2013

Teaching Mathematics for Social Justice: Conversations with Educators – A Symposium

David W. Stinson
Georgia State University, dstinson@gsu.edu

Anita A. Wager

Recommended Citation

Stinson, D. W., & Wager, A. A. (2013). Teaching mathematics for social justice: Conversations with educators – A symposium (Presenters: Drs. T. Bartell, B. Evan, E. Gutstein, J. Leonard; Discussants: Drs. V. Hand & J. Spencer). In M. Berger, K. Brodie, V. Frith, & K. le Roux (Eds.), Proceedings of the 7th International Mathematics Education and Society Conference (MES7, Vol. 1, pp. 125–128). Cape Town, South Africa: MES7.

TEACHING MATHEMATICS FOR SOCIAL JUSTICE: CONVERSATIONS WITH EDUCATORS

Symposium Coordinators:

David W. Stinson — Georgia State University

Anita A. Wager — University of Wisconsin-Madison

Symposium Presenters – Tonya Gau Bartell, Brian R. Evans, Eric (Rico) Gutstein and Jacqueline Leonard

Symposium Discussants – Victoria Hand and Joi Spencer

Using Marilyn Frankenstein's germinal 1983 article "Critical Mathematics Education: An Application of Paulo Freire's Epistemology" and Ole Skovsmose's 1985 germinal article "Mathematics Education Versus Critical Education" as credible "start points", critical mathematics or more broadly, social justice mathematics, is marking three decades of empowering yet uncertain possibilities. Nonetheless, there are two recurring questions: What is it? and What does it "look like"? Drawing on the collective stories (and wisdom) of critical mathematics educators, this symposium aims to offer some open, non-definitive answers to these two questions.

AIMS OF SYMPOSIUM[1]

This symposium aims to engage MES7 delegates in a critical, interactive discussion on the recently released, edited volume *Teaching Mathematics for Social Justice: Conversations with Educators* (Wager & Stinson 2012), and on critical/social justice mathematics in general. The symposium participants include leading mathematics teacher educators and researchers, who have explored, developed, researched, and/or taught mathematics for social change. The symposium presenters will not only share personal narratives of how they came to do this important work but also offer theoretical, methodological, and pedagogical propositions in solidarity with others who might wish to explore the empowering uncertainties of teaching (and learning) mathematics for social justice.

The book in general was organized into three key sections intended to guide readers through the historical and theoretical development of critical/social justice mathematics, the teaching of teachers in how to teach mathematics for social justice, and the possibilities and challenges of teaching mathematics for social justice (TMfSJ) in classrooms. The symposium presenters are four contributing authors and the two co-editors who will provide, in turn, an overview of their respective chapter and the book in general. Two outside discussants will critique not only the work presented but also the open-ended challenges and promises of critical/social justice mathematics.

RELEVANCE OF SYMPOSIUM

The phrase *teaching for social justice* is increasingly visible within discourses surrounding education. Specifically, in teacher education, "social justice" is emphasized as part of teachers' overall "diversity" or "multicultural" initial preparation or professional development (McDonald 2007). More generally, social justice is often found in the mission and vision statements of education organizations, in the overarching goals and objectives of education conferences and associations, in the titles of "special issues" of scholarly journals, and in the titles of an increasing number of books. After all, who in education would claim that they're *not* for social justice?

The intent of the symposium (and of the book in general), however, is not to provide a definitive definition of social justice or, more specifically, critical/social justice mathematics but rather to provoke more questions and to stimulate new discussions about the many meanings of and possibilities for TMfSJ. In other words, echoing Bartell (2011), the symposium's participants view teaching (mathematics) for social justice as a "sliding signifier," which suggests that defining what teaching for social justice "actually means is struggled over, in the same way that concepts such as democracy are subject to different senses by different groups with sometimes radically different ideological and educational agendas" (Michael W. Apple, as quoted in Bartell 2011, p. 2).

Viewing TMfSJ as a sliding signifier springs from the symposium participants' desire to ask MES7 delegates to enter into conversations as they travel on an individual and collective journey in discovering the possible meaning(s) of teaching for social justice in general and TMfSJ in particular. The metaphor *to travel* is borrowed from Marilyn Cochran-Smith's (2004) book *Walking the Road: Race, Diversity, and Social Justice in Teacher Education* and Ole Skovsmose's (2005) book *Travelling Through Education: Uncertainty, Mathematics, Responsibility*.

Cochran-Smith (2004) notes that her metaphor of traveling – or walking the road – "makes the case that doing teacher education for social justice is an ongoing, over-the-long-haul kind of process for prospective teachers as well as for teacher education practitioners, researchers, and policy analysts" (p. vxviii). Her metaphor of walking the road also represents her personal journey of over two decades in which she has focused seriously on issues of race, diversity, and social justice in teacher education practice, policy, and research at local, state, national, and international levels.

Skovsmose (2005), who positions social justice mathematics as just one approach to critical mathematics, continues to reconceptualize the open and uncertain possibilities of a critical mathematics education. In so doing, he not only speaks about traveling through different philosophical considerations but also physically traveling through different places around the world, experiencing different people, different cultures, different educational contexts—and different possibilities. Skovsmose claims that traveling through differences constitutes the turbulent development of critical

mathematics, as aspirations and hopes are continuously recontextualized and reformulated, and uncertainties appear (Skovsmose 2009).

Similarly, although each symposium participant will provide her or his own unique, nuanced definition or description of critical/social justice mathematics, these descriptions have developed over time during her or his own journey and therefore are fluid and continue to change and adjust. Nonetheless, an overarching theme that is somewhat present in each description is a goal for teaching mathematics *about*, *with*, and *for* social justice (Wager 2008). Teaching mathematics *about* social justice refers to the context of lessons that explore critical (and oftentimes controversial) social issues using mathematics. Teaching mathematics *with* social justice refers to the pedagogical practices that encourage a co-created classroom and provides a classroom culture that encourages opportunities for equal participation and status. And teaching mathematics *for* social justice is the underlying belief that mathematics can and should be taught in a way that supports students in using mathematics to challenge the injustices of the status quo as they learn to read and *re*write their world (Gutstein 2006).

But in the end, neither Cochran-Smith (2004) or Skovsmose (2005) nor the symposium participants provide a simple, linear, or certain mapping of social justice for other travelers to journey. Indeed, Cochran-Smith notes that learning to teach for social justice, for teachers and teacher educators alike, "is a long road with 'unlearning' a rugged but unavoidable part of a journey during which people double back, turn around, start and stop, reach dead ends, and yet, sometimes, forge on" (p.xx). Likewise, Skovsmose claims that attempts to bring clarification or meanings to a concept such as critical (or social justice) mathematics often takes us in the opposite direction of any fixed meaning in which "clarification of 'something' brings us to consider 'everything'" (p. 216). We hope MES7 delegates will be inspired by the symposium participants' journeys and undertake their own journey of making meaning(s) of teaching (mathematics) for social justice, going through their own process of considering everything as they consider something—starting, stopping, and even sometimes doubling back. Undeniably, "TMfSJ is a journey, not a destination" (Stinson, Bidwell, & Powell 2012, p. 88).

PLAN OF SYMPOSIUM

The 90-minute symposium will be structured as follows:

1. Symposium coordinator (co-editor) will provide a brief introduction of the goals and objects of the symposium and a general overview of the motivation behind and the development of the book (10 minutes);
2. Symposium presenters (contributing authors) will provide brief overviews of their respective chapter (three chapters, 15 minutes each);
3. Symposium discussants will provide a critique of not only the work presented but also the open-ended challenges and promises of critical/social justice mathematics (15 minutes);

4. Symposium coordinator (co-editor) will facilitate a semi-structured question-and-answer session; possible questions include (20 minutes):
    a. Has critical/social justice mathematics moved to the "center" (as indicated by the support of the National Council of Teachers of Mathematics)? If so, at what cost?
    b. How might teachers begin to teach mathematics for social justice? How might teacher educators begin to teach teachers (pre- and in-service) how to teach mathematics for social justice?
    c. After 30 years, just where is the mathematics education community in regards to critical/social justice mathematics? What's next?

NOTES

1. The text from *Aims of Symposium* and *Relevance of Symposium* sections was extracted and revised from the introductory chapter of the book (Wager & Stinson, 2012).

REFERENCES

Bartell, T. G. (2011). Learning to teach mathematics for social justice: Negotiating social justice and mathematics goals [Special issue]. *Journal for Research in Mathematics Education, 41*(0).

Cochran-Smith, M. (2004). *Walking the road: Race, diversity, and social justice in teacher education*. New York: Teachers College Press.

Frankenstein, M. (1983). Critical mathematics education: An application of Paulo Freire's epistemology. *Journal of Education, 164*, 315–339.

Gutstein, E. (2006). *Reading and writing the world with mathematics: Toward a pedagogy for social justice*. New York: Routledge.

McDonald, M. (2007). The joint enterprise of social justice teacher education. *Teachers College Record, 109*, 2047–2081.

Skovsmose, O. (1985). Mathematical Education versus Critical Education. *Educational Studies in Mathematics, 16*, 337–354.

Skovsmose, O. (2005). *Travelling through education: Uncertainty, mathematics, responsibility*. Rotterdam: Sense.

Skovsmose, O. (2009). *In Doubt – about language, mathematics, knowledge and life-world*. Rotterdam: Sense.

Stinson, D. W., Bidwell, C. R., & Powell, G., C. (2012). Critical pedagogy and teaching mathematics for social justice. *The International Journal of Critical Pedagogy, 3*(4), 76–94.

Wager, A. A. (2008). Developing equitable mathematics pedagogy. *ProQuest Dissertations & Theses* (AAT 3327857).

Wager, A. A., & Stinson, D. W. (2012). *Teaching mathematics for social justice: Conversations with educators*. Reston, VA: National Council of Teachers of Mathematics.