

Book Review...

The View from Here: Opening Up Postmodern Vistas

Ginny Powell

Walshaw, M. (Ed.). (2004). *Mathematics education within the postmodern*. Greenwich, CT: Information Age. 254 pp. ISBN 1-59311-130-4 (pb). \$34.95

The term “postmodern” has been used in many different ways by many different people. And that’s just fine with postmodernists. Those given credit for the creation of postmodernism cared little for the name, and today’s evangelizers feel no need to pin it down to one meaning. That is the point, after all. Postmodernism was born as a reaction against the “modernist project” of finding the one final answer to every question. The real world, postmodernists would say, is much more complex than that.

But whether you consider yourself a postmodernist or not, you will find *Mathematics Education within the Postmodern* (edited by Margaret Walshaw, \$34.95) an eye-opening and thought-provoking book. As postmodern pioneer Valerie Walkerdine says in the preface, the purpose of this volume is to “challenge accepted wisdoms” (p. vii) about mathematics, mathematics education, and mathematics educators. Up to now, “the post” has led to few insights into mathematics education, even as its contribution to other disciplines has grown.¹ A volume such as this is a sign that this interesting perspective is growing in popularity and recognition, pulling up a seat at the table, and joining the fray.

For those new to postmodernism, editor Walshaw provides a nice introduction in the first chapter, along with an explanation of modernism, for those who are not aware they are embedded in it. Accurately, though disturbingly, she describes the postmodern approach as “unsettling” and about “exploring tentativeness” (p. 3). There is an unapologetic lack of answers here: no “tips for teachers” (p. 222), as Cotton says in the final chapter. This book, like this approach, is about opening up new ways of thinking about matters we did not realize we needed to think about, things we thought

were fixed and decided, the “unthinkable.” I like to picture postmodernism as pointing out a new path I never noticed before, which invites endless exploration, but also carries possible dangers.

This book is the fourth volume in the *International Perspectives in Mathematics Education*² series, and international certainly describes it; contributors hail from, or have worked in, Colombia, Brazil, the United States, Australia, Kiribati, Denmark, the United Kingdom, and New Zealand, though only the last two countries have multiple representatives. As a mathematics teacher in the United States, I found nothing that seemed lost in the translation across cultures. It was all relevant and recognizable, sometimes troublingly so.

Organization of the Book

After the introductory chapter, the book is divided into three roughly equal parts. The three chapters in “Part I: Thinking Otherwise for Mathematics Education” treat the broad subjects of how postmodernism might lead to new ways of thinking about mathematics itself, research in mathematics education, and the practice of mathematics education. “Part II: Postmodernism within Classroom Practices” includes four chapters attempting to show, with varying success, how a postmodern attitude has changed or could change the classroom. The final part, “Part III: Postmodernism within the Structures of Mathematics Education,” takes on teacher training, curriculum design, and assessment from the postmodern perspective.

This structure seems arbitrary. Chapters from the first and last parts could have easily been put together, as all treat large issues in mathematics education. Then again, some of them treat classroom practices, and might have fit better in the second part. The chosen organization seems to echo that of the previous volume in the series rather than any logical arrangement. That Walshaw’s volume has one less chapter and is one

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hundred pages shorter than the previous volume leads one to wonder if some of the contributions would not have been accepted if there had been more submissions. Perhaps in the future there will be more researchers willing and able to contribute to future mathematics education publications in the postmodern vein.

The Big Picture

Paul Ernest starts off the first part by taking mathematics to task for its failure to respond meaningfully to fundamental issues, or rather for responding by gobbling up each new paradox and going on as though nothing had happened. “Gödel’s Theorem did not even cause mathematics to break its stride as it stepped over this and other limitative results” (p. 17). Some would see that as a strength, but Ernest, consistent with the postmodern emphasis on deconstruction, would rather explore where those issues might take us. Also in this chapter, he discusses several postmodernists and pre-postmodernists, such as Lyotard, Foucault, and Lakatos, illuminating the origins of some of the basic ideas of postmodernism. Ernest gently points out how we sometimes have to unlearn what we thought we knew in order to learn something new, whether it’s “addition makes a bigger number” or “there is one best way to teach.”

In the next chapter, Valero takes us into a classroom in Colombia to explore what we think we know about mathematics students. Adopting a postmodern attitude, she offers insight into the unreality of the “laboratory children” (p. 43) mathematics education researchers claim to have knowledge about. Real children are much more complicated, of course, and she discusses how we might better approach them. Even if some children are willing to make it easy for us by playing by the rules of mathematics and the classroom, she asks if that is really all we want for them.

Finishing up Part I of the book, Neyland tackles ethics and what postmodern ethics might mean. He charges current, “modern” ethics with being “undesirable and illusory” (p. 56), leading to educational “reforms” like national curricula and standardized tests that seem to him flawed from the ground up. His goal is not to replace this state of affairs with a new set of unquestionable standards—an “objectively founded and universal ethical code is impossible to obtain” (p. 60)—but to explore other possibilities based on the individual self, possibilities that might lead to a “re-enchantment” (p. 60) with mathematics.

Hands On

The next section, on classroom practices, should be the most enjoyable for the neophyte postmodernist reader, if only for its concreteness. Those set afloat by the endless questioning of the first part will find something to hold onto here, as we see teachers and students interacting in recognizable ways. But soon we will be led to question what we thought we knew about such a familiar setting, as the authors point out the obvious-once-you-hear-them, shocking undercurrents of teacher-student relationships.

Unfortunately, the first chapter in this section seems completely out of place in this volume. In it, Macmillan discusses interactions in preschool mathematics groups in Australia. Her occasional use of a word from the official postmodern lexicon (e.g., agency, discourse) cannot hide her essentially constructivist approach. She painstakingly systematizes everything and explicitly and unquestioningly accepts the conventions of the current modernist classroom. One wishes she had read and learned from Valero’s chapter above, or Hardy’s below.

The rest of the second section, however, is filled with questions and new perspectives. In her piece, Hardy vividly dissects an “exemplar” teacher training video. Drawing on Foucault, she discusses the normalizing effect on students and teachers, asking how we might “choose to do otherwise” (p. 116). Speaking as though for the entire book, she hopes that “by working through alternatives, by exploiting the lack of stability of many of our professional notions, we might open up spaces from which we can counter ill-posed problems and look for sites of resistance” (p. 117).

Editor Walshaw contributes a chapter to this section as well, bringing Lacanian psychoanalysis into the fray. Once again she acts as helper to the reader, defining and explaining constructivist and sociocultural theories of knowing and outlining Lacan for us, before bringing him to bear on a single student and that student’s interactions with her mathematics teacher. What she has to say about the idea of a “model” pupil will have you deconstructing all your notions about your relationship to your students as a teacher and your relationship with your teachers as a student.

Cabral continues the Lacanian analysis by describing a classroom where postmodern ideas have already influenced practice. The result is, as promised, unsettling. She coins a new phrase, “pedagogical transference” (p. 142), to explain her ideas about how learning is affected by the unconscious, by feelings and moods. But even without adopting her terms, the

reader can come to the, by now familiar, space of constant questioning as they experience this new vision. The result is not necessarily the urge to run out and replicate her classroom, but the reader becomes aware of yet another space for change in her or his own teaching and learning.

More Big Issues

The last part of the book returns to confrontation with current large issues in mathematics education. In their article, Brown, Jones, and Bibby search for insight into the thinking of elementary school teacher trainees. They find nearly universal fear and lack of facility with mathematics. This chapter isn't "teacher bashing," nor is it a panacea, but rather it exposes a reality that needs to be addressed. Brown, Jones, and Bibby ask how a teacher's identity and feelings about her- or himself as a mathematics learner and teacher affect future students, and how we might change those feelings for the betterment of all.

Meaney, in the next chapter, takes us back a step to look at curriculum design. Specifically, she looks at how she, as an outside consultant brought in to facilitate the development of a mathematics curriculum among the Māori, negotiated the many power relations inherent in the situation, and how she might do it differently next time. There is much here about cross-cultural pitfalls, but also about the dangers of top-down decision making. Once again, she asks only that we begin to think about how and why things are done, and what alternatives are possible.

"Do you ever think about what you don't think about?" (p. 202) Fleener asks provocatively at the beginning of her chapter. The sole American contributor, she draws on Deleuze and Guattari, as well as popular movies, to question the most basic structures of mathematics education. "Why do we teach division after multiplication? ... Why is mathematical aptitude considered evidence of intelligence? ... Why do we teach 400-year-old algebra and calculus and 2500-year-old geometry?" (p. 202). Echoing Ernest, she castigates the mathematical community for ignoring the possibilities that foundational problems create, expressing a wish that we "celebrate rather than bemoan the loss of certainty and structure" (p. 203) and help our students "fall in love" (p. 205) with mathematics, not just regurgitate it.

In the final chapter, Cotton challenges current assessment practices and how they can take on a self-perpetuating life of their own. Drawing on Lyotard, he deconstructs assessment as it is currently practiced in the UK and then sets forth his own criteria for a better

way. His vision is clear, but the example he gives of his attempt to actually use his new assessment shows just how difficult change can be, as ten-year-olds demonstrate how embedded they already are in the world that standardized testing has wrought.

Putting It All Together

This book is not an exhaustive treatise on mathematics education or on postmodernism. It is only a beginning, a step towards possible change. While the authors come at postmodernism from different angles and through the work of different thinkers (Lacan, Foucault, Lyotard, Deleuze, etc.), they all share one goal: to make us think about mathematics education differently. They remind us that there is no one "right" way to teach or learn mathematics. Through their own examples, they inspire us to seek new insights of our own. As Walshaw says in the introductory chapter, "Ultimately it is the hope of all the authors that the ongoing engagement will mark a fruitful and productive convergence between mathematics education and postmodernism" (p. 11).

This book would be an interesting and useful read for anyone involved in the teaching or learning of mathematics at any level, kindergarten through college, and for administrators and policymakers who are in a position to make broad decisions about mathematics education. It can be read all at once, or the reader can use the index or Walshaw's excellent introductions in Chapter 1 to find something applicable to their own situation. Whether or not anyone embraces postmodernism as a result of reading this book is irrelevant. As long as new questions are asked, progress has been made toward a more flexible system of mathematics education.

References

- Linn, R. (1996). *A teacher's introduction to postmodernism*. Urbana, IL: National Council of Teachers of English.
- Walshaw, M. (Ed.). (2004). *Mathematics education within the postmodern*. Greenwich, CT: Information Age.

¹ For example, in 1996 the National Council of Teachers of English (NCTE), in the NCTE Teacher's Introduction Series, published the book *A Teacher's Introduction to Postmodernism* (Linn, 1996).

² Volume 1 was *Multiple Perspectives on Mathematics Teaching and Learning* (2000), edited by Jo Boaler; Volume 2 was *Researching Mathematics Classrooms: A Critical Examination of Methodology* (2002), edited by Simon Goodchild and Lyn English; and Volume 3 was *Which Way Social Justice in Mathematics Education?* (2003), edited by Leone Burton, who is also series editor.