When Academic Disagreement Becomes Harassment and Persecution.

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Honest academic debate lies at the core of good scholarship. But what happens when, under the guise of academic freedom, people distort the truth in order to promote their position and discredit someone's evidence? I have suffered serious intellectual persecution for a number of years and decided it is now time to reveal the details.

I am a Stanford University professor and researcher of mathematics education. My research focuses on the most effective learning environments for students learning mathematics and has won awards in both England and the United States. My different studies have shown that students who engage actively in their mathematics learning, rather than simply practicing procedures, achieve at higher levels.

Since joining the faculty of Stanford University in 1998 I have experienced fierce personal and professional attacks from two mathematicians – James Milgram (Stanford, retired) and Wayne Bishop (California State University, LA). Milgram and Bishop are opposed to reforms of mathematics teaching and support the continuation of a model in which students learn mathematics without engaging in realistic problems or discussing mathematical methods. They are, of course, entitled to this opinion, and there has been an ongoing, spirited academic debate about mathematics learning for a number of years. But Milgram and Bishop have gone beyond the bounds of reasoned discourse in a campaign to systematically suppress empirical evidence that contradicts their stance. Academic disagreement is an inevitable consequence of academic freedom, and I welcome it. However, responsible disagreement and academic bullying are not the same thing. Milgram and Bishop have engaged in a range of tactics to discredit me and damage my work which I have now decided to make public.

The particular area of my research that Milgram and Bishop have tried to discredit is focused upon equity and the ways that the mathematics achievement of all students in the US may be raised. Bishop has used explicitly racist language when discussing issues of equity, claiming that teachers and other 'experts' believe that "little pickaninnies just don't learn math like we do." (http://old.post-gazette.com/neigh_city/20021021mathcity2p2.asp). His accusations towards educators are offensive and serve as important background to the attacks upon my research in which he and Milgram have engaged.

The following is a timeline of the most significant events.

- In 1999, within months of my moving from London University to Stanford University, Milgram invited me to his office and told me not to talk about my research results in America as American teachers are "too weak" to be able to work in the ways shown to be effective.
- In 2000 I was awarded a National Science Foundation (NSF) Presidential Award which supported a four year research study into the effectiveness of different mathematics teaching approaches in the US.

- Between 1999 and 2003 Bishop posted on mathematics education websites that I had invented the schools in my studies. He asserted that "The schools exist only in her mind." At the time, his candid comments in some web-based discussions with his perceived allies disclosed the motivation behind his efforts to damage my reputation and discredit my work. He wrote that I was "the worst possible scenario a researcher in a top university with data".
- In 2003 Bishop discussed Schools of Education in the US and suggested to readers that they "nuke 'em all dammit". This, alongside his personal attacks on my work, prompted Stanford's police department to travel to LA to speak to Wayne Bishop.
- In 2005 preliminary results of my NSF research were published, again showing that students who are more actively involved in mathematics achieve at higher levels.
- In 2006 Milgram claimed that I had engaged in scientific misconduct. This is an allegation that could have destroyed my career had it been substantiated. Stanford formed a committee to assess Milgram's allegations. After reviewing all of my NSF research data, Stanford found that Milgram's allegations of scientific misconduct were unfounded and terminated the investigation.
- Milgram was informed that there would be no formal investigation of scientific misconduct as the Stanford inquiry found his allegations of scientific misconduct to be without merit. Having failed to convince Stanford, Milgram went public with his damaging allegations.
- Milgram and Bishop attempted aggressively to identify my research subjects schools and students that had been promised confidentiality for their protection, consistent with fundamental research study principles. Identifying human research subjects is contrary to university policy and federal law. Yet Bishop contacted numerous school district officials, including principals, and pressured them to disclose whether they were subjects of my study. Among other tactics, he threatened to take legal action against them. Two of the people concerned contacted Stanford University and sent details of Bishop's communication with them. In letters to Stanford they stated that Bishop had been "unprofessional, demanding, condescending, dishonest" and "verbally aggressive".
- In 2006 Milgram and Bishop posted a "paper" on Milgram's website in which they claimed that they had identified the schools in my study. They specifically asserted that they "were able to determine the identities of these schools". The "paper" presented information from which schools, teachers and students in my study could easily be identified. The "paper" went on to attack the schools and students, (eg "The Railside students show that they do not have a good understanding of mathematics"). The "paper" also attacked my integrity as a researcher, claiming for example, that different populations of students were studied at the different schools a false assertion at the core of the allegations of scientific misconduct that Stanford found to be baseless.
- Milgram and Bishop's "paper" contravenes federal law that protects the human

subjects of research as it identifies schools, teachers and students. Its identification of individual students breaches the Family Educational Rights and Privacy Act (FERPA). The "paper" has never been peer reviewed, and no journal has accepted it for publication.

- In 2006 I decided to leave the hostile environment caused by Milgram at Stanford and accepted an award from the Marie Curie Foundation to become the Marie Curie Chair of Mathematics Education in England.
- In 2010 I agreed to return to Stanford at the request of the School of Education. Milgram tried – but failed – to block my reappointment.
- A small but active group of people who support Milgram and Bishops' position continue to use their "paper" to discredit my research. Recently, for example, I was invited to Ireland by government officials to help with the new mathematics reforms that are being implemented nation wide. After appearing on the national news and writing in the *Irish Times*, my work was attacked by Milgram/Bishop followers, who asserted that my research evidence should be ignored and claimed that a "peer review" of my work had found it to be "flawed", citing and providing the link to the Milgram/Bishop "paper" on Milgram's website. The idea that the Milgram/Bishop "paper" was peer reviewed is incorrect but these attacks serve the purpose of suppressing the impact of my research and the potential benefit it could provide to students in Ireland and elsewhere.
- In a similar vein, following three recent publications of my research in the US, Ze'ev Wurman has tried to suppress its influence, saying for example my research involves "prime evidence of data cooking", again linking to the Milgram/Bishop "paper".

These are examples of the way that the group engages in this continued persecution. All of their attacks are based on the same unfounded "paper" that has never been substantiated, peer reviewed, or accepted for publication, yet remains available on Milgram's website.

As the "paper" remains available on Milgram's website, and as Milgram and Bishop and their group are continuing their efforts to suppress research evidence that could be used to improve the mathematics achievement of students in the United States and beyond, I have decided to provide the details of their bullying behavior. This statement will no doubt be met with more attacks, but readers may now locate such behavior within the broader context in which this persecution takes place.

A list of my different books and peer-reviewed scholarly articles is provided at the end of this document. Many of the articles are available for download on my Stanford site http://ed.stanford.edu/faculty/joboaler and at www.joboaler.com

Selected Publications.

Books.

Boaler, J. (2009) What's Math Got To Do With It? How Parents and Teachers Can Help Children Learn to Love Their Least Favorite Subject. Penguin: New York.

Boaler, J. (2010). The Elephant in the Classroom. Helping Children Learn & Love Maths. Souvenir Press: London. UK Edition of What's Math Got To Do With It.

Boaler, J & Humphreys, C (2005) *Connecting Mathematical Ideas: Middle School Cases of Teaching & Learning*. Heinneman: Portsmouth. (9th reprinting).

Boaler, J (2002) *Experiencing School Mathematics: Traditional and Reform Approaches to Teaching and their Impact on Student Learning*. Lawrence Erlbaum Associates: Mahwah, New Jersey.

Boaler, J. (ed) (2000) *Multiple Perspectives on Mathematics Teaching & Learning*. Ablex Publishing: Westport, CT.

Boaler, J. (1997) *Experiencing School Mathematics: Teaching Styles, Sex and Setting*. Open University Press: Buckingham, England.

Peer-Reviewed Journal Articles.

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Boaler, J. (2008). When Politics Took the Place of Inquiry: A Response to the National Mathematics Advisory Panel's Review of Instructional Practices. *Educational Researcher. December 2008, 37: 588-594*.

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Boaler (2005). The 'Psychological Prison' from which they never escaped: The role of ability grouping in reproducing social class inequalities. *FORUM*, *47*, *2&3*, *135-144*.

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Boaler, J. (2002). Learning from Teaching: Exploring the Relationship Between Reform Curriculum and Equity. *Journal for Research in Mathematics Education*, *33*(4), 239-258.

Boaler, J. (2002). Paying the Price for "Sugar and Spice": Shifting the Analytical Lens in Equity Research. *Mathematical Thinking and Learning*. 4(2&3), 127-144.

Boaler, J. (2002). The Development of Disciplinary Relationships: Knowledge, Practice and Identity in Mathematics Classrooms. *For the Learning of Mathematics*, 22(1), 42-47.

Boaler, J (2002). Mathematical Modeling and New Theories of Learning. *Teaching Mathematics and its Applications*. 20 (3), 121-127

Boaler, J., Wiliam, D., & Brown, M. (2000). Students' experiences of ability grouping - disaffection, polarization and the construction of failure. *British Educational Research Journal*, 26, 5, 631-648.

Boaler, J. (2000). Exploring Situated Insights into Research and Learning. *Journal for Research in Mathematics Education*, 39 (1), 113-119

Boaler, J. (2000). Mathematics from another World: Traditional Communities and the Alienation of Learners. *Journal of Mathematical Behavior*, 18 (4), 1-19.

Boaler, J. (1999). Participation, Knowledge and Beliefs: A Community Perspective on Mathematics Learning. *Educational Studies in Mathematics*, 40, 259-281.

Boaler, J. (1998) Open and Closed Mathematics Approaches: Student Experiences and Understandings *Journal for Research in Mathematics Education. 29 (1) 41-62.*

Boaler, J. (1998) Mathematical Equity: Under Achieving Boys or Sacrificial Girls? *Journal of Inclusive Education*, 2 (2).

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Boaler, J. (1997) Reclaiming School Mathematics: The Girls Fight Back. *Gender and Education*. 9 (3) 285-306.

Boaler, J. (1997) When Even the Winners are Losers: Evaluating the Experience of 'top set' students. *Journal of Curriculum Studies*, 29 (2) 165-182.

Boaler, J. (1996) Learning to Lose in the Mathematics Classroom: a critique of traditional schooling practices. *Qualitative Studies in Education*, 9 (1) 17-34.

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