

ZMATH 2010d.00452

Jackson, Kara; Ginsburg, Lynda

Algebra for all? The meanings that mothers assign to participation in an algebra class.

Adults Learn. Math. 3, No. 2a, 10-28 (2008).

Summary: In this paper, we report on a series of algebra classes with a group of low-income, African American mothers of elementary-aged children who had limited and negative formal experiences with algebra. We drew from United States reform-oriented elementary mathematics curricular materials in the classes. The women initially arrived to the class out of a desire to support their children's learning but over time also engaged in the class for intellectual purposes. We show how their questions and observations, rooted in their experiences with algebra in secondary education and in their children's elementary mathematics, drove our instruction, and how the women shifted their understandings of who can "do" algebra and of algebraic content. We suggest that the shifts they experienced were supported by three sources of meaning-making specific to algebra: "from within the mathematics, from the problem context, and from that which was exterior to the mathematics/problem context" (Kieran, 2007, p. 711). Our analysis suggests the importance of understanding parents as learners and the potential of reform-oriented elementary curriculum for supporting the learning of adults who had negative experiences with mathematics.

Classification: H28 C68 D48 C78

Keywords: adult education; elementary algebra; parents