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**Teaching and learning middle school algebra: valuable lessons from the history of mathematics.**

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Summary: Algebra is often thought of as a ‘gatekeeper’ in school mathematics, being crucial to further study in mathematics as well as to future educational and employment opportunities. However, a large number of studies have highlighted the difficulties and cognitive obstacles that students face when they learn algebra. In response to growing concerns about students’ fragile understandings and preparation in algebra, recent research and reform efforts in mathematics education have made algebra curriculum and teaching a focus of attention. Very little research, however, has paid attention to extracting ideas from the history of algebra for developing classroom teaching strategies. In this chapter, we examine some important issues in the history of algebraic ideas involving variables and exponents that can transfer well to the mathematics classroom of today.

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