COMMENTARY

Why Mathematics (Education) was Late to the Backlash Party: The Need for a Revolution

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Our lives begin to end the day we become silent about things that matter. - Martin Luther King, Jr.

When our pedagogy or scholarship involves challenging the status quo, especially on behalf of students who are Indigenous,¹ Latinx,² and Black,³ some people will go to extreme measures to silence us. Those extreme measures became apparent this year when I came under attack from the Alt-Right as a result of a "news" story that Campus Reform and Fox News produced.⁴ In a chapter of a book on scholarly practices in mathematics methods courses, I wrote about the relationship between whiteness and mathematics (Gutiérrez, 2017b). My argument had two key points: (a) mathematics operates as whiteness when we do not acknowledge the contributions of all cultures, and (b) mathematics operates as whiteness when it is used as a standard by which we judge others. The message that made headlines,

² I use the term Latinx (as opposed to Latino, Latina/o, or Latin@) as a sign of solidarity with people who identify as lesbian, gay, bisexual, transgender, queer, questioning, intersexual, asexual, and two-spirit (LGBTQIA2S). Latinx represents both a decentering of the patriarchal nature of the Spanish language whereby groups of men and women are normally referred to with the "o" (male) ending as well as a rejection of the gender binary and an acceptance of gender fluidity.

³ 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 often racialized in similar ways, regardless of country of origin.

⁴ Rather than giving traffic and further legitimacy to conservative websites, you can read a mirrored page of these stories here <u>https://equitymathed.wordpress.com/</u>.

¹ I use Indigenous and Aboriginal interchangeably. U.S. authors tend to use the term Indigenous or Native, whereas authors from Canada, Australia, and New Zealand tend to use the term Aboriginal. In Canada, Aboriginal includes First Nations, Métis, and Inuit peoples.

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however, was simply "mathematics operates as whiteness," and it got morphed into "White privilege is bolstered by teaching mathematics," which people took to mean that I was claiming either that *only* Whites⁵ could do mathematics or that we should stop teaching mathematics altogether because it was racist.

Within the first few days of the Campus Reform and Fox News stories, I was inundated with hundreds of hate-filled email and voicemail messages; trolls invaded my Twitter space; a Facebook page about mathematics education was closed for comments after being flooded with vitriol; individuals wrote to my university arguing that I needed to be fired; Alt-Right groups produced podcasts and additional stories that slandered me and my work; and Turning Point USA⁶ (a conservative group known for their bigotry and witch hunting of left-leaning professors on college campuses) placed me on the front page of their professor watch list. My college and campus also received a flood of harassing emails and calls. Some of the email messages sent to me were carbon copied to random students and faculty, thereby inflicting violence upon them, for no apparent reason other than to instill fear or have them question my scholarship. These attempts to censor faculty through swarm attacks is becoming more common in this era of "coercive efforts to control political debate" (Wu, 2017); where there is increased incivility in public spaces (Kamenetz, 2017); and where professors are unfairly blamed for indoctrinating students into more leftist views (Jaschik, 2014). Yet, a national attack on mathematics education scholars is new.

In some ways, this kind of national attack was surprising. Over the past 17 years, I had produced a number of other writings on mathematics that touched on issues of power in general and White supremacist capitalist patriarchy, in particular (see, e.g., Gutiérrez, 2000, 2002, 2009, 2010/2013,⁷ 2012a, 2012b, 2013, 2015, 2016, 2017a, 2017b). Drawing on the work of bell hooks (2004), I use the term White supremacist capitalist patriarchy to highlight the interlocking systems of oppressions at work in society. In fact, I am not alone in making these connections to mathematics. There is a robust domain of scholarship dedicated to chronicling the relationship between mathematics and power/domination in society stemming back more than 50 years (see, e.g., Bishop, 1990; Burton, 1994; Frankenstein, 1989, 1990; Knijnik, 2007, 2011; Mellin-Olsen, 1987; O'Neil, 2016; Popkewitz, 2002;

⁵ Similar to the term *Black*, I capitalize the term *White* throughout this commentary to highlight the racial category that has been constructed in society.

⁶ For a better understanding of Turning Point USA, see Bascunan Simone (2017).

⁷ I cite this article as 2010/2013 because it was published online through *Journal for Research in Mathematics Education (JRME)* in 2010 and some researchers began citing it as such then. It was not released in print until 2013, and some researchers have cited it as such since. Because the focus of the article is on a particular point in history, the work should reflect the earlier date.

Skovsmose & Valero, 2002). Moreover, a growing number of scholars have written eloquently about the connections between whiteness or White supremacy and mathematics education (see, e.g., Battey, 2013; Battey & Leyva, 2016; Bullock, 2017; Joseph, Haynes, & Cobb, 2015; Leyva, 2017; Martin, 2013, 2015; Stinson, 2013; Warburton, 2015, 2017).

The kind of attack that is launched through social media today, partly because it can be done anonymously (with stolen IP addresses or anonymous accounts), is dehumanizing and is launched against the person as opposed to the ideas or argument that a scholar has conveyed. Few of the negative responses I received through email, voicemail, or Twitter actually attended to my argument or mathematics education. Instead, the messages tended to convey White pride, pro-Trump, or anti-Latinx sentiments, such as "You are the perfect argument for why we need to build the wall!" or "Leave our country now!" or "I'm white privilege. I'll be here anytime you need to blame someone for your poor life choices." Elsewhere, I analyzed how the attack related to mathematics teacher educators (Gutiérrez, in press-b). Here, I focus more exclusively on possible reasons for a delay in attacking mathematics education and what that may mean for our work as mathematicians and mathematics education scholars.

First, I need to put this attack into a broader context. Only a few months earlier, Alt-Right groups also targeted Dr. Luis Leyva (a Latinx scholar) after Campus Reform and Breitbart published stories about his research. His work highlighted the intersecting nature of whiteness and gender as contributing to racialized and gendered spaces that produce inequities in mathematics education (Battey & Leyva, 2016; Leyva, 2017). Following these stories, he received online harassment via email, blog post comments, and tweets. Sadly, I (and many others) had not heard of that attack until I was in the thick of mine.

Around the same time, Campus Reform had produced another story, singling out two national professional organizations, the National Council of Supervisors of Mathematics (NCSM) and TODOS Mathematics for All (TODOS) for their 2016 joint position statement on social justice in mathematics education. Moving beyond typical calls for equity, NSCM and TODOS had come out strong, suggesting that mathematics teachers needed to take on an advocacy stance that "interrogates and challenges the roles power, privilege, and oppression play in the current unjust system of mathematics education—and in society as a whole" (para. 1). Shortly thereafter, Campus Reform produced another story, targeting Texas State University for posting a job announcement for a mathematics education professor with preference given to a candidate who addresses social justice issues.⁸ Although it is standard practice for job announcements to indicate they welcome candidates from un-

⁸ See <u>https://equitymathed.wordpress.com/2017/10/29/history-of-istandwithrochelle/</u> for a mirrored webpage of this story.

derrepresented groups, the story made sure to highlight this phrase, implying "those" people will bring their social justice agendas with them. Most recently, Campus Reform produced a story on Brian Lawler, Andrea McCloskey, and Theodore Chao who jointly wrote a chapter for the same mathematics methods book where my chapter appeared. Although these groups suffered no apparent backlash as a result of the stories, the trend is clear that mathematics education is now on the radar of Alt-Right groups.

Earlier this year, Dr. Piper Harron, a mathematician who is Black and studies number theory, suggested in her blog⁹ that White cis¹⁰ men consider leaving the profession to make room for more women and people of color in mathematics (Harron, 2017). Campus Reform produced an article¹¹ that launched a national attack against her, including additional stories by Breitbart and other right wing media and web outlets. She was heavily trolled and made to feel unsafe on and off campus. These are some of the recent cases of public scholars under attack within mathematics and mathematics education. They raise issues for why our field is coming under attack now, and why not before?

From Tinkering to Overhauling

Much of what currently counts as scholarship in mathematics education assumes we will work within the given system or expand what we currently count as the status quo. Within mathematics education, we have convinced ourselves that "equity" is a strong enough agenda when maybe revolution should be the goal. Elsewhere (Gutiérrez, in press-a), I have argued that equity harms our cause in mathematics education for a number of reasons, including: (a) it assumes we all mean the same thing and does not promote dialogue or creativity; (b) it only guarantees we are addressing equity when we are far from reaching the goal; (c) it tends to privilege images of teaching and learning that are universal, or that only attend to issues of access, achievement, or a bit of identity but not power in any serious way; and (d) because the term is bogged down in history.

Dr. Harron points out the irony in trying to tinker with a system in mathematics that needs overhauling. She states:

⁹ See https://blogs.ams.org/inclusionexclusion/2017/05/11/get-out-the-way/.

¹⁰ Cis gender means when an individual's gender identity matches the one they were assigned at birth.

¹¹ See <u>https://equitymathed.wordpress.com/2017/10/29/history-of-istandwithrochelle/</u> for a mirrored webpage of this story.

Most of us do not have good role models for what a feminist math department would look like. I have this talk that I give and afterwards, I will often get concerned white men asking me what they can do to fight sexism. But they're not really thinking about ending sexism. They're thinking about progress. They want to know which benefits the cis male hoarders-of-power can offer to women so that we don't feel so bad and complain so much and contribute to such dismal numbers. This is natural, reasonable even, but sexist all the same. (Blog post May 11, 2017)

Similarly, we do not have good models for what a feminist, pro-Black/Indigenous/Latinx, socialist mathematics education would look like, or if even such a thing could exist. What would a mathematics education program that took decolonization seriously look like? When I say decolonization, I do not mean something tacked on to anti-racist approaches or an approximation of other oppressions (Tuck & Yang, 2012). I mean a program that takes seriously land, sovereignty, and the history of erasure of people through culture and language. I acknowledge the ways in which mathematics teaching and learning contributes to the denial of language and history for Indigenous students primarily. How do we create a system that does not just give some of the breadcrumbs to others but emancipates people from colonialism? First, we must begin by acknowledging settler colonialism and ask whose history and whose language is part of mathematics? We cannot claim as our goal to decolonize mathematics for students who are Black, Latinx, and Aboriginal while also seeking to measure their "achievement" with the very tools that colonized them in the first place. When we consider the relationship of power to mathematics, we cannot be content with notions of power that are limited to solving difficult problems in mathematics classrooms. We must be open to deconstructing power dynamics, challenging authority, restoring peace and dignity, repairing settler colonialism, and positing new questions that need to be asked. Dismantling White supremacist capitalist patriarchy is one step in the right direction and, perhaps, one reason we have caught the attention of the Alt-Right who seek to protect the status quo.

Mathematics education as a broad field has tended to be complacent with tinkering toward utopia. Documents such as the *Curriculum and Evaluation Standards for School Mathematics* (National Council of Teacher of Mathematics [NCTM], 1989), *Professional Standards for Teaching Mathematics* (NCTM, 1991), *Assessment Standards for Teaching Mathematics* (NCTM, 1995), *Principles and Standards for School Mathematics* (NCTM, 2000), and *Principles to Actions: Ensuring Mathematical Success for All* (NCTM, 2014) have tended to produce the same kinds of recommendations—grade level scope and sequences, processes important for learning, and attention to equity. But there is little in these documents that acknowledges the role of mathematics education as a field that creates the very inequities it seeks to address (Martin, 2015).

The *Standards for Preparing Teachers of Mathematics*, produced by the Association of Mathematics Teacher Educators (AMTE, 2017), however, take a more

directed approach in addressing issues of identity and power. Similar to the aforementioned NCSM/TODOS position statement on social justice, AMTE states:

Well-prepared beginning teachers of mathematics understand the roles of power, privilege, and oppression in the history of mathematics education and are equipped to question existing educational systems that produce inequitable learning experiences and outcomes for students. ... They are prepared to ask questions as needed to understand current policies and practices and to raise awareness of potentially inequitable practices. These practices are particularly important related to students who are Black, Latinx, American Indian, emergent multilingual, or students living in poverty. (p. 23)

Even so, the mathematical content and much of what counts as pedagogy within the AMTE Standards continues to align with the status quo. There is acknowledgement that the system has failed Latinx, Indigenous, and Black students in their mathematical learning and, therefore, requires attention to such things as the history of mathematics. However, the standards are not written in a way that puts those students first, something that would require overhauling the system.

In some ways, we were surprised by the attack on me, and others, in mathematics education because we had not embraced the fact that our work could have that upsetting effect. Perhaps we believed, like others, that our scholarship was neutral or absent from politics. Many of us have certainly been conditioned to think that way. Scientists and Engineers for Social and Political Action (SESPA) have highlighted how one problem with adequately understanding and addressing social and political issues through science is the way scientists are trained:

Consider first the training of the scientist. In the classroom and laboratory the myth of an apolitical, benevolent science prevails. Graduate school, and often undergraduate education, involves a near total submersion of the student in technical material with little if any historical or philosophical perspective. Research productivity is the measure of worth as the student acquires skill in a specialized field. Technical questions are isolated from their social and economic context (e.g., the use of science) except for perhaps consideration of the prestige and financial status of the researcher. Thus the end product of this training is a narrow specialist—one taught to perform scientific miracles without considering their political implications—a reliable tool of the power structure. Another aspect of this training is an ingrained sense of elitism. Courses are designed to select and separate out potential scientists from their fellow students. Those who succeed are led to view themselves as members of an elite intellectual class. (Boston SESPA Teaching Group, 1974, p. 7)

The group is describing the training of a scientist over 50 years ago, but the description easily fits the mathematician and many mathematics education professors today. Few are ever required to think deeply about the ethical implications of their work when funded by the Department of Defense, Silicon Valley (García Martínez, 2016), other industries (O'Neil, 2016), or even universities (Hersh, 2014).

This idea of mathematics separate from politics is perpetuated even in these attacks. Mathematics is the last place one would expect someone to claim that it relates to White supremacy. The White Genocide Project suggests the ridiculousness of the claim simply because it involves mathematics, a discipline that could not reasonably have anything to do with whiteness: "Now, even mathematics is being thrown to the floor and buggered by the anti-white louts who've taken over the universities." In a similar vein, the American Thinker blog adds, "It's finally happened: Professor claims math perpetuates 'white privilege!""

By claiming, "even mathematics is being thrown to the floor" and "it's finally happened," these Alt-Right groups are relying upon a view shared by many that mathematics is objective, pure, and culture-free (Burton, 1994). By focusing on mathematics, they are using our work to prove that anti-White sentiments must abound in universities if comments like these can arise in disciplines that have nothing to do with power.

As the title of this commentary infers, I argue that mathematics was late to the backlash party because we have not been making institutional or structural changes that would impact society; our agendas have been aligned too closely with the status quo, with a system of education that is not meant to support students who are Black, Indigenous, or Latinx (especially womyn and people who identify as queer). As such, we are not seen as a threat.

What if we began with the premise that our work would call for such radical and systemic changes that it would threaten those who currently benefit from the system? Rather than being surprised, we would anticipate the backlash. But history shows us that we cannot look within mathematics or mathematics education to imagine such radical changes; we need to look elsewhere for those models.

Looking Outside of Ourselves

When we look elsewhere, we can reimagine a new way of doing things, based on different values/principles, with different goals, and different systems for considering how well things are working (e.g., how well our field and its related practices reflect the principles upon which we say they rest). Rather than beginning with the principles of logic, proof, and universality as indicative of mathematics, we might look to see ourselves in others and others in us, providing windows and mirrors, reflecting reciprocity, uncertainty, and pattern as problem solving and joy, something I have referred to as mathematx (Gutiérrez, 2017a). I have suggested that we no longer hold humans as the center, that we challenge where learning should take place and with what guiding principles, and that we rethink whom our new teachers might be. This rethinking is not simply a call for a broadened view of ethnomathematics, but a radical shift in how we do mathematics, for what purpose, and how that influences us and our relationships with others in this universe. This rethinking is not simply a challenging of dehumanizing practices in a system that already exists but a re-envisioning of our discipline.

When we look to other disciplines, we see that their goals are not simply to have historically oppressed people viewed as legitimate participants in the discipline as defined. They are seeking to radically change the discipline itself, partly through putting the needs, views, and contributions of historically oppressed people first. That is, in contrast to "equity" or "social justice" language within mathematics education, other disciplines have been more forthright in addressing identity and power head on. For decades, ethnic studies programs, departments of English, and even literacy professionals in K–12 schools have been: questioning what counts as the "canon;" expecting to see different kinds of authors/perspectives on the discipline; choosing to teach "controversial" texts; recognizing there is no one "truth" but only interpretations; and rethinking literacies and knowledge. Perhaps as a result, there is greater infrastructure for such disciplines to deal with backlash. See, for example, the National Council of Teachers of English's Intellectual Freedom Center that supports English teachers under attack for the texts they choose to use.¹²

In doing this work, ethnic studies programs have experienced a long history of backlash from those who seek to protect the status quo, including from administrators at the very universities that house them (Chang, 1999) or from conservative politicians who want to control the K–12 curriculum (Calacal, 2017). Opponents have presented La Raza/Mexican American Studies (MAS) programs as "courses that promote the overthrow of the United States government" or that "promote resentment toward a particular race or class of people" and as being taught by "radical instructors teaching students to be disruptive" (Calacal, 2017). What arises from these debates is the political clarity of the teachers. Proponents of MAS programs have rejected current versions of culturally relevant curriculum because it lacks the critical focus on race theory and pedagogy that were at the heart of the 1960s protests to create such programs.

We can benefit from understanding how other disciplines (e.g., ethnic studies) have used their backlash to their benefit. After House Bill 2281 was passed in 2010 to ban the Mexican American Studies course in Tucson, Arizona, teachers pushed back and led the movement to strengthen the program, including librotraficantes— people who smuggled banned books into mobile underground libraries where students would have access—and to expand the courses nationally (Phippen, 2015). Students supportive of MAS chained themselves to each other and desks in the district boardroom in a similar manner to the East LA 13 high school students who organized thousands of Chicanos to walkout of their schools in 1968 (Smith, 2013). In addition to filing a lawsuit against the state board, some teachers began holding

¹² See <u>http://www2.ncte.org/resources/ncte-intellectual-freedom-center/</u>.

Sunday gatherings to teach the courses through a liberal arts college where students would receive college credit. Meanwhile, students used social media to broadcast to the world the fact that officials were collecting textbooks in order to enforce the ban on MAS. All this attention created solidarity among teachers, students, and scholars across the nation, further strengthening their resolve to keep MAS curriculum and expand it to other places. Although the threat to dismantle these programs remains, as a result of the backlash and community organizing, now every school in the city of San Francisco offers ethnic studies. More importantly, there is a network of scholars and community members ready to act if another ban arises. We need to create alliances with such groups who can teach us about how they have negotiated backlash on their work over the years.

The field of Science, Technology, and Society (STS) has paved the way for many advances in our field by taking seriously intersectionality and colonialism. That is, STS has documented how science and society co-construct. The importance of the history of mathematics is not just to show that certain racial or cultural groups contributed to the knowledge we have today but to also highlight the ways in which settler colonialism or White supremacy are linked to scientific projects (e.g., astronomy being developed to help Europeans identify the location of slaves and to make efficient the export of their labor [Prescod-Weinstein, 2017]). In looking to other disciplines, we need to ask ourselves how we can take more and higher risks in our everyday work? That is, we need to be arguing for a deep sense of education, not compliance. Mathematics education researchers need to be embracing activism, as opposed to seeing it as activity that only bad, trouble-making, unprofessional scholars, or ones who do not really "know their mathematics," engage (Gutiérrez, 2017b; Picower, 2011).

A Revolution in Mathematics (Education)

Having been raised in a Chicanx activist family, I already understood the power of organizing. One thing that has been underscored from this attack is that we cannot create a revolution by ourselves; we need accomplices (not allies) in this work (Indigenous Action, 2014). That is, we need people who are willing to stand with us, around us, so that those who attack us will need to go through them (first). Having accomplices is different than having allies who support with solidarity, cheer loudly from the sidelines, or who safely stand on the sidewalk with their signs. Accomplices do what Delores Huerta called for when organizing for the rights of Chicano farmworkers: "Walk the street with us into history. Get off the sidewalk."

Mathematicians are one group who are showing some promise in the arena of being our accomplices.

An accomplice as academic would seek ways to leverage resources and material support and/or betray their institution to further liberation struggles. An intellectual accomplice would strategize with, not for, and not be afraid to pick up a hammer. (Indigenous Action, 2014, p. 5)

Rather than absolve themselves from the politics or try to speak for us as mathematics education researchers, when the attack on me occurred, many mathematicians deferred to us as the experts of our domains. They also communicated to other mathematicians the value of our work and the impossibility of separating politics or domination from mathematics and thereby used their privilege to lend credence to our position. They blogged and tweeted about our issues and pointed their readers to our work (Karp, 2017; Katz, 2017; Lamb, 2017). They wrote letters to our administration and Op-Ed pieces to newspapers. They invited us to give talks at mathematical conferences, in their mathematics departments, and in their colloquia series. They read and discussed our work in their lab spaces and gave us feedback. They invited several of us in mathematics education to the Joint Mathematics Meetings and organized receptions and small gatherings to help continue the momentum and to educate their members on these issues. Many of the mathematicians I know did not shy away from the "politics" or ask me not to use words like White supremacy when naming the relationship between mathematics and power. I saw a different relationship between mathematicians and mathematics education researchers than what happened over a decade ago to Jo Boaler (Boaler, 2012), whose main opposition came from mathematicians.

The attack on our field was meant to discredit all of us who work to document and abolish the relationships between current forms of mathematics education and White supremacist capitalist patriarchy. Instead, it seemed to spark greater allegiance and create or strengthen networks that had not existed or were previously weak. In some ways, the attack gave us greater exposure and legitimacy, as more thoughtful citizens chose to read our work. One question that looms is how will this play out going forward? How will mathematics education (and mathematicians) act and interact in the future when further attacks arise? For those who were paying attention, there was great concern for the health of our field and the scholarship that attends to dismantling White supremacist capitalist patriarchy in connection to mathematics. But, more should be feeling moral outrage at the current state of affairs (Spencer, 2015).

Throughout history, we have seen how some mathematicians have done this political work themselves. Scientists and Engineers for Social and Political Action (SESPA), a group that later became Science for the People during the Vietnam War, is one example. They produced a magazine that chronicled their efforts and the successes they achieved. Another group, founded in 1973, alongside of the Chicano Movement and the Native American Civil Rights, the Society for Advancement of Chicanos and Native Americans in Science (SACNAS) sought to highlight

how Indigenous mathematicians/scientists have carried out their work while negotiating a racist society. SACNAS did not assume that members could attend their national conferences and only talk about "pure" science. They embedded Native worldviews and rituals that celebrated what traditionally was erased from society. How might we draw lessons from these professional groups to understand how mathematicians and mathematics education researchers might join forces to radically reimagine a more humane practice?

Neither perfect articulations of the problems with the current system nor literature to back it up will be enough to sway policy makers or school officials to alter what they are currently (or have been) doing. Instead, it will require an insurgency by the people; a rejection of a bill of goods that suggests being a winner in a colonizing system is any prize at all. We need a rejection of the hyper evaluation processes that occur in mathematics classrooms, and perhaps an elimination of classrooms altogether. We need a movement like the Civil Rights or Science for the People to catalyze social transformation. Yet, unlike the Civil Rights Movement that argued for obtaining a share of the settler wealth that was stolen, our goals should be to return the wealth to their proper owners. Critique or critical consciousness cannot be the goal. We must be willing to reject domination and exploitation in various forms. Such exploitation includes forms of packaging and selling social justice programs to districts that require people of color to pay for their own internalized colonialism (Gutiérrez, 2017b) or for the right to count in a STEM (science, technology, engineering, and mathematics) based society (e.g., Bullock, 2017).

Some of the things we might consider in future work include:

• Reframing of Scholar

In the 1960s and 1970s, the Black Panther Party inspired health activism (e.g., desegregating hospitals, sickle cell anemia screening, Free Breakfast for Children). At the time, health was seen as a basic human right. Which groups might help support activism in mathematics? The Algebra Project (e.g., Moses, Kamii, Swap, & Howard, 1989) is well on its way in reimagining mathematics education by paying Black and Brown students in "eduprises" to teach each other mathematics and develop into leaders (Gillen, 2014; J. Gillen, personal communication, November 29, 2017). What other re-visions could we imagine? In framing this work, what might be the role of scholar activists? In the 1830s, Black scientists such as Martin Delany and Sarah Mapps Douglass used their discipline to support their arguments for emancipation (Rusert, 2017). Among other things, they delivered scientific lectures that included astronomy and maps to help others chart a course for freedom and had Black girls use their own bodies as anatomical models. Activists in the Civil Rights Movement won battles through legal means, negotiations, petitions, and protest demonstrations. What might these look like in mathematics education?

What would a mathematics education scholar look like that serves not the university but the most vulnerable/dehumanized?

• Decolonizing Readings Lists and Resources

Chonda Prescod-Weinstein has created a readings list for decolonizing science education.¹³ We need to create one in mathematics. And then, we should consider how to include those pieces in readings lists for Ph.D. qualifying exams, National Science Foundation program officers, and mathematics department chairpersons but also local school councils, leadership institutes, book clubs for teachers/students/community members, journalists, policy makers, and others. What other resources would be critical to overhauling the system, rather than tinkering?

- Rethinking Programming and Professional Development
 - What forms of graduate education would better prepare mathematicians and mathematics education scholars to understand the relationship between the humanities and the sciences? To see the relationship between White supremacist capitalist patriarchy and mathematics? To question the current state of affairs and know how to channel their outrage into new research projects that are designed to honor reciprocity with the communities they most wish to engage? Which mathematics programs serve as models for effectively preparing their graduates to understand issues of colonization and oppression as it relates to mathematics? What are the mechanisms through which they accomplish this work? Which graduate programs in mathematics education do the same? And what are their mechanisms? Which programs require their graduates to consider the ethical implications of the mathematics they practice?
- Networking among Mathematicians and Mathematics Education Researchers Rather than superficial naming of committee members from outside of mathematics education onto mathematics education dissertation committees, what might it look like to have meaningful engagement with other fields (e.g., more in line with minoring in another field)? Should mathematics education graduate students be required to read outside of one's field for qualifying examinations? Might there be a role for mathematics education researchers to guest blog on mathematician-led blogs, and vice versa? What kinds of coalitions can develop between mathematicians and mathematics education researchers to address social and political action in society? Between these groups and teachers? And community members? What would it look like to have local

¹³ See https://medium.com/@chanda/decolonising-science-reading-list-339fb773d51f.

chapters of an organization like SESPA that was geared to mathematicians and mathematics education researchers? To whom would these groups address themselves? To colleagues? Students? Community groups? Political groups? Policy makers? Journalists?

• Developing a Set of Principles to Guide the Field

Other movements have begun with a set of unwavering principles. See, for example, those of the Black Lives Matter movement.¹⁴ If womyn scholars of color in mathematics education were to write a manifesto or develop a statement of principles relating to a decolonized or rehumanized mathematics, what might it include? How might we use such a set of principles to hold ourselves accountable to a standard? How might that set of principles guide the field on the aforementioned areas (e.g., reframing of scholar, decolonizing reading list, rethinking programming and professional development, networking among mathematicians and mathematics education researchers)? Given those principles, what is the next set of critical conversations we must have in and about our field?

The attack on me, and others, has shown that when we present arguments that challenge White supremacist capitalist patriarchy head on, we pose a threat. The Alt-Right will use their power to launch personal attacks on individuals, co-opting our language and twisting our words to make it seem as though *we* are the ones who are discriminating or doing evil. They will tell their readers explicitly how to use social media and what to say to flood our inboxes. However, if we stand side by side as accomplices, not allies, we will be stronger. It is much more difficult to launch an attack on a field than on an individual. Understanding how these attacks work and having a game plan for responding is key. I am reminded of a Mexican proverb with which I was raised: *Quisieron enterrarnos sin saber que éramos semilla* (They tried to bury us; they didn't know we were seeds).

When the attack on me was launched, I did not suffer alone. Instead, leaders of professional organizations wrote public letters in supporting scholars whose research addresses issues of power, privilege, and oppression and who challenge the status quo; many individuals wrote to my campus administration with support for me and my work; educators blogged or responded on my behalf on Twitter. And, someone created the website that housed the timeline and resources for other scholars under attack.¹⁵

¹⁴ See <u>http://blmdetroit.org/principles</u>.

¹⁵ See <u>https://equitymathed.wordpress.com/2017/10/29/history-of-istandwithrochelle/.</u>

It was a proud moment for mathematics education researchers and mathematicians who stood together and communicated, "Not on our watch." However, we were, nevertheless, caught off guard because for so long we had slid under the radar of Alt-Right groups who have been busy targeting critical scholars in other disciplines. Instead of seeing the attack as an isolated incident, we need to be planning for the next one—organizing ourselves, strengthening our networks, building resources and models, setting precedents, and creating infrastructure and policies in universities and professional organizations to better support future scholars under attack. And, in those efforts, we must begin with a focus on womyn of color. There will certainly be more attacks and the next time we need to be savvy about how to respond. If there is one lesson I believe mathematics education should take from this attack, it is that we were late to the backlash party because we were not doing enough in our field to get noticed. Now, if we take that idea seriously, what do we plan to do about it?

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