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EDITORIAL

"…and a Little Child Shall Lead Them"

Jacqueline Leonard
University of Wyoming

A visit to the National Civil Rights Museum in Memphis, Tennessee, allowed me an opportunity to learn about the African American experience in the United States since 1619. An exhibit entitled "A Culture of Resistance: Slavery in America 1619–1861" drew my attention because of its historical significance as well as its relationship to the research I have been conducting on how Black lives matter in mathematics education. This work promotes using data on racial profiling, housing equality, voting rights, elections, and historical data related to the Black experience in America (Leonard, 2019). For example, Black men were not allowed to vote until 1867 even though slavery ended with the Emancipation Proclamation in 1863. Blacks continued to be disenfranchised at the ballot box through Jim Crow laws (i.e., literacy tests, poll taxes, and grandfather clauses). Understanding the struggle for voting rights and using technology to find ancestors who voted in 1867 and beyond are powerful experiences that can be used to teach mathematics for social justice. Thus, the museum offered me a new window to continue this work.

Visiting the museum brought three thoughts to mind as I drove down Mulberry Street to park in an adjacent car lot. Within the context of the Black struggle in the United States, my first thought was the boycott, which was used effectively in southern cities like Montgomery, Alabama, to protest segregation on city buses. It was not uncommon to find Whites riding in the front of the bus and Blacks in the back. I remember riding in the back of the bus in St. Louis, Missouri, during the early 1960s. A little-known fact, however, is that the first African American woman in Montgomery to refuse to give her seat to a White person was 15-year-old Claudette Colvin on March 2, 1955 (Hoose, 2009). Later that same year, the famous boycott of buses began in Montgomery. Jo Ann Gibson Robinson, an English professor at Alabama State College, promoted the boycott by distributing 35,000 flyers in the Black community (Osborne, 2006). Yet, the Montgomery bus boycott, with Rosa Parks as the central figure, lasted from December 5, 1955 to December 20, 1956 and was notably the first large-scale demonstration against segregation in the United States (History.com Editors, 2019). The boycott remains an important tool of protest in the Black community. On October 10, 2019, there was a booth on Mulberry Street that called for a boycott of the museum itself (see Figure 1).

JACQUELINE LEONARD is Professor of Mathematics Education in the School of Teacher Education, University of Wyoming, 1000 E. University Avenue, Department 3374, Laramie, WY 82071; email: jleona12@uwyo.edu. Her research interests include computational thinking, self-efficacy in STEM education, culturally specific pedagogy, and teaching mathematics for social justice.

Figure 1: Photograph courtesy of Jacqueline Leonard.

Although freedom of speech is a constitutional right, I wondered why Black people would want to boycott a museum that promotes knowledge and history of the Black struggle in America. The sign seemed to focus on the $10 million spent on the museum and the souvenirs that could be purchased inside. Most of the workers inside the museum, however, including the security guards, ticket agents, docents, and cashiers in the gift shops, were Black. Moreover, Black architects, contractors, and donors were involved in building the National Civil Rights Museum. Why do protestors think Dr. Martin Luther King, Jr.'s name is being desecrated as the sign suggests? Dr. King was in Memphis primarily to focus on sanitation workers' wages, safety, and job benefits. Would he be opposed to the museum's proceeds going to support jobs in the Black community? Those who support the boycott raise the question of who in the community may benefit more from the construction and the proceeds of the museum. Surely, the museum serves a purpose solely by sharing knowledge and history about the Civil Rights Movement and, thereby, benefits everyone in the community. I was left wondering what conversations need to take place to bring ideas and people from all sides of the argument together to allow for broader understanding. Undoubtedly, what is just or unjust in this particular context is complex.

Even more complex, were some of the exhibits in the museum, which brings me to my second thought about desegregation in public schools. One of the exhibits focused on *Brown v. Board of Education* (1954). As part of this exhibit, a film explained the cases brought forth by two prominent Black lawyers, Charles Hamilton Houston and Thurgood Marshall, to dismantle racism in education and housing. The exhibit also explained that the U.S. Supreme Court decision on May 17, 1954 to desegregate U.S. public schools was not and is not without controversy. The positive impact of the decision was the admission of Black students to predominantly White colleges and universities and the desegregation of K–12 public schools. A negative impact of *Brown v. Board of Education*, however, was the mass firing of Black teachers when schools were closed as a result of desegregation, meaning that many of their previous students were now under the instruction of predominantly White teachers (Tillman, 2004). Moreover, some public schools were shut down for months if not the entire academic year as part of the fallout (Beals, 1994). The immediate

consequences of *Brown v. Board of Education* were significant, but the decision's long-term effects, though just as impactful to society, are more nuanced. For example, the majority of Black and Brown children today are still attending segregated schools because the neighborhoods in which they live remain highly segregated (Leonard, 2019). Thus, the decree had both positive and negative ramifications for Black students and teachers alike and the communities in which they lived and continue to live.

The majority of the teachers who work with children from underrepresented communities continue to be predominantly White (Madkins, 2011; Villegas & Irvine, 2004), as the teaching profession continues to grapple with recruiting and retaining Black and Brown teachers (Evans & Leonard, 2013; Leonard, Burrows, & Kitchen, 2019). A survey conducted in 2016 revealed 80% of the teacher workforce is White, while 9% is Hispanic and 7% is Black (Loewus, 2017). These statistics reveal the percentage of Hispanics teachers rose 1% from 2012 to 2016 (Loewus) while the percentage of Black teachers decreased 1% from 2010 to 2016 (Evans & Leonard, 2013). Thus, having a teacher of mathematics who is Black or Brown continues to be unlikely for most children of color. Villegas and Irvine (2004) contended that teachers of color who are familiar with marginalized students' cultural backgrounds are more likely to establish positive relationships between the home and school, thus enriching learning. Such relationships are critical to enhancing learning in high-status courses like mathematics, especially in high-poverty schools that serve predominantly Black and Brown students (Clark, Frank, & Davis, 2013).

Historically, young Black children have been a force for change in education. In the struggle to integrate public schools, Black children put their lives and bodies on the line to integrate public schools in the South and to bring about the potential for change in the American culture of education (e.g., Clinton Twelve, Little Rock Nine). Another exhibit at the National Civil Rights Museum in Memphis explained that 2,500 children (10 children per minute) were arrested in Birmingham, Alabama, on May 6, 1963. Under the leadership of Fred Shuttlesworth, James Bevel, and Dr. Martin Luther King, Jr., elementary and secondary students participated in nonviolent demonstrations by walking from the 16th Street Baptist Church to City Hall. There were both praise and criticism over the decision to allow children to participate in the Civil Rights Movement. The indelible images of children being knocked down with high-powered fire hoses and assaulted by the sharp teeth of barking dogs were etched in my brain as a 6-year-old child in 1963. These same harrowing memories came flooding back when I saw the images on full display at the National Civil Rights Museum in 2019. These surreal images moved a nation, President Kennedy, and, in turn, President Johnson to act in behalf of Black (and all) citizens (e.g., Civil Rights Act of 1964 and the Voting Rights Act of 1965).

The impact of young protesters during the Civil Rights Movement had effects that reached far beyond Birmingham and the United States. In mathematics education,

the works of Gutstein (2006, 2013), Martin (2009), and Leonard and Martin (2013) were grounded in the Civil Rights Movement and revealed the positive impact of children's efforts to understand and use social justice for empowerment. This work, along with the current call for papers by the *Journal of Urban Mathematics Education* (*JUME*), which asks for other pieces related to teaching mathematics for empowerment, brings me to my third point.

With *JUME*'s recent change in editorial leadership, there are some scholars of color who have chosen to boycott the journal. There may be myriad reasons for them to boycott, and the scholars are within their rights as citizens to do so. Nevertheless, the implication reminds me of the complexity I witnessed at the National Civil Rights Museum. *JUME* is a free journal that serves as an outlet for doctoral students and junior scholars to write about issues that impact predominantly urban children of color. There are no dollars at stake, so who hurts or benefits the most from a boycott of *JUME*? What would the boycott achieve except to delay progress in our field and create dissention among those most committed to change in our field?

If we are on the side of social justice, we should work together to bring about educational reform to benefit the descendants of 400 years of chattel slavery and the progeny of children who stood up against Jim Crow laws and segregation, as well as the Indigenous and migrant students who also suffer from generational racism and oppression that have negatively impacted their education. The plethora of problems plaguing the educational system allows space for mathematics educators and researchers of all backgrounds to unite with one voice to transform the nation's schools. The severity of the need renders our differences petty in comparison (Ladson-Billings, 2006).

Having recently moved to the greater Memphis community for a visiting professorship, I am appalled at the poverty I witness but am energized by the opportunity to engage with students in science, technology, engineering, and mathematics (STEM) education. I am inspired by the efforts I see from communities and institutions with privilege to help break the cycle of poverty in economically depressed areas of the city. For example, a local Methodist church is working with students in a reading program at an inner-city school. Furthermore, Rhodes College has a new urban education teacher licensure program to address the need for culturally relevant teachers in classrooms of diverse students. Many opportunities are denied to students due to their race, language, class, gender, citizenship status, and so forth; this is a barrier to student success that should be eradicated, and it is encouraging to see local organizations work toward making this happen.

To personally address the lack of opportunities many students face, I plan to work with university faculty and community-based leaders in Memphis, St. Louis, Denver, and Cheyenne to offer weeklong summer camps in 2020 on computational thinking to support STEM education among underrepresented, upper-elementary students. In these camps, children will lead the effort to become creators instead of

merely consumers of technology and STEM more broadly (Kafai & Burke, 2014; Leonard, 2019). Children will also be engaged in activities that allow them to engage in computer coding to model and create 3D images of interest to them (Kafai & Burke, 2014). They will also learn about flight, research the men and women of color who were pioneers in aviation and space, and use drones to investigate urban issues of significance to them. The goal is not to "fix" these children, but rather to self-empower them like the children of the 1960s, specifically by allowing them to tell their stories using digital tools (Kafai & Burke). These stories can become the springboard to engage children of color in STEM while demonstrating their brilliance in computational thinking and mathematics (Leonard & Martin, 2013).

The primary goal of this work, supported by the National Science Foundation, is to increase underrepresented student interest and access to STEM. We must work with communities of color to ensure that school curriculum is important and relevant to them. I have learned from my work with Indigenous communities that teachers and elders must be integrally involved in the planning, implementation, and delivery of relevant curriculum (Leonard et al., 2018). When researchers value the cultures, histories, experiences, and abilities of the communities they study, participants are not only self-empowered with the tools to tell their own stories but begin to change the narrative of how they are viewed in society at large.

Furthermore, as mathematics educators and scholars, we must also be cognizant of community goals and participant buy-in to ensure that we do not ourselves engage in interest convergence. Interest convergence is defined as a condition when racial equality is championed only when it converges with the interests, ideologies, and beliefs of the status quo (Bell, 1980). Interest convergence is manifested when, for example, minority participation in the STEM workforce is connected to national interest, such as international dominance in STEM (Martin, 2009). If we are honest, we benefit directly and indirectly from the research that we do with children of color in the tenure and promotion process. None of us, whether White male, Black female, or LGBTQ faculty, for example, are blameless. We are beneficiaries of the institution of higher education and benefit from the elitist system we often criticize. Yet, as part of the hegemonic system that oppresses others, we have a responsibility to critique it. Although critique and even boycotts are necessary, we should understand the ramifications of our actions and engage in collaborative efforts that lead to justice and systematic change.

The children of the Civil Rights Movement provide excellent role models for other children to participate in nonviolence to promote social justice. From Ruby Bridges to Claudette Colvin, children engaged in acts of social justice that provoked a nation to change laws and broaden educational opportunities. Yet, over six decades later, there is still work to be done. Black children have mathematical brilliance that needs to be noticed. I first witnessed their brilliance 35 years ago in Project SEED classes in Dallas, Texas (Leonard, 2019). Black children demonstrated their mathematical

prowess when they used computational thinking to explain why any number to the zero power is equal to one. They also used call and response and chorus reading to generalize mathematical properties, such as associative and distributive properties. On the contrary, I have observed teachers' failure to recognize Black students in everyday classrooms despite them flailing their arms to be called on to answer a mathematics problem. Similar to demands for equal education in the 1950s, teaching children how to use mathematics for social justice can lead to demands for more rigorous and relevant mathematics education. When this happens, mathematics education may truly be transformed.

> The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and young lion and the fatling together; and a little child shall lead them. (Isaiah, 11:6, KJV)

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