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Ernest, Paul (ed.); Sriraman, Bharath (ed.); Ernest, Nuala (ed.)

Critical mathematics education. Theory, praxis and reality.

Cognition, Equity & Society: International Perspectives. Charlotte, NC: Information Age Publishing (IAP) (ISBN 978-1-68123-260-7/hbk; 978-1-68123-259-1/pbk; 978-1-68123-261-4/ebook). 360 p. (2016).

Publisher's description: Mathematics is traditionally seen as the most neutral of disciplines, the furthest removed from the arguments and controversy of politics and social life. However, critical mathematics challenges these assumptions of neutrality and actively attacks the idea that mathematics is pure, objective, and value neutral. It argues that history, society and politics have shaped mathematics – not only through its applications and uses, but through moulding its concepts, methods, and even mathematical truth and proof, the very means of establishing truth. Critical mathematics education also attacks the neutrality of the teaching and learning of mathematics, showing how these are value laden activities indissolubly linked to social and political life. Instead it argues that the values of openness, dialogicality, criticality towards received opinion, empowerment of the learner and social/political engagement and citizenship are necessary dimensions of the teaching and learning of mathematics, if it is to contribute towards democracy and social justice. The book draws together critical theoretic contributions on mathematics and mathematics education from leading researchers in the field. It explores many facets of the practical implications of these critical views for the varying stages and phases of mathematics education around the globe. Recurring themes in the book include: – the natures of mathematics and critical mathematics education, issues of epistemology and ethics; – ideology, the hegemony of mathematics, ethnomathematics, and real-life education; – capitalism, globalization, politics, social class, habitus, citizenship and equity. The book demonstrates the links between these themes and the discipline of mathematics and its critical teaching and learning. The outcome is a groundbreaking collection unified by a shared concern with critical perspectives of mathematics and education, and of the ways they impact on practice and the realities of society and schooling. The articles of this volume will not be indexed individually.

Classification: A60 D10