Teaching Mathematics for Social Justice: An Ethical and Moral Imperative?

David W. Stinson

Georgia State University

Fear and Stress in the Police Department (*The New York Times*, March 5) – The acquittal last week of Officer William L. Walker by an all-white jury in Brooklyn on charges that he murder a young black man named John Brabham would be troubling in any event. Unfortunately, in context the Walker case is even more disturbing. *Over the past four years, three other blacks—Clifford Glover, Claude Reese Jr. and Randolph Evans—have been shot and killed by white police officers* in New York in circumstance that have frightened and enraged residents of black communities and have troubled thoughtful citizens everywhere. (Editorial Board, ¶ 1, emphasis added)

Rapes at Hunter Spark Student Protest (*The New York Times*, September 30) – More than 100 student demonstrators, angered over the rape of three students at Hunter College in the last two months, invaded the office of the school president yesterday to demand more guards and tighter security, which was cut over the summer as a result of the city's fiscal crisis. ...

Afterward, the dean announced several limited security measures. But she emphasized that students [i.e., the female students] should take greater personal precautions and noted that no funds were available to hire more guards to patrol the 16story main building, which has 15 exits, hundreds of classrooms, offices and laboratories and thousands of students. (McFadden, ¶ 1 & 3; emphasis added)

Mexicans Protest an Intensification of Inspections at Border in El Paso (*The* New York Times, March 12) – Mayor Ray Salazar castigated the Immigration and Naturalization Service yesterday for having created "a potentially dangerous international situation" along the United States–Mexico border here by stepping up its inspections. (Crewdson, ¶ 1; emphasis added)

The often-quoted epigram *The more things change, the more they stay the same* is attributed to the 19th century French journalist and satirist Jean-Baptiste Alphonse Karr. Those who often find themselves on the non-privileged side of discursive identity binaries (cf. Derrida, 1974/1997) can certainly attest to the paradoxical truth found in the nearly two centuries old saying (e.g., White/non-White, man/non-man, wealthy/non-wealthy, able/non-able, Christian/non-Christian, citizen/non-citizen, English speaking/non-English speaking,

DAVID W. STINSON is an associate professor of mathematics education in the Department of Middle and Secondary Education in the College of Education, at Georgia State University, P.O. Box 3978, Atlanta, GA, 30303; e-mail: <u>dstinson@gsu.edu</u>. His research interests include exploring socio-cultural, -historical, and -political aspects of mathematics and mathematics teaching and learning from a critical postmodern theoretical (and methodological) perspective. He is a co-founder and current editor-in-chief of the *Journal of Urban Mathematics Education*.

heterosexual/non-heterosexual, etc.). The above headlines with accompanying introductory text, pulled from *The New York Times*, clearly illustrate this *change–same cycle*, if you will. In that, these headlines, which can readily be mapped onto recent national events, are neither from last week, last month, or last year, nor even from the last decade, but rather from the mid-to-late 1970s (specifically, 1977, 1975, and 1979, respectively).

Why headlines from the mid-to-late 1970s? These years were my teenage years (I graduated from high school in 1979). I have been thinking a lot about my teenage years recently with the ongoing realization that many present injustices are, unfortunately and eerily, too often repeats of the past. Nevertheless, in many ways, both as a child and as a teenager, I was oblivious to most national (and global) injustices that occurred during the 1960s and 70s. Back then, it was as if children, even teenagers, were somehow protected or shielded from being aware of the injustices of the day; that is, unless the injustices were directed toward them and/or their community. Or, more aptly, I should say, being shielded from the injustices of the day was true for most of the children in the racially (White) and religiously (Protestant) segregated, blue- and white-collar, lower middle class community in which I grew up. In making such a statement, I clearly recognize the danger in both romanticizing the past and generalizing my childhood. I wish to do neither. But, suffice it to say, most communities (those with privilege and those without) in the 1960s and 70s had some means of shaping messages about injustices for their children (even if that shaping meant not mentioning injustices at all).

Today, however, it is practically impossible for children and teenagers to escape from being aware (some more so than others) of present and past injustices. It matters not, for example, if the injustice happens in Ferguson, Missouri; Charlottesville, Virginia; or Austin, Texas; awareness of injustices is no longer isolated to particular individuals or groups and/or communities. With access to Facebook; Twitter; Google; and tens of dozens of blogs, print and online magazines and newspapers, and radio and television stations (many specifically targeted to children and teenagers), children of all ages, from all communities, are aware (some more so than others) of local, national, and global injustices.¹ And although children in the United

¹ Access to information is a change that will never be the same and will be forever changing. Borgman (2000), however, provides some important caveats to this statement:

In view of the undisputed magnitude of some of these developments [increased access to information through technology], it is reasonable to speak of a new world emerging. It is not reasonable, however, to conclude that these changes are absolute, that they will affect all people equally, or that no prior practices or institutions will carry over to a new world. Nor is it reasonable to assume that any individual institutions, whether libraries, archives, museums, universities, schools, governments, or businesses, will survive unscathed and unchanged into the next millennium. Strong claims in either direction are dangerous and misleading, as well as lacking in intellectual rigor. (p. 3)

States hail from literally tens of thousands of different communities, 50 million or so share a common experience: they attend one of the nearly 100,000 U.S. Pre-K–12 public schools. Furthermore, given the privileged status (justified or not) of the discipline of mathematics in U.S. public school curricula, these nearly 50 million children also share the common experience of mathematics instruction throughout the school year (if not every day, nearly every day).

As I have been comparing my teenage years (or my childhood more broadly) with teenagers today, I have been reflecting on my current profession as a mathematics teacher educator as well as my previous profession as a public high school mathematics teacher. In doing so, I have been asking several questions in light of certain recent national events. Given children and teenagers' increased awareness of social injustices, what are the ethical and moral obligations of mathematics teacher educators and classroom teachers in using injustices as a catalyst for mathematics teaching and learning? Does such an ethical and moral imperative exist? Is a mathematics teacher educator or classroom teacher being ethical if she or he chooses to close the door (i.e., close off the world) to her or his mathematics methods course or Algebra II course to teach "best practices" or "families of function" without engaging in discussions about present (and past) injustices? As the most privilege discipline of study in schools, do mathematics teacher educators and classroom teachers have a unique civic responsibility in leading efforts of teaching and learning for social justice in our U.S. public schools? Do mathematics teacher educators and classroom teachers have a unique pedagogical responsibility in demonstrating to stakeholders (i.e., students, teachers, administrators, school board members, communities members, etc.) that teaching for social justice is not either-or but rather both-and: both social justice pedagogical goals and mathematics (or any other specific discipline) pedagogical goals (see Gutstein, 2006, p. 23).

There appears to be an abundance of questions to ask around the increasingly unfiltered awareness about injustices that children wrestle with daily, and the ethical, moral, civic, and pedagogical responsibilities of teachers and those who teach teachers. Additional questions include: How might a teacher assist a child in making sense of that which is senseless? How might a teacher assist a child in moving beyond awareness of injustices toward analyses of injustices? How might a teacher assist a child in moving beyond analyses of injustices toward selfempowering actions against injustices? As mathematics teacher educators and classroom teachers, we clearly understand that mere awareness is not enough in problem solving: awareness is a necessary condition but not a sufficient condition. Problem solving requires doing science and taking action (and here, the phrase *doing science* is left open to its multiplicitous possibilities). Furthermore, as mathematics teacher educators and classroom teachers, we clearly understand that within the context of schools there is no better place to do science on problem

solving than the mathematics classroom. It just seems natural, then, that the mathematics classroom would be one of the first places that the problem of injustice (in all its forms) would be used as a catalyst for teaching and learning rigorous science—in this case, the mathematical sciences (see, e.g., Gutstein & Peterson, 2013).

Given the profusion of injustices and children's increasing awareness of those injustices, why has there not been a collective effort to integrate teaching mathematics for social justice throughout mathematics curricula (e.g., similar to integrating technology throughout mathematics curricula)? After more than three decades of research and scholarship on social justice (or critical) mathematics (see, e.g., D'Ambrosio, 2012; Frankenstein, 2012; Gutstein, 2012; Powell, 2012; Skovsmose, 2012), is it not time for social justice mathematics to become not only an integral component of the "canon" of mathematics teacher education but also strategically integrated throughout the eight Standards for Mathematical Practice? In the end, as mathematics teacher educators and classroom teachers, if we choose not to engage in the "empowering uncertainties" (Stinson & Wager, 2012, p. 3) of teaching and learning mathematics for social justice, are we failing to uphold our ethical, moral, civic, and pedagogical responsibilities?

References

- Borgman, C. L. (2000). The premise and the promise of global information infrastructure, In *From Gutenberg to the global information infrastructure: Access to information in the networked world* (1–32). Cambridge, MA: MIT Press.
- Crewdson, J. M. (1979, March 12). Mexicans protest an intensification at border in El Paso. *The New York Times*, p. A14.
- D'Ambrosio, U. (2012). A broad concept of social justice. In A. A. Wager & D. W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 201– 213). Reston, VA: National Council of Teachers of Mathematics.
- Derrida, J. (1997). Of grammatology (G. C. Spivak, Trans., Corrected ed.). Baltimore, MD: Johns Hopkins University Press. (Original work published 1974)
- Editorial Board. (1977, March 5). Fear and stress in the police department [Editorial]. *The New York Times*, p. A18.
- Frankenstein, M. (2012). Beyond math content and process: Proposals for underlying aspects for social justice education. In A. A. Wager & D. W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 49–62). Reston, VA: National Council of Teachers of Mathematics.
- Gutstein, E. (2006). Reading and writing the world with mathematics: Toward a pedagogy for social justice. New York, NY: Routledge.
- Gutstein, E. (2012). Reflections on teaching and learning mathematics for social justice in urban schools. In A. A. Wager & D. W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 63–78). Reston, VA: National Council of Teachers of Mathematics.
- Gutstein, E., & Peterson, B. (Eds.). (2013). *Rethinking mathematics: Teaching social justice by the numbers* (2nd ed.). Milwaukee, WI: Rethinking Schools.

- McFadden, R. D. (1975, September 30). Rapes at Hunter spark student protest. *The New York Times*, p. A34.
- Powell, A. P. (2012). The historical development of criticalmathematics education. In A. A. Wager & D. W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 21–34). Reston, VA: National Council of Teachers of Mathematics.
- Skovsmose, O. (2012). Critical mathematics education: A dialogical journey. In A. A. Wager & D.
 W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 35–47). Reston, VA: National Council of Teachers of Mathematics.
- Stinson, D., & Wager, A. (2012). A sojourn into the empowering uncertainties of teaching and learning mathematics for social change. In A. A. Wager & D. W. Stinson (Eds.), *Teaching mathematics for social justice: Conversations with educators* (pp. 3–18). Reston, VA: National Council of Teachers of Mathematics.