

Georgia State University

ScholarWorks @ Georgia State University

Middle-Secondary Education and Instructional
Technology Faculty Publications

Department of Middle-Secondary Education and
Instructional Technology (no new uploads as of
Jan. 2015)

2013

On Being a Hardliner on Issues of Race and Culture in Mathematics Education Research

David W. Stinson

Georgia State University, dstinson@gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/msit_facpub



Part of the [Elementary and Middle and Secondary Education Administration Commons](#), [Instructional Media Design Commons](#), [Junior High, Intermediate, Middle School Education and Teaching Commons](#), and the [Secondary Education and Teaching Commons](#)

Recommended Citation

Stinson, D. W. (2013). On being a hardliner on issues of race and culture in mathematics education research. *Journal of Urban Mathematics Education*, 6(2), 1–6.

This Editorial is brought to you for free and open access by the Department of Middle-Secondary Education and Instructional Technology (no new uploads as of Jan. 2015) at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Middle-Secondary Education and Instructional Technology Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

EDITORIAL

On Being a Hardliner on Issues of Race and Culture in Mathematics Education Research¹

David W. Stinson
Georgia State University

In the past, when I have been a discussant or respondent at conferences, after I have provided my remarks, I am often accused of being somewhat of a “hardliner” when it comes to the inclusion of issues of “race”/ethnicity and culture, or, more generally, the challenges and promises of exploring “diversity” (broadly defined) in mathematics education research. So this afternoon, it’s with great pleasure that I provide some briefs remarks in response to Professor Na’ilah Nasir’s (2013) plenary address “Why Should Mathematics Educators Care about Race and Culture?” I believe that my hardliner image has evolved over the years because more often than not I offend folks (unintentionally) by strongly arguing for an explicit and clear focus on the issues of race and culture in their projects (see, e.g., Stinson, 2011). This call for an explicit and clear focus is especially evident when projects have been positioned under the larger—and I might add, increasingly popular—umbrella of “equity work” in mathematics education research. I believe that such projects should keep *both* culture *and* mathematics education in the foreground (and here, when I say mathematics education, I am including not only the teaching and learning of mathematics but also the discipline). In actuality, I believe that all mathematics education research should pay serious attention to issues of race, culture, and diversity, broadly defined—but that’s just me.

The increasing popularity of positioning projects under the “equity” umbrella is clearly evident in grant proposals and submitted manuscripts; given that, the words equity and its derivative, “diversity,” have become increasingly important within the discourses of funding agencies and editorial boards. That is to say, it appears that more and more folks are “positioning” their research as equity or diversity projects. But more often than not, I can see the complexities of mathematics education in the

¹ This editorial is a revised version of remarks delivered at the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL, November 15, 2013; the remarks were in response to Professor Na’ilah Suad Nasir’s (2013) plenary address “Why Should Mathematics Educators Care about Race and Culture?” (See [Stinson’s reaction to Nasir](#) for accompanying PowerPoint presentation.)

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: dstinson@gsu.edu. 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*.

foreground—after all, we’re mathematics educators. But the complexities of issues around race, culture, diversity, or equity, in general, somehow slip in the background or are left to the reader to make some kind of implicit connections. Or, worst yet, these issues are stripped of their complexities and reduced to “labels” or “categories” in which children, youth, and communities belong; unfortunately, the latter is too often the case (see, e.g., Lubienski & Bowen, 2000; Parks & Schmeichel, 2012).

As I make this critique of some of the work positioned under the equity umbrella and mathematics education research in general, I clearly understand the difficulty of keeping issues of race, culture, or diversity, broadly defined, equally in the foreground along with issues of mathematics teaching and learning. It was not too long ago that the *JUME* Editorial Team provided what we believed to be a much needed space for intellectual discourse around the very issue of the importance of maintaining a “both–and” approach in mathematics education research by publishing a collection of critical commentaries (see Battista, 2010; Confrey, 2010; Martin, Gholson, & Leonard, 2010). These commentaries were in response to Kathleen Heid’s *Journal for Research in Mathematics Education* editorial “Where’s the Math (in Mathematics Education Research)?” (Heid, 2010) and to a National Council of Teachers of Mathematics Research Pre-session symposium “Keeping the Mathematics in Mathematics Education Research” (Ball, Battista, Guershon, Thompson, & Confrey, 2010).

We can hypothesize about the many reasons that folks have the tendency to let the issues of race, culture, or again, more broadly, issues of diversity slip to the background, or to avoid them altogether:

- Restrictions on the length of manuscripts (That is, can one do justice to both culture and mathematics in a single grant proposal or manuscript?);
- Concerns or fears of “political correctness” in talking about issues such as race, racism, and White supremacy (That is, White folks of a certain age in the United States have been reared in a discourse of political correctness where it is not “proper” to talk about race and other such “uncomfortable” things.); or
- Lacking the knowledge of how to engage in the sheer volume of literature that addresses issues of race, culture, gender, language, socioeconomic class, and so forth (That is, in our “formal” schooling in becoming mathematics educators and researchers, how much time was devoted in our doctoral programs to exploring, in meaningful ways, larger socio-cultural and -political issues of human existence, and how they relate to mathematics and mathematics teaching and learning?).

In short, doing race work, culture work, diversity work, or equity work in mathematics education research is just hard to do.²

As I struggle in doing both–and in my own work, I often return to a diagram that has become quite familiar: the Instructional Triangle. This diagram, originat-

² For a collective discussion of the challenges and promises of doing race and culture work in mathematics education research and teacher education, see [JUME Special Issue: Volume 6, Number 2](#) (Stinson & Spencer, 2013).

ing from a Consortium for Policy Research in Education paper (Cohen & Ball, 1999), has become somewhat of a standard model when considering the teaching and learning context. The model was further refined specifically for mathematics education in the book *Adding it Up: Helping Children Learn Mathematics* (National Research Council, 2001).

I return to this figure in my own research to keep me grounded in thinking about what my work specifically has to do with the dynamics of mathematics and mathematics teaching and learning as I bring issues of race, culture, and diversity, broadly defined, to the foreground. Other researchers have provided extensions, elaborations, or reworkings of the Instructional Triangle. For instance, Nipper and Sztajn (2008) extend the Instructional Triangle into the challenges of mathematics teachers' professional development. Herbst and Chazan (2012) elaborate on the Instructional Triangle to illustrate how the nature of mathematics instructional activity might help in justifying teachers' actions in mathematics teaching. And Bullock and I (Stinson & Bullock, 2012) rethink the Instructional Triangle as we apply critical postmodern theory and place each of the vertices under erasure (cf. Derrida, 1974/1997). But the extension, elaboration, or rethinking that I turn to most often—and has become my standard—is the one provided by Weissglass (2002) in Figure 1.

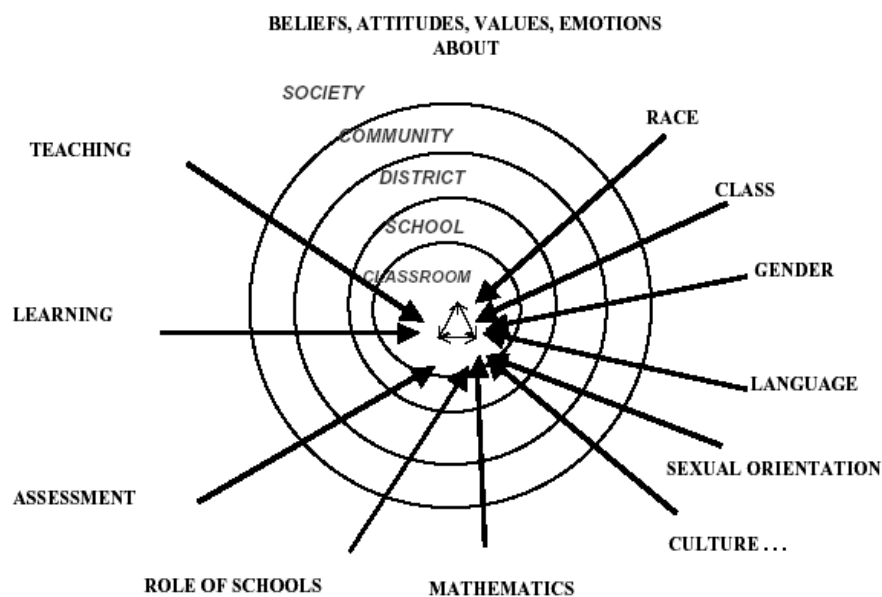


Figure 1. The many factors that affect student learning (Weissglass, 2002, p. 35). From “Inequity in Mathematics Education: Questions for Educators,” by J. Weissglass, 2002, *The Mathematics Educator*, 12(2), p. 35. Copyright 2002 by the Mathematics Education Student Association. Reprinted by permission.

As I have argued elsewhere (Stinson, 2006), I believe that Weissglass appropriately positions the triangle in its proper perspective. In that, when doing research in mathematics education—or dare I say, ethical research in mathematics education—explorations of mathematics teaching and learning must become much broader than what is possible within the confines of the initial Instructional Triangle (Cohen & Ball, 1999).

It is important to note, however, that throughout the construction of the original model, Cohen and Ball (1999) consistently made reference to the “environmental” contexts in which the Instructional Triangle is embedded. But in specifically naming some of these socio-cultural, -historical, and -political contexts—contexts that too often marginalized particular students, families, and communities—Weissglass (2002), I believe, is asking us to adopt a degree of social consciousness and responsibility in seeing the wider socio-cultural and -political picture of mathematics education (Gates & Vistro-Yu, 2003). Adopting such a stance requires us to delve deeper into how the social, political, cultural, and economic discourses of society in general affect the construction of students, teachers, and mathematics—and the possibilities and impossibilities of equitable and just mathematics teaching and learning. In short, it requires taking the “socio-political turn” in mathematics education research (Gutiérrez, 2013, p. 40).

In her talk this afternoon, I believe that Professor Nasir (2013) has asked us to engage in the ethical act of adopting a degree of social consciousness and responsibility in seeing the wider social and political picture of mathematics teaching and learning. And here my remarks are specific to some of the work that she and her colleagues from the National Science Foundation Learning in Informal and Formal Environments (LIFE) Center are engaged in currently (see <http://life-slc.org>). In particular, I pull from a paper titled “Learning Pathways: A Conceptual Tool for Understanding Culture and Learning” (Nasir et al., 2013). In this paper, Professor Nasir and colleagues describe a developing framework for “conceptualizing learning as occurring along culturally organized learning pathways—the sequences of consequential participations and transitions in learning activities that move one toward greater social recognition as competent in particular learning domains and situations” (p. 2).

What struck me about Professor Nasir and colleagues’ (2013) developing culturally organized framework for learning is that it is, concurrently, simple and complex. And one really has to possess poststructural sensibilities for this seemingly contradictory remark to not be contradictory. Nevertheless, the learning pathways draw attention to—

- The resources students have access to (or not);
- The ways that students are positioned as learners (or not); and
- The role that identity—that is, the process of becoming—plays in learning.

According to the culturally organized framework, there are four key characteristics to learning pathways. *Characteristic 1 – Learning pathways are taken up in relation to identities, and have a relational, affective, and motivational component:* Key here is the acknowledgement that a student’s identity (or her or his becoming) can be supported (or not) by the normalizing discourses and discursive practices, and that identity has a critical influence on a students’ motivation to continue on particular learning pathways (or not). *Characteristic 2 – Learning pathways are socially constructed by self and others, and they build up over multiple instances:* Key here is the acknowledgement that learning pathways are iterative, building up over multiple instances with significant social others being important in supporting (or not) the construction and maintenance of particular learning pathways. *Characteristic 3 – Learning pathways are made up of related sets of practices and routines, which over time support repertoires of practices, often organized with one or more goals in mind:* Key here is the acknowledgement that learning pathways are constructed and constituted through socially and historically accepted discourses and discursive practices that are made available (or not), and are shaped and reshaped over multiple times, in both informal and formal spaces. And *Characteristic 4 – Learning pathways include enactments of privilege and marginalization that occur in relation to structural constraints and supports from families and institutions:* Key here is the acknowledgement that structures and the normalizing processes and practices of institutions serve to marginalize some students as they privilege others, and that absent of support from families members (extended or otherwise) some learning pathways are effectively closed off for certain students.

So going back to the Instructional Triangle—after all, it is mathematics and mathematics teaching and learning that we’re researching. What if we overlay the Instructional Triangle with Professor Nasir and colleagues’ (2013) learning framework that conceptualizes learning as occurring along culturally organized learning pathways? But then again, for me, that just brings us back to Figure 1. So, I guess, in the end, similar to Professor Nasir, I am a hardliner when calling for an explicit and clear focus on issues of race, ethnicity, culture, language, socio-economic class, and so on when doing ethical work in mathematics teaching and learning.

—But then again, that’s just me.

References

- Ball, D. L., Battista, M., Harel, G., Thompson, P. W., & Confrey, J. E. (2010, April). *Keeping the mathematics in mathematics education research*. Research symposium at the National Council of Teachers of Mathematics Research Pre-session, San Diego, CA.
- Battista, M. T. (2010). Engaging students in meaningful mathematics learning: Different perspectives, complementary goals. *Journal of Urban Mathematics Education*, 3(2), 34–46. Retrieved from <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/115/58>.

- Cohen, D. K., & Ball, D. L. (1999). Instruction, capacity, and improvement. The Consortium for Policy Research in Education. Retrieved from <http://www.cpre.org/instruction-capacity-and-improvement>.
- Confrey, J. (2010). "Both And"—Equity and mathematics: A Response to Martin, Gholson, and Leonard. *Journal of Urban Mathematics Education*, 3(2), 25–33. Retrieved from <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/108/53>.
- Derrida, J. (1997). *Of grammatology* (G. C. Spivak, Trans., Corrected ed.). Baltimore, MD: Johns Hopkins University Press. (Original work published 1974)
- Gates, P., & Vistro-Yu, C. P. (2003). Is mathematics for all? In A. J. Bishop, M. A. Clements, C. Keitel, J. Kilpatrick, & F. K. S. Leung (Eds.), *Second international handbook of mathematics education* (Vol. 1, pp. 31–73). Dordrecht, The Netherlands: Kluwer.
- Gutiérrez, R. (2013). The sociopolitical turn in mathematics education. *Journal for Research in Mathematics Education*, 44, 37–68.
- Herbst, P., & Chazan, D. (2012). *On the instructional triangle and sources of justification for action in mathematics teaching*. Retrieved from <http://deepblue.lib.umich.edu/handle/2027.42/91281>.
- Heid, M. K. (2010). Where's the math (in mathematics education research)? *Journal for Research in Mathematics Education*, 41, 102–103.
- Lubienski, S. T., & Bowen, A. (2000). Who's counting? A survey of mathematics education research 1982–1998. *Journal for Research in Mathematics Education*, 31, 626–633.
- Martin, D. B., Gholson, M. L., & Leonard, J. (2010). Mathematics as gatekeeper: Power and privilege in the production of knowledge. *Journal of Urban Mathematics Education*, 3(2), 12–24. Retrieved from <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/95/57>.
- Nasir, N. S. (2013, November). *Why should mathematics educators care about race and culture?* Plenary address delivered at the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.
- Nasir, N. S., Barron, B., Pea, R., Goldman, S., Stevens, R., Bell, P., & McKinney de Royston, M. (2013). *Learning pathways: A conceptual tool for understanding culture and learning*. Manuscript submitted for publication.
- National Research Council. (2001). *Adding it up: Helping children learn mathematics*. In J. Kilpatrick, J. Swafford, & B. Findell (Eds.), Mathematics Learning Study Committee, Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Nipper, K., & Sztajn, P. (2008). Expanding the instructional triangle: Conceptualizing mathematics teacher development. *Journal of Mathematics Teacher Education*, 11, 333–341.
- Parks, A. N., & Schmeichel, M. (2012). Obstacles to addressing race and ethnicity in the mathematics education literature. *Journal for Research in Mathematics Education*, 43, 238–252.
- Stinson, D. W. (2006). African American male adolescents, schooling (and mathematics): Deficiency, rejection, and achievement. *Review of Educational Research*, 76, 477–506.
- Stinson, D. W. (2011). "Race" in mathematics education research: Are we a community of cowards? [Editorial]. *Journal of Urban Mathematics Education*, 4(1), 1–6. Retrieved from <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/139/83>.
- Stinson, D. W., & Bullock, E. C. (2012). Transitioning into contemporary theory: Critical postmodern theory in mathematics education research. In L. R. Van Zoest, J. J. Lo, & J. L. Kratky (Eds.), *Proceedings of the 34th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1163–1169). Kalamazoo, MI: Western Michigan University.
- Stinson, D. W., & Spencer, J. A. (Eds.). (2013). Privilege and Oppression in the Mathematics Preparation of Teacher Educators [Special issue]. *Journal of Urban Mathematics Education*, 6(1).
- Weissglass, J. (2002). Inequity in mathematics education: Questions for educators. *The Mathematics Educator*, 12(2), 34–39.