being able to hold both views in tandem—teaching as a profession happens in the classroom and teaching as a profession happens outside of the classroom—can go a long way towards helping teachers (and teacher educators) prepare for the complexity that is inherent in the everyday work of teachers. It might open the door for teachers to invent new approaches to address White supremacist capitalist patriarchy that exist along side of a focus on pedagogy or curriculum. Already, savvy teachers are using social media to critique testing regimes and spread the word for how parents and students can opt out of

---

<sup>7</sup> A noted exception is Wager & Stinson (2012).

standardized tests that cause unfair stress to students, take precious time away from teaching, place undue economic burdens on low income districts that do not have the proper infrastructure to administer such tests, or weigh too heavily into teachers' evaluations. The teacher candidates I work with are required to help develop and host a community event called GeoJam that gets hundreds of students (especially ones who do not identify as mathematical) and their family members to compete in creative and rigorous mathematical challenges that help teachers see "unmotivated" or "slow" students in a more positive light and can change the view for students about what it means to do mathematics. In addition, teacher candidates in our program volunteer in a weekly, bilingual, after-school mathematics club run out of a public library. The club supports groups of Black and Latin@ adolescents to do college level mathematics challenges that involve the body and rely on no formulas or calculators. Some of our graduates choose to take these experiences and create analogous clubs, steering committees, or events in their communities, spaces where adolescents can be proud to be brown/Black and mathematical. Others use social media, like Google Hangout, blogs, or create professional learning communities with colleagues in their building to discuss and strategize ways to dismantle the oppression they see in their schools. They see this work as just as important and "professional," if not more so, than anything they do in their classrooms.

### **Mathematics and Whiteness**

**"Mathematics is White/Mathematics is Not White"**

Most mathematics teacher education programs concerned with interrogating oppression or promoting more social justice focus on teaching and curriculum—in particular, the ways in which teacher beliefs, teacher practices, and school policies like tracking can be viewed as forms of racism. At a practical classroom level, it is important for teachers and teacher candidates to recognize how popular educational reforms in mathematics can have different affects on students who historically have been marginalized. That is, teachers need to be able to critically analyze the limitations of discourses like the "achievement gap" or psychology-based reform movements that focus on motivation from an individual perspective. Two of these popular reforms focus on generating in students "grit" and a "growth mindset," things that may prevent teachers from seeing the larger sociopolitical contexts in which students and learning operates. That is, if students are competing in a space that maintains White supremacist capitalist patriarchy, where the playing field is not level and where participating in mathematics class may require assimilating practices that do not align with one's cultural or racial identity, then being told to "develop grit" and "perseverance" or to focus on "developing new dendrites" in the brain may be distractions to maintaining a critical view on the world and a sense of wholeness in the process of doing mathematics. These reform slogans circulate in the media and their implementations in schools can make it seem as if the student is in control of their destiny; they simply need to develop a more productive mindset about learning. Yet, teacher candidates can be supported to see that this approach may inadvertently be little more than a modern version of the "pull yourself up by your bootstraps" mentality that students of color have heard before. Persevering in an unfair or unjust system is not the basis of equity. I have expressed similar concerns with respect to the discourse on "closing the achievement gap" (Gutiérrez, 2008; Gutiérrez & Dixon-Roman, 2011).

Even so, understanding how mathematics teaching can maintain White supremacist capitalist patriarchy may not be enough. It is critical for mathematics teacher candidates to see how mathematics itself is political, to understand the relationship between mathematics as a discipline/practice and White supremacist capitalist patriarchy (Gutierrez, 2013a, 2015; Warburton, 2014). Without this examination, teachers are likely to perpetuate the status quo, a version of doing mathematics that continues to oppress. Let us consider the nature of mathematics.

On the one hand, the face of mathematics is White; the people most credited with “inventing” or “discovering” it are the Greeks and others of European descent (Connor, 2005; Joseph, 2011). And, in this sense, mathematics is viewed (and generally treated) as a noun. I will return to this notion later in this section. When asked about important mathematicians, my teacher candidates can easily conjure up the names of Pythagoras, Einstein, Gauss, Euler, Fibonacci, and Pascal. They are less likely to know Srinivasa Ramanujan, Benjamin Banneker, or Baudhayana, the Indian mathematician who first provided a written proof for the “Pythagorean” theorem at least a thousand years before Pythagoras lived. For the most part, schools do not teach the global history of mathematics. So, teacher candidates cannot be faulted for not knowing that Greece benefitted from the flow of mathematical understanding they received from Mesopotamia, Egypt, and Islam. Some researchers have argued that the contributions of non-Europeans to mathematics have been not only largely ignored and devalued, but outright distorted (Joseph, 1992; Connor, 2005). Omitting this dynamic history from the classroom can give students the impression that excellence in mathematics is the exclusive domain of Europeans, that mathematics is ultimately an enterprise for and by Whites, especially White men. Again, most teacher candidates do not recognize that the lack of famous women mathematicians is related to the fact that until fairly recent in history, women were not allowed to attend universities or engage in research. And, only those who had powerful fathers or husbands were given any chance at learning advanced mathematics or communicating with other mathematicians.

More importantly, like Whiteness, mathematics dominates; it exerts a formatting power over our lives (Christensen, Skovsmose & Yasukawa, 2008; Volmink, 1994). Disconnected from emotions or morals, it is viewed as an “objective” arbiter of “truth,” as having no agenda of its own other than to reflect the natural order of the world. In general, we do not challenge the power mathematics exerts because we see its properties operating outside of humans—existing in patterns such as Fibonacci sequences in shells, seeds, flowers, and music; as fractals in trees, plants, snowflakes, and human vein systems. These enduring phenomena are then recast as “truths” and reify mathematics’ place as superior to all other disciplines or ways of viewing the world. Even the hard sciences (e.g., physics, chemistry) are seen to rely upon mathematics in order to flourish. Perhaps as a result, we have come to view mathematics as a sign of intelligence—those who understand it are inherently smarter (read superior) to those who do not. Moreover, mathematics as a measure of intelligence is static. That is, some people are mathematical (intelligent) while others are not. That is simply the way of the world.

With respect to education, mathematics exerts its power over individuals through a form of “microaggression.” That is, particular ways of thinking are related with mathematics. Like Whiteness, mathematics operates with unearned privilege in society. Its superiority in society and the natural world is seen as normal, pure, even beautiful. Yet, such elevated status is somewhat arbitrary. We could imagine a society where something other than mathematics conferred intelligence: for example, the ability to be artistic, to relate well with others, or to view things holistically. All of these forms of “intelligence” would structure society, its citizens, and their relationship to each other and our planet in very different ways than they occur today.

One of the ways that mathematics dominates is by structuring what types of thinking are valued, what is considered “the standard” to which we measure all things. Assigning higher value to those who can reason and think abstractly outside of any real or experienced context, mathematics implicitly suggests that those who cannot do this type of abstraction are inferior (Walshaw, 2004; Walkerdine, 1994). In fact, this phenomenon, referred to as “context dependent learners,” was assigned to Blacks and Latin@s in the 1970s. In this sense, when it comes to schooling, mathematics can operate as a form of microaggression, a repeated assault to those who value connection with others and one’s environment, to those who need to see a reason for doing mathematics beyond getting a grade in school.

In fact, in many mathematics classrooms, students are expected to leave their emotions, their bodies, their cultures, and their values outside the classroom walls, stripping them of a sense of wholeness. All that seems to be needed for mathematics is a brain and an instrument to record—a pencil and paper, a computer, a calculator. Even when students can clearly identify the mismatch between the mathematical task at hand and the context from which it is supposedly extracted, their mathematics teachers often become complicit with this form of microaggression and reply, “Just pretend.” And, yet, by privileging abstraction, we deny ourselves the right to be compassionate, humane, and intimate.

Given that mathematics operates as a kind of proxy for intelligence, teacher candidates need to recognize the lasting effects on students who are racialized as “other” or “inferior” by White supremacist capitalist patriarchy. Such students include: girls, Blacks, Latin@s, American Indians, recent immigrants, English learners, and students who come from working class families. These students are disproportionately placed in low level mathematics courses; are not well represented in advanced mathematics courses or on the mathematics team; and tend to score lower on tests of standardized mathematics achievement, a scenario that is likely to worsen with newly released tests like PARCC and the Smarter Balanced Test that are expected to have failure rates as high as 60 percent. As a result of this process, certain students will not only be labeled as poor at math, they will be viewed (and may view themselves) as less intelligent in society long into their adult lives.

In my mathematics methods courses, I ask teachers to reflect on their mathematical autobiographies, not just to understand how they are positioned with respect to mathematics (and how that may differ from their future students who might not have positive identities around doing mathematics), but to ascertain what they think mathematics is. I ask them two general questions: 1) “Think back to the first time you can remember doing mathematics. Who were you with? What were you doing? How did you feel? And, how did you know you were doing mathematics?” and 2) Think back to a time when someone else recognized you for doing mathematics. Who were you with? What were you doing? How did you feel? And, how did they know you were doing mathematics?” From their answers, we are able to launch into a discussion about who gets to decide what counts as mathematics and how do our definitions of mathematics influence who identifies as mathematical as well as who is recognized for doing mathematics. And, more importantly, they are able to start analyzing in what ways they are complicit with a form of mathematics that is potentially oppressive (to themselves and/or others). For many of them, mathematics is a noun, often involving words like axioms, logic, and numbers. Almost all struggle to come up with an adequate definition, having never before been asked to do so, even though they are mathematics majors. Similar to Whiteness, they had never faced any consequences for not interrogating the very field and professional activity to which they were devoting their lives.

On the other hand, if we define Whiteness as relating to Caucasian ancestry, mathematics is not White. Most of the inhabitants of this planet are non-White and their ancestors (inhabitants of Egypt, Mesopotamia, and Islam) contributed greatly to mathematical advances, as aforementioned. Even if we ignore history and consider only the state of things today, we see that mathematics is practiced throughout the world, in various forms that all relate. In that sense, mathematics is a verb, something that is done by people. Alan Bishop (1988) developed a classification system to document the basic forms of mathematics that are practiced by different people in different parts of the world. They include: counting, locating, measuring, designing, playing, and explaining. In fact, many mathematicians would agree that mathematics is a verb, not a noun. When asked what mathematics is, they often respond, “It is what mathematicians do.” Seeing mathematics as a verb, anthropologists (Eglash, 1999; Ascher, 2002) have extended Bishop’s work to show that, indeed, the whole world does it. As such, mathematics is neither White in its historical sense nor in its modern sense.

By maintaining a view that mathematics is both White and not White, teacher candidates can more effectively participate in a form of doing mathematics that they desire. That is, even while understanding that there is a long and distorted history about mathematics and its place in society, they can recognize they are part of a larger group of people on this planet who are “doing mathematics.” As such, the mere act of doing it in ways that goes against White supremacist capitalist patriarchy is helping to define what mathematics is. And, when teachers are able to see mathematics as a verb, as a living, breathing thing that is in constant motion, then they can better position their students not as individuals with misconceptions about or correct answers in mathematics (noun), but as authors and doers of mathematics (Gutiérrez, 2012). Because mathematics cannot be done by itself, humans are always helping shape what it is, what kinds of questions the activity can answer, and how doing it will help us make sense of our reality (Gutiérrez & Dixon-Roman, 2011). Historically, the act of doing mathematics has been more associated with supporting warfare and economics. That does not have to be our future.

### **Action & Coalition Building**

“It’s all about me/It’s not all about me”

On the one hand, interrogating White supremacist capitalist patriarchy requires that I am constantly reflecting on myself and the ways in which I might (unknowingly) participate in these interlocking systems of oppression. In that sense, it’s all about me. Placing that responsibility elsewhere (e.g., on others who have more power, more experience, or more claim to this work) is not due to ignorance but a choice not to work on these issues. This process of fleeing from *Nepantla* is what Gloria Anzaldúa would refer to as *desconocimiento* or a “refusal to know.” As a teacher, I need to be prepared to raise issues of White supremacist capitalist patriarchy in both informal settings (e.g., interactions with people in school hallways, the parking lot, conversations over lunch) and formal settings (e.g., classroom, school wide meetings, professional learning communities and conferences). In order to do that, I must understand not only the systems of oppression I seek to dismantle, but my place in them.

Elsewhere, I have discussed the dangers of philosophizing to the detriment of action and social transformation (Gutiérrez, 2013b). That is, by adopting a postmodernist or poststructuralist perspective, many individuals can become fascinated with the fact that nothing is real, that no value judgments can be made, and they essentially become paralyzed from acting. Teacher candidates can end up in a cycle of constant reflection about themselves and their place in systems of oppression to the point of not ever knowing what, if anything, is the right thing to do about it. Yet, it is important for teachers to be able to take a stand, to advocate for students who are Black, Latin@, immigrants, and/or English learners. As I mentioned earlier, to the extent that teacher candidates learn about Whiteness, privilege, and White supremacist capitalist patriarchy and are not called to action, it actually can serve as a form of recentering Whiteness. We seek not just to understand but to transform White supremacist capitalist patriarchy. Thinking our way towards progress or taking action as a single individual is not likely to make any great impact on the powerful systems of oppression we face as teachers and teacher educators. It is important to resist intellectualizing the struggle, and instead live it. Living it means action, such as taking risks in our everyday work.

More than just “living” the struggle and taking risks as an individual, it is important to look for ways to build coalitions with others (e.g., team teaching with people who are different from us, developing partnerships with teachers who use creative insubordination on a regular basis, creating communities in which we learn and can be held accountable to our beliefs, our students, and our definitions of mathematics) so that we can be inspired to continue to participate in a larger movement. In fact, history has taught us that progress usually occurs only through movements (e.g., Civil Rights



movement), when people come together to collectively resist systems of oppression and demand, often through legal actions, that a new system be put into place. In that sense, it is not all about me.

Craig and Bonner seem to agree that introspection is an important part of interrogating Whiteness. They claim,

...we find it necessary to continuously look at our own positionalities, perspectives, and living contradictions, especially as they relate to our identities as White MTEs and how this interrogation might inform or hinder our goals. Engaging in this type of reflection has allowed us to understand and be critical of our own cultural lenses and teaching practices.

Later, they highlight how this approach of reflecting on prior experiences relates to assignments they create for their teacher candidates: “We hope that our assignments provide our PSTs with an opportunity to reflect on their prior experiences in terms of equity, access, and privilege and to develop sensitivity for similar issues in their future practice. Yet, this whole process of reflecting seems to be the extent of the action.

On the one hand, Craig and Bonner recognize that action is important. They assert, “...we interrogate and *notice* our cultural backgrounds, *challenge* (and continue to challenge) our beliefs, and *take action* in our practice...” However, the specifics of what it means to “take action” is not clear. Bonner attempts to elaborate:

I began (and continue to) seek out new perspectives while deconstructing my Whiteness. I began working closely with my advisor and others, who guided my thinking and work in this area. She pushed my thinking about myself and my role in systems that oppress, and by the end of my program my focus shifted to explicitly resisting the racism that is inherent in schools and society, and has moved me towards autonomy... (p. 10)

From the description, it is not clear if she considers her action the “shift in thinking” or if she simply failed to describe the specific actions that constituted “resisting racism.” I was left wondering.

Admittedly, Craig and Bonner note that because they only have 1 semester with their students, they focus on the goals of noticing and challenging, and less on action. Even so, their notion of action tends to be in the form of “re-noticing” or in actions that are directed to the classroom (e.g., implementing a mathematical problem that draws on the funds of knowledge of students they have studied), not in engaging with others to dismantle systems of oppression. Again, their focus on racial identity development with roots in psychology seems to privilege an individual rather than a collective perspective.

As aforementioned, my approach to teaching privileges tensions. On the one hand, a large part of addressing White supremacist capitalist patriarchy is the mirror test (It’s all about me); yet, the goal is to reclaim the profession and that can only be done in solidarity with other professionals (It’s not all about me). When teachers are able to hold both in mind, they can work from a place that better reflects the reality in which we participate.

In discussing White supremacist capitalist patriarchy with teacher candidates, one film I find especially helpful is *Color of Fear*, a discussion among men of different racial backgrounds reflecting on White supremacist capitalist patriarchy. <https://www.youtube.com/watch?v=vBSImagHK8c> Although this film was produced in 1994, many of the points are still very relevant today. In fact, one of the prompts I use for this film is “What, if anything, from the conversation is still pertinent today?” In addition, I probe for how this conversation can inform the stances and conversations we have in teaching mathematics. For example, what kinds of things do we hear from our students, practicing teachers, peers, friends, and family members that echo parts of the conversation? And, in what ways do we feel comfortable in initiating greater dialogue? The variety of views from the White men in the film

highlights how “Whites” are not a monolithic group, shows some of the resistance tactics used by Whites who feel defensive, and helps teacher candidates identify some of the actions of White allies. The part of the conversation where people of color talk only to each other provides another level of honesty and surfaces the ways their actions may unknowingly maintain White supremacist capitalist patriarchy. This part of the film also helps add complexity to the phenomena and underscores the idea that this work is not about one individual or one group of individuals solving the problem, but rather involves being part of a larger movement.

### **Conclusion:**

The ideas of double consciousness and nesting in *Nepantla* have long been the work of people of color. The ability to see the world with contradictory lenses helps individuals deconstruct White supremacist capitalist patriarchy as “normal” or “truth” and recognize their role in colluding with or dismantling such supremacy. The point of identifying and deconstructing White supremacist capitalist patriarchy is not to replace it with another form of supremacy, so that a new group is in power. Rather, individuals who seek to deconstruct White supremacist capitalist patriarchy aim to dismantle all systems of oppression. While many people of color grapple daily with the multiple and contradictory views and identities they enact, they are not immune to maintaining White supremacist capitalist patriarchy. And, while there are fewer incentives for Whites to interrogate Whiteness or dismantle oppression, the ability to live in tensions is a stance that can be learned by others.

I have argued that more than just reflecting on the tensions and contradictions that arise in our work as teachers and teacher educators, we must work to maintain those tensions, so as not to collapse too easily into a state of resolution and false knowledge. Some benefits we gain when we maintain the contradictions/tensions is that we continue to stay connected to each other. When we are not able to make sense of our reality through only one lens, we are open to the views of others. There is a spiritual greeting grounded in Mayan philosophy that suggests that all beings are connected. It is highlighted by the saying *En Lak’ech* (You are the other me) to which the receiver responds with *Ala K’in* (I am the other you). Seeing ourselves as hybrids, our identities as contradictory, is an important step in maintaining a connection with others. Nesting in *Nepantla* also helps us as teachers and teacher educators to develop a better familiarity with uncertainty and risk, a feature that is key to all teaching. Moreover, researchers who study semiotics remind us that by continuing to hold two conflicting views side by side (e.g., a new view that traverses but is part of an old view), we are more likely to generate new knowledge. Maintaining the tensions and contradictions in our work is also necessary for all of the everyday decisions that teachers make. For example, many teachers seek to create more student voice in the classroom, to challenge what we think we know about students, and yet it is important to remember that the very mechanisms we employ to “create student voice” can lead to essentializing students or expecting them to be spokespeople for their group. The language of “Play the game/Change the game” highlights the ways in which even while seeking to dismantle systems of oppression, we are all still part of those systems.

### **Epilogue**

I feel fortunate to teach (and learn immensely from) a variety of students in my mathematics methods courses. Some are students who have been marginalized in society and want to make the mathematics learning experience a more humanized one for adolescents. Most are middle-class White females who grew up in the suburbs and envision themselves teaching back in their home neighborhoods once they graduate. Almost all of them excelled at mathematics while in high school, though that feeling of success often ends abruptly once they hit upper level mathematics courses in

college. Many have gone 19-20 years having never had any real consequences for not reflecting upon their history, their identities, or how individuals are racialized or positioned in society based upon their perceived race, class, gender, religion, or sexuality. I have worked hard to help my teacher candidates deconstruct society and the education system to see that the current version is but one of many we could have (Freire, 1970). For me, that is the first step towards helping nurture a different, more humanized, mathematics education forward. I also support my teacher candidates to construct identities that will allow them to become informed advocates for their students, to take more risks that will benefit others.

Although it may sound like I have it all figured out. I do not. I have made many mistakes as a mathematics teacher educator committed to social justice. For example, it took me several years to recognize that mathematics teacher candidates cannot “drink through a fire hose” when it comes to learning about issues of interlocking systems of oppression. Even though our time together is limited during class, I now understand that there is a delicate balance between how much I can say and how much I need to trust they will eventually say (with/to each other). On the one hand, I want them to engage with tensions and contradictions, to not seek closure. On the other hand, I do not want that process to lead them to forever question everything and never take a stand. After 20 years of this work, I have a better sense of a *direction* in which I am heading, though I certainly do not have a *destination* in mind. For now, I am happy to nest in Nepantla.

## Bibliography

- Anzaldúa, G. (1987). *Borderlands/La Frontera: The new mestiza*. San Francisco: Aunt Lute Books.
- Anzaldúa, G. and Keating, A. L. (2002). *This bridge we call home: Radical visions for transformation*. New York: Routledge.
- Ascher, M. (2002). *Mathematics elsewhere: An exploration of ideas across cultures*. Princeton, NJ: Princeton University Press.
- Ball, D. L. (1988). Unlearning to teach mathematics. *For the Learning of Mathematics*, 8(1), 40-48.
- Barrow, John. D. (1992). *Pi in the Sky: Counting, Thinking, and Being*. Oxford, London: Clarendon Press.
- Bartolomé, L. (1994). Beyond the methods fetish: Toward a humanizing pedagogy. *Harvard Educational Review*, 64(2), 173-194.
- Boaler, J. (1997). When even the winners are losers: Evaluating the experiences of 'top set' students. *Journal of Curriculum Studies*, 29(2), 165-182.
- Chinnery, A. (2008). Revisiting "the master's tools:" Challenging common sense in cross-cultural teacher education. *Equity & Excellence in Education*, 41(4), 395-404.
- Christensen, O. R., Skovsmose, O., and Yasukawa, K. (2008). The mathematical state of the world—Explorations into the characteristics of mathematical descriptions. *ALEXANDRIA Revista de Educação em Ciência e Tecnologia*, 1(1), 77-90.
- Connor, C. D. (2005). *A people's history of science: Miners, midwives, and low mechanics*. New York: Nation Books.
- D'Ambrosio, U. (1990). The role of mathematics education in building a democratic and just society. *For the Learning of Mathematics*, 10, 20-23.
- D'Ambrosio, U. (2006). *Ethnomathematics: Link between traditions and modernity*. Rotterdam, the Netherlands: Sense Publishing.
- Dance, L. J., Gutiérrez, R., Hermes, M. (2010). More like jazz than classical: Reciprocal interactions among educational researchers and respondents. *Harvard Educational Review*. 80(3), 327-352.
- Du Bois, W.E.B. (1994). *The souls of Black folk*. Chicago: Dover.
- Du Bois, W. E. B. (1897). Strivings of the Negro people. *The Atlantic*. August 1, 1897.

- Eglash, R. (1999). *African fractals: Modern computing and indigenous design*. Rutgers, NJ: Rutgers University Press.
- Fenning, P. & Rose, J. (2007). Overrepresentation of African American students in exclusionary discipline: The role of school policy. *Urban Education*, 42(6), 536-559.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Herder & Herder.
- Gutiérrez, R. (in preparation). *Mathematics as microaggression*.
- Gutiérrez, R. (in preparation). *Mathematics teaching as subversive activity*.
- Gutiérrez, R. (in press). Listening to Latin@ students. *The Mathematics Teacher*. Mahwah, NJ: NCTM.
- Gutiérrez, R. (2015). *Risky business: Mathematics teachers using creative insubordination*. A paper to be presented at the annual meeting of the North American chapter of the Psychology of Mathematics Education. East Lansing, MI.
- Gutiérrez, R. (2013a). Why (urban) mathematics teachers need political knowledge. *Journal of Urban Mathematics Education*, 6(2), 7-19.
- Gutiérrez, R. (2013b). The sociopolitical turn in mathematics education. *Journal for Research in Mathematics Education*, 44(1), 37-68.
- Gutiérrez, R. (2013, c). Mathematics teachers using creative insubordination to advocate for student understanding and robust mathematical identities. *Proceedings of the Annual Conference of Psychology of Mathematics Education North America*. Chicago, IL.
- Gutiérrez, R. (2012). Embracing "Nepantla:" Rethinking knowledge and its use in teaching. *REDIMAT- Journal of Research in Mathematics Education*, 1(1), 29-56.
- Gutiérrez, R. (2009). Embracing the inherent tensions in teaching mathematics from an equity stance. *Democracy and Education*, 18(3), 9-16.
- Gutiérrez, R. (2008). A "gap gazing" fetish in mathematics education? Problematizing research on the achievement gap. *Journal for Research in Mathematics Education*. 39(4), 357-364.
- Gutiérrez, R. and Dixon-Román, E. (2011). Beyond gap gazing: How can thinking about education comprehensively help us (re)envision mathematics education? In Atweh, B., Graven, M., Secada, W., and Valero, P. (eds.), *Mapping equity and quality in mathematics education*, (pp. 21-34). New York: Springer.
- Gutiérrez, R. & Gregson, S. (2013, April). *Mathematics Teachers and Creative Insubordination: Taking a Stand in High-Poverty Schools*. Selected paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, California. April, 2013.

- Gutiérrez, R. & Irving, S. (2012). Student centered learning: Latin@s, Blacks, and mathematics. A white paper commissioned by the Nellie Mae Foundation. Boston: Nellie Mae. Available at: <http://www.studentsatthecenter.org/topics/latinoa-and-black-students-and-mathematics>
- Gutiérrez, R., Irving, S., & Gerardo, J. M. (2013, April). *Mathematics, Marginalized Youth, and Creative Insubordination: A Model for Preparing Teachers to Reclaim the Profession*. Selected paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, California.
- Helms, J.E. (1990). *Black and white racial identity: Theory, research, and practice*. New York: Greenwood Press.
- hooks, b. (2004). *The will to change: Men, masculinity, and love*. Washington, DC: Washington Square Press.
- hooks, b. (2012). *Writing beyond race: Living theory and practice*. New York: Routledge.
- Hyland, N. E. (2000). *Threatening discourse: Cultural and contextual challenges in constructing antiracist narrative and action in one elementary school*. Unpublished doctoral dissertation. University of Illinois at Urbana-Champaign. Urbana, IL.
- Ignatiev, N. (1995). *How the Irish became white*. New York: Routledge.
- Joseph, G. G. (2011). *The crest of the peacock: Non-European roots of mathematics*. Princeton, NJ: Princeton University Press.
- López, I. H. (1997). *White by law: The legal construction of race*. New York: New York University Press.
- López, I. H. (2004). *Racism on trial: The Chicago fight for justice*. Cambridge: Harvard University Press.
- Lortie, D. (1970). *School teacher: A sociological study*. Chicago: University of Chicago Press.
- Maffie, J. *Weaving the Aztec cosmos: The metaphysics of the 5<sup>th</sup> era*. Downloaded on March 17, 2012 from <http://www.mexicolore.co.uk/aztecs/home/aztec---philosophy>
- McIntyre, A. (1997). *Making meaning of whiteness: Exploring racial identity with white teachers*. Albany: SUNY Press.
- Peterson, D. (2015). *Thinking outside the boxes: The changing face of the US Census*. Downloaded on March 5, 2015 from <http://www.las.illinois.edu/alumni/magazine/articles/2015/census/>

- Pollack, M. (2005). *Colormute: Race talk dilemmas in an American school*. Princeton, NJ: Princeton University Press.
- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender proportionality in school punishment. *The Urban Review*, 34(4), 317-342.
- Varenne, H., E. W. Gordon, and L. Lin. (2009). *Theoretical perspectives on comprehensive education: The way forward: Vol. 2*. Perspectives on comprehensive education series. Lewiston: The Edwin Mellen Press.
- Volmink, J. (1994). Mathematics by all. In S. Lerman (Ed.), *Cultural perspectives on the mathematics classroom* (pp. 51–67). Dordrecht, The Netherlands: Kluwer Academic.
- Wager, A. A. & Stinson, D. W. (2012). *Teaching mathematics for social justice: Conversations with educators*. Reston, VA: National Council of Teachers of Mathematics.
- Walkerdine, V. (1994). Reasoning in a postmodern age. In P. Ernest (Ed.), *Mathematics, education and philosophy: An international perspective* (pp. 61-75). Bristol, PA: Falmer.
- Walshaw, M. (2004). Mathematics education within the postmodern. Greenwich, CT: Information Age.
- Warburton, T. T. (2014). Discourses influencing the teacher identity of secondary pre-service mathematics teachers. Dissertation proposal. University of Utah. Salt Lake City, Utah.