EDITORIAL

Mathematics Educators and the "Math Wars": Who Controls the Discourse?

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The lead story in the daily online publication *Inside Higher Ed* on October 15, 2012 was titled "<u>Casualty of the Math Wars</u>" (Jaschik, 2012). It provided a context for Professor Jo Boaler's¹ actions in posting the essay "Jo Boaler Reveals Attacks by Milgram and Bishop: When Academic Disagreement Becomes Harassment and Persecution" (Boaler, 2012a) on her Stanford University website. Professor Boaler's essay chronicles, in detail, the professional and *personal* attacks she has experienced since joining the Stanford faculty in 1998 by two mathematicians—James Milgram (Stanford University, emeritus) and Wayne Bishop (California State University Los Angeles).

As evident by the title of the *Inside Higher Ed* article, Jaschik (2012) places Professor Boaler's actions within the larger context of the so called "math wars." Schoenfeld (2004), in his participant-observer historical review of the wars, states that the underlying issues or questions being contested by two opposing camps are more than a century old: "Is mathematics for the elite or for the masses? Are there tensions between 'excellence' and 'equity'? Should mathematics be seen as a democratizing force or as a vehicle for maintaining the status quo?" (p. 253). Probable responses to these questions are significantly different depending on which camp controls the discourse: the traditionalists or the reformers. The traditionalists' camp claims that standards-based, reform curricula are superficial and undermine "classical" mathematical values—Milgram and Bishop clearly reside

¹ **EDITOR'S NOTE:** We, the Editorial Team at *JUME*, support our colleague, Professor Jo Boaler, in her actions of going public with the harassment and persecution (i.e., academic bullying) that she has experienced through the unrestrained professional and personal attacks by James Milgram and Wayne Bishop.

Others can show support of Professor Boaler by signing the Change.org petition <u>The Community of</u> <u>Mathematics Educators: Join in Defending Fundamental Values</u>, initiated by University of Georgia Regents Professor Jeremy Kilpatrick.

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here. Whereas the reformers' camp claims that reform-oriented curricula such as IMP or CPMP² reflect a deeper, richer view of mathematics—this of course is where Professor Boaler resides. My intent here is not to provide a detailed discussion of the math wars; it has been done elsewhere (see, e.g., Becker & Jacob, 2000a, 2000b³; Davison & Mitchell, 2008; Herrera & Owens, 2001; Kilpatrick, 2001; O'Brien, 2007; Reys, 2001; Schoen, Fey, Hirsh, & Coxford, 1999; Schoenfeld, 2004). But rather I provide some background (albeit brief) to explain why I believe Jaschik placed Professor Boaler's recent actions within the larger context of the math wars.

It is interesting to note that Jaschik's (2012) article is not the first time that James Milgram and Wayne Bishop have been named as traditionalist culprits in the math wars who have hindered reform in mathematics teaching and learning. In a March 2000 *Phi Delta Kappan* article, Becker and Jacob (2000b, also see 2000a) name both Milgram and Bishop among members of "a powerful group of parents and mathematicians who manipulated information and played off of the public's perception of our 'failing schools' to acquire political clout" (p. 530), which, in turn, was used to substantially revise California's school mathematics policy in the late 1990s. Specifically, Becker and Jacob outline how this undeserved "political clout," in many ways, silenced mathematics educators and K-12 mathematics teachers during the process of revising California's school mathematics policy. They write:

A unique feature of California's new school mathematics policy is the influential role of university mathematicians. Four Stanford University mathematics professors substantially revised the standards in 1997, and three mathematics professors wrote the sample problems for the framework in 1998. Two math professors wrote key sections of the framework's discussion for teachers and then, on 22 September 1999, led the department of education presentation for publishers, explaining what was expected of them when they submit materials for adoption in August 2000. Two other mathematics professors judged (and extensively rewrote) the curriculum for the professional development provided, for which \$43 million will be available during 2000–01. To our knowledge, none of these mathematicians ever taught in K-12 schools, and throughout their work on policy, there was never a publicly scheduled session for them to interact with K-12 teachers. Mathematics professors also ran the Math Content Review Panels for the billion-dollar material adoption that was competed by the state board during the summer 1999. Through these actions, the state board made it clear whose voice would count and whose would be ignored. (p. 531)

In concluding their discussion, Becker and Jacob (2000b) claim that school

² For information about the Interactive Mathematics Program (IMP), see <u>http://mathimp.org;</u> for information about the Core-Plus Mathematics Project (CPMP), see <u>http://www.wmich.edu/cpmp/</u>.

³ See Haimo and Milgram (2000) for a response to Becker and Jacob (2000b).

mathematics policy which once held "'teaching for understanding' as its centerpiece has vanished from the California mathematics education landscape, and mastery of procedure skills is now the order of the day in the state's standards, framework, standardized assessments, and professional development" (pp. 535– 536). Overall, Becker and Jacob's purpose in outlining the events that unfolded in the late 1990s is to bring to light their bewilderment of how mathematicians managed to replace mathematics educators and classroom teachers in leading the development and implementation of California's school mathematics policy. In other words, how did those with expertise in mere mathematics content knowledge replace those with expertise not only in mathematics content knowledge but also in how students come to learn mathematics and how teachers might best teach mathematics? This "replacement" was (is) most problematic. Battista (1999) argues:

To perform a reasonable analysis of the quality of mathematics teaching requires an understanding not only of the essence of mathematics but also of current research about how students learn mathematical ideas. Without extensive knowledge of both, judgments made about what mathematics should be taught to schoolchildren and how it should be taught are necessarily naïve and almost always wrong. (p. 433)

I believe that most, if not all, mathematics educators and classroom teachers as well as most "mathematically sane"⁴ mathematicians would agree with Battista's (1999) argument. But how did such a replacement happen in California in the late 1990s? Battista claims that traditionalists exploited the "talk show/tabloid' mentality of Americans" and provided them "with hearsay, misinformation, sensationalism, polarization, and conflict as they attempt[ed] to seize control of school mathematics programs and return them to traditional teaching" (p. 425). A walk through any school today would confirm that traditionalists did indeed win The Battle of the 2000s—both the Bush administration's No Child Left Behind Act and the Obama administration's Race to the Top Fund have secured a return to traditional practices. Nonetheless, wining the battle is not winning the war. New battles always provide for different possibilities.

It is within the context of a new battle—The Battle of 2010s—with its different possibilities that I like to place Professor Boaler's recent actions. From a poststructural perspective, I like to think of Professor Boaler's actions as a coun-

⁴ Mathematically Sane "has been created to provide insights into the reform of mathematics teaching in the schools by making a compelling case that changes in our nation's mathematics programs are imperative for our students' future success and for the economic health of our nation"; see <u>http://mathematicallysane.com</u> for more information. Of particular interest might be web links to two TED Talks: *Teaching Kids Real Math with Computers* by Conrad Wolfram and *Math Class Needs a Makeover* by Dan Meyer.

termove in the math wars, seizing control of the discourse and thus, the power.⁵ Professor Boaler (2012b), in her plenary talk at the 34th annual conference of the North America chapter of the International Group for the Psychology of Mathematics Education (PME-NA) held recently in Kalamazoo, Michigan, spoke directly about such efforts, providing her own insights of communicating mathematics education research to broader audiences and the importance of leading the discourse in mathematics education reform.

But controlling or leading the discourse does not mean that there is no room for scholarly disagreement. *Scholarly* disagreement is beneficial (and needed) for intellectual growth.⁶ Nonetheless, what Professor Boaler has demonstrated by going public and taking control of the discourse is that she will no longer be bullied. We might all take a cue from Professor Boaler in this regard. When it comes to issues of mathematics teaching and learning, mathematics educators and classroom teachers should not stand for being bullied in our own sandbox.

References

- Battista, M. T. (1999). The mathematical miseducation of America's youth: Ignoring research and scientific study in education. *Phi Delta Kappan*, 80, 425–433.
- 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 <u>http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/115/58</u>.
- Becker, J. P., & Jacob, B. (2000a). Look at the details: A reply to Deborah Haimo and James Milgram. *Phi Delta Kappan*, 82, 147–148.
- Becker, J. P., & Jacob, B. (2000b). The politics of California school mathematics: The anti-reform of 1997-99. *Phi Delta Kappan*, *81*, 529–537.
- Boaler, J. (2012a). Jo Boaler reveals attacks by Milgram and Bishop: When academic disagreement becomes harassment and persecution. Retrieved from http://www.stanford.edu/~joboaler/.
- Boaler, J. (2012b). *Scaling up innovation: Using research to make a difference*. Plenary talk delivered at the 34th annual conference of the North America chapter of the International Group for the Psychology of Mathematics Education, Kalamazoo, MI.
- 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 <u>http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/108/53</u>.
- Davison, D. M., & Mitchell, J. E. (2008). How is mathematics education philosophy reflected in the math wars? *The Montana Mathematics Enthusiast*, 5(1), 143–154.
- Haimo, D. T., & Milgram, R. J. (2000). Professional mathematicians comment on school mathematics in California. *Phi Delta Kappan*, 82, 145–146.

⁵ See Stinson (2009) for a brief discussion of how *discourse* and *power* are re-inscribed within poststructural theory.

⁶ JUME recently played a roll in demonstrating such benefits through the scholarly exchange within its pages regarding the question *Where's the math in mathematics education research?* (see Battista, 2010; Confrey, 2010; Martin, Gholson, & Leonard, 2010).

- Herrera, T. A., & Owens, D. T. (2001). The "new new math"?: Two reform movements in mathematics education. *Theory Into Practice*, 40(2), 84–92.
- Jaschik, S. (2012, October 15). Casualty of the math wars, *Inside Higher Ed.* Retrieved from <u>http://www.insidehighered.com/news/2012/10/15/stanford-professor-goes-public-attacks-over-her-math-education-research.</u>
- Kilpatrick, J. (2001). Understanding mathematical literacy: The contribution of research. *Educational Studies in Mathematics*, 47, 101–116.
- 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 <u>http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/95/57</u>.
- O'Brien, T. C. (2007). The old and the new. Phi Delta Kappan, 88, 664-668.
- Reys, R. E. (2001). Curricular controversy in the math wars: A battle without winners. *The Phi Delta Kappan, 83*, 255–258.
- Schoen, H. L., Fey, J. T., Hirsch, C. R., & Coxford, A. F. (1999). Issues and options in the math wars. *Phi Delta Kappan*, 80, 444–453.

Schoenfeld, A. H. (2004). The math wars. Educational Policy, 18, 253-286.

Stinson, D. W. (2009). The proliferation of theoretical paradigms quandary: How one novice researcher used eclecticism as a solution. *The Qualitative Report*, 14(3), 498–523. Retrieved from http://www.nova.edu/ssss/QR/QR14-3/stinson.pdf.