

2017

In Search of Defining Ethics in (Mathematics) Education Research?

David W. Stinson

Georgia State University, dstinson@gsu.edu

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

 Part of the [Curriculum and Instruction Commons](#), and the [Junior High, Intermediate, Middle School Education and Teaching Commons](#)

Recommended Citation

Stinson, David W. 2017. "In Search of Defining Ethics in (Mathematics) Education Research?" *Journal of Urban Mathematics Education* 10 (1). <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/336>.

This Article is brought to you for free and open access by the Department of Middle and Secondary Education at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Middle and Secondary Education Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

EDITORIAL

In Search of Defining Ethics in (Mathematics) Education Research?

David W. Stinson
Georgia State University

This editorial is inspired by an essay by Paul Ernest (2012), “What is Our First Philosophy in Mathematics Education?,” which I recently uncovered as I was preparing for my summer courses. In the introduction, Ernest asks—

Can mathematics education have a first philosophy? Is there a branch of philosophy that is a *sine qua non* for mathematics education research and possible its practice as well? Are there philosophical assumptions that cannot be avoided in pursuing any inquiries whatsoever in our field? Can these assumptions be located in one branch of philosophy? (p. 8)

Ernest offers five alternative “candidates” as a response to this singularly focused set of questions. Two candidates are general branches of philosophy—the philosophy of mathematics and the philosophy, if you will, of critical theory—and the other three candidates are general areas of philosophical inquiry—ontology, epistemology, and ethics.¹ Throughout the essay, Ernest provides justifications of why both the philosophy of mathematics and the philosophy of critical theory as well as ontology and epistemology fall short in providing a first philosophy for mathematics education research and practice.

After eliminating the first four candidates, Ernest (2012) makes a four-pronged argument for ethics as a first philosophy. Ethics, he claims, “enters into mathematics education research in several ways” (p. 13). First, ethics is at the center of the research process with respect to seeking informed consent, causing no harm or detriment, and ensuring confidentiality for all those involved. Ernest believes that any research that does not conform to these most basic standards “is ethically flawed and its knowledge claims are suspect” (p. 13). Second, mathematics education researchers are participating “in the great, age-old human conversation that sustains and extends our common knowledge and cultural heritage,” as such

¹ These are the branches of study that are concerned with the nature of being, the theory of knowledge, and the principals of moral behavior, respectively.

“we and others benefit and grow” (p. 13.) Third, the species of human beings depends on its survival by sharing in ethical social and life behaviors with fellow humans. And fourth, drawing on Emmanuel Levinas (1906–1995) and his ethics as first philosophy,² Ernest states, according to Levinas—

we owe a debt to the other that precedes and goes beyond reasons, decisions, and our thought processes, and precedes and exceeds any attempt to understand the other. Our infinite responsibility to the other person is, of course, ethical: “Ethics precedes ontology [...] ethics primarily signifies obligation toward the other, that it leads to the Law and to gratuitous service, which is not a principle of technique” (Levinas, 1987, p. 183). (p. 13)

In the end, Ernest (2012) contends that positioning ethics as a first philosophy for mathematics education research enables us (i.e., the larger mathematics education research community) “to rethink and re-evaluate some of the taken-for-granted commonplaces of our practices” (p. 14), which opens up new possibilities for theorizing and researching mathematics teaching and learning.

Ernest’s 2012 essay is neither his first discussion on ethical considerations in the field (see, e.g., Ernest, 1991³), nor is he the only mathematics education scholar to explore directly the ethical implications of our work as researchers. Nearly two decades ago, Judith Sowder (1998) explicitly placed ethics at the center of the mathematics education research process in her contribution to the International Congress on Mathematical Instruction study *Mathematics Education as a Research Domain: A Search for Identity* (Sierpinska & Kilpatrick, 1998). Given the shift from largely quantitative methodology to qualitative methodology that occurred in mathematics education research during the 1980s (Lester & Lambdin, 2003), Sowder believed that new questions with respect to ethics should be explored (see also Adler & Lerman, 2003⁴). Much of her discussion can be characterized as aligning with Ernest’s (2012) first argument for ethics as a first philosophy: ethical considerations in the most basic standards of conducting research, for example, purpose, informed consent, minimizing harm, maximizing benefits, confidentiality, data use, data interpretation, and so forth. She concluded, stating: “Ethical decision making is difficult. There are times when we face conflicting ethical demands, and a decision must be made—a decision with which we want to be satisfied in the long run” (p. 440).

² See Atweh and Brady (2009) and Neyland (2004) for discussions of Levinas’s ethics as first philosophy applied to mathematics teaching and learning.

³ Traces of concern for ethical considerations in the field of mathematics education are found throughout Ernest’s prolific [body of scholarship](#).

⁴ See also Andersson and le Roux (2017) for a discussion of ethical considerations in writing in mathematics education research.

Uncovering Ernest's 2012 essay this summer reignited my own struggles, concerns, and doubts in becoming an ethical critical postmodern⁵ mathematics education scholar and researcher. These struggles, concerns, and doubts came into my being as I entered the field as a researcher and have grown exponentially (it seems) when I consider the entirety of the roles that I have occupied in the field: participant, researcher, presenter, writer, reviewer, editor, and so forth. My struggles (and so forth) originated when my journey into postmodern theory began to expose the fault line of research done within the humanist tradition (St. Pierre, 2000). Within the ruptures of this fault line, researcher ethics emerged, for me at least, as *the* primary concern of education research—becoming an issue that was not completely addressed by the inquiries of an Institutional Review Board (Guillemin & Gillam, 2004). Uncovering Ernest's essay this summer, therefore, gave me solace, if you will, that I was somewhat on the “right” track, back then and now.

Being “well schooled” as an education researcher in the early 2000s, I was carefully taught that there was a crisis in representation (Marcus & Fischer, 1986) and an end to innocence (Van Maanen, 1995) in the work that we do as (mathematics) education researchers. Nevertheless, as I acknowledge, both then and now, a crisis in representation and an end to innocence, I continue to ask: Is everything dangerous? I argue, yes, while using Foucault's (1983/1997) reconfiguration of the word *dangerous*: “My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do” (p. 256).

It is the coupling of Marcus and Fischer's (1986) and Van Maanen's (1995) arguments and Foucault's (1983/1997) statement, and postmodern theory in general, that continues to present me with some troubling questions: Given that there is still work to do, how do I (we) go about doing that work, ethically? Does showcasing and monitoring my (our) subjectivities address ethical concerns (Glesne, 1999; Peshkin, 1988)? Or does presenting thick descriptions (Geertz, 1973)? Or is it reconceptualizing validity (Lather, 1986)? Although helpful, I believe, engaging in a combination of these methodological procedures (and others) in our research is only a starting point in confronting the crisis in representation, as we acknowledge that our work is not innocent and is always dangerous.

As a critical postmodern researcher, the aspect of the research process that I focus on most, in order that I might sleep at night, is my ethics. In making the foregoing statement, I understand that I might be seeking a metanarrative around ethics,

⁵ Often the words *postmodernism* and *poststructuralism* are used interchangeable in the literature; however, there are acknowledged differences in the terms (for a brief discussion see St. Pierre, 2000, pp. 506–507). Following Walshaw (2004), I use the term *postmodern* as a general term that attempts to capture the nuances of both words (also see Ernest, 1998). See Stinson and Bullock (2012, 2015) for discussions on the phrase *critical postmodern* in mathematics education research.

which I have incredulity toward (Lyotard, 1979/1984⁶). But in considering ethics as a first philosophy (Ernest, 2012), I somehow get out of the metanarrative quandary. . . . I think. Nonetheless, I do not get complete peace of mind by showcasing and monitoring my subjectivity or by presenting thick descriptions, neither from searching for disconfirming evidence nor conducting triangulation of data (Silverman, 2000). Although these methodological procedures are important components of the research process, I get most of my peace of mind by engaging, continuously and chaotically, my ethics.

But how do I talk about ethics? How do I “represent” or “define” ethics? How do I talk about and represent engaging in continuous and chaotic ethics without establishing a metanarrative around ethics, which begins to surveil and discipline ethics (Foucault, 1975/1995)? Shouldn’t ethics always be un surveilled, undisciplined, continuous, and chaotic engagement? Oops, is the aforementioned statement the start of a metanarrative? Then again, would a metanarrative around ethics be such a bad thing?

I state explicitly here that I do not wish to engage in a critical discussion about ethics (see, e.g., Dewey, 1932/1985), a discussion that has been ongoing since the question *What is ethics?* was even possible to ask. I do, however, discuss, although briefly, how I have come to think about framing my researcher ethics and provide a definition of ethics that I attempt to continuously and chaotically engage throughout the multiple roles I occupy in the field of mathematics education research.

Guillemin and Gillam (2004) identify two different dimensions of ethics in research: “procedural ethics and ‘ethics in practice’” (p. 262). They define procedural ethics as those ethical issues most often addressed by research ethics committees (e.g., Institutional Review Boards). And they define “ethics in practice” as the ongoing day-to-day ethical issues that arise throughout the research process (e.g., the disclosure of sensitive information from a research participant). Although Guillemin and Gillam perceive continuity between the two dimensions, they frame “ethics in practice” within reflexivity. Reflexivity, in research, requires thinking about the researcher’s positionality and how the process of conducting research affects the study and the human relationships developed throughout the study (Glesne, 1999). Guillemin and Gillam claim that in being reflexive the researcher becomes alert not only to issues related to knowledge creation (i.e., epistemology) but also to the ethical issues of research. In so doing, they believe, the researcher adopts “a continuous process of critical scrutiny and interpretation, not just in relation to the research methods and the data but also to the researcher, participants, and the research context” (p. 275).

⁶ Lyotard (1979/1984) believed that metanarratives are foundational in supporting “universal truths” that serve to legitimate modern culture; meta- or grand-narratives are evident in “the dialectics of Spirit, the hermeneutics of meaning, the emancipation of the rational or working subject, or the creation of wealth” (p. xxiii).

It is Guillemin and Gillam's (2004) concept of reflexivity and ethics in practice that best frames how I bring into play *a* definition of ethics, which offers a means for thinking and rethinking ethical issues throughout the research process, no matter what role I am playing. The Dalai Lama (1999), in his book *Ethics for the New Millennium*, suggests that ethics is an understanding that we all desire happiness, and we all seek to avoid suffering. Thus, he believes

what is entailed...is not an admission of guilt but...a reorientation of our heart and mind away from self and toward others. To develop...an attitude of mind whereby, when we see an opportunity to benefit others, we will take it in preference to merely looking after our own narrow interests. But though, of course, we care about what is beyond our scope, we accept it as part of nature and concern ourselves with doing what we can. (p. 162–163)

The Dalai Lama's definition of ethics does not require one to solve the “world's problems”; it simply requires one to seek ways of assisting in others' happiness and security concurrently with her or his own, decentering oneself to attempt to become the other. Becoming the other is never possible; it is, however, I believe, the honest attempt that is an ethical act. Moreover, such a definition of ethics, I believe, requires an ethics of care of the self and, in turn, care of others (Foucault, 1984/1988).

In the end, as I live, think, and interact within a critical postmodern existence, there appears to be a bottomless abyss of ethical issues that trouble the research process (and the field of mathematics education in general). Yet, by continuously and chaotically engaging my ethics throughout the research decision-making process, I believe, I successfully negotiated some of these issues—doing dangerous work, ethically. And yes, I will continue to take up Ernest's (2012) suggestion: ethics as a first philosophy for mathematics education research (and practice).

– **What is your first philosophy?**

References

- Adler, J., & Lerman, S. (2003). Getting the description right and making it count: Ethical practice in mathematics education research. In A. Bishop, M. A. Clements, C. Keitel-Kreidt, J. Kilpatrick, & F. Koon-Shing Leung (Eds.), *Second international handbook of mathematics education* (Vol. 2, pp. 441–470). Dordrecht, The Netherlands: Springer.
- Andersson, A., & le Roux, K. (2017). Toward an ethical attitude in mathematics education writing. *Journal of Urban Mathematics Education*, 10(1), 74–94. Retrieved from <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/303/215>
- Atweh, B., & Brady, K. (2009). Socially response-able mathematics education: Implications of an ethical approach. *Eurasia Journal of Mathematics, Science & Technology Education*, 5(3), 267–276.
- Bstan-'dzin-rgya-mtsho-Dalai Lama XIV. (1999). *Ethics for the new millennium*. New York, NY: Riverhead Books.
- Dewey, J. (1985). Ethics. In J. A. Boydston (Ed.), *John Dewey: The later works, 1925–1953* (Vol. 7). Carbondale, IL: Southern University of Illinois Press. (Original work published 1932)

- Ernest, P. (1991). *The philosophy of mathematics education*. London, United Kingdom: Falmer Press.
- Ernest, P. (1998). A postmodern perspective on research in mathematics education. In A. Sierpiska & J. Kilpatrick (Eds.), *Mathematics education as a research domain: A search for identity* (Vol. 1, pp. 71–85). Dordrecht, The Netherlands: Springer.
- Ernest, P. (2012). What is our first philosophy in mathematics education?. *For the Learning of Mathematics*, 32(3), 8–14.
- Foucault, M. (1988). *The history of sexuality. Volume 3: The care of the self* (R. Hurley, Trans.). New York, NY: Vintage Books. (Original work published 1984)
- Foucault, M. (1995). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). New York, NY: Vintage Books. (Original work published 1975)
- Foucault, M. (1997). On the genealogy of ethics: An overview of work in progress. In P. Rabinow (Ed.), *The essential works of Michel Foucault, 1954–1984* (Vol. I, Ethics, pp. 253–280). New York, NY: New Press. (Interview given 1983)
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York, NY: Basic Books.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). New York, NY: Longman.
- Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and “ethically important moments” in research. *Qualitative Inquiry*, 10(2), 261–280.
- Lather, P. (1986). Issues of validity in openly ideological research: Between a rock and a soft place. *Interchange*, 17(4), 63–84.
- Lester, F. K., & Lambdin, D. V. (2003). From amateur to professional: The emergence and maturation of the U.S. mathematics education community. In G. M. A. Stanic & J. Kilpatrick (Eds.), *A history of school mathematics* (Vol. 2, pp. 1629–1700). Reston, VA: National Council of Teachers of Mathematics.
- Lyotard, J. F. (1984). *The postmodern condition: A report on knowledge* (G. Bennington & B. Massumi, Trans.). Minneapolis, MN: University of Minnesota Press. (Original work published 1979)
- Marcus, G. E., & Fischer, M. M. J. (1986). A crisis of representation in the human sciences. In G. E. Marcus & M. M. J. Fischer (Eds.), *Anthropology as cultural critique: An experimental moment in the human sciences* (pp. 7–16). Chicago, IL: University of Chicago Press.
- Neyland, J. (2004). Toward a postmodern ethics of mathematics education. In M. Walshaw (Ed.), *Mathematics education within the postmodern* (pp. 55–73). Greenwich, CT: Information Age.
- Peshkin, A. (1988). In search of subjectivity: One’s own. *Educational Researcher*, 17(7), 17–22.
- Sierpiska, A., & Kilpatrick, J. (Eds.). (1998). *Mathematics education as a research domain: A search for identity*. Dordrecht, The Netherlands: Springer.
- Silverman, D. (2000). *Doing qualitative research: A practical handbook*. Thousand Oaks, CA: Sage.
- Sowder, J. T. (1998). Ethics in mathematics education research. In A. Sierpiska & J. Kilpatrick (Eds.), *Mathematics education as a research domain: A search for identity* (Vol. 2, pp. 427–442). Dordrecht, The Netherlands: Springer.
- St. Pierre, E. A. (2000). Poststructural feminism in education: An overview. *International Journal of Qualitative Studies in Education*, 13(5), 467–515.
- Stinson, D. W., & Bullock, E. C. (2012). Critical postmodern theory in mathematics education research: A praxis of uncertainty. *Educational Studies in Mathematics*, 80(1&2), 41–55.
- Stinson, D. W., & Bullock, E. C. (2015). Critical postmodern methodology in mathematics education research: Promoting another way of thinking and looking. *Philosophy in Mathematics Education Journal*, 29, 1–18
- Van Maanen, J. (1995). An end to innocence. In J. Van Maanen (Ed.), *Representation in ethnography* (pp. 1–35). Thousand Oaks: Sage.
- Walshaw, M. (Ed.). (2004). *Mathematics education within the postmodern*. Greenwich, CT: Information Age.