

ZMATH 2016d.00317

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Just say yes to early algebra!

Teach. Child. Math. 22, No. 2, 92-101 (2015).

Summary: Mathematics educators have argued for some time that elementary school students are capable of engaging in algebraic thinking and should be provided with rich opportunities to do so. Recent initiatives like the Common Core State Standards for Mathematics (CCSSM) have taken up this call by reiterating the place of early algebra in children's mathematics education, beginning in kindergarten. Some might argue that early algebra instruction represents a significant shift away from arithmetic-focused content that has typically been taught in the elementary grades. To that extent, it is fair to ask, "Does early algebra matter?" That is, will teaching children to think algebraically in the elementary grades have an impact on their algebra understanding in ways that will potentially make them more mathematically successful in middle school and beyond? In this article, the authors share findings from a research project whose goal is to study the impact of a comprehensive early algebra curricular experience on elementary school students' algebraic thinking within a range of domains including generalized arithmetic, equivalence relations, functional thinking, variables, and proportional reasoning. The focus here is on the performance of third-grade students who participated in an early algebra intervention on a written assessment administered before and after instruction. The authors also discuss the strategies these students used to solve particular tasks and provide examples of the classroom activities and instructional strategies that they think supported the growth they saw in students' algebraic thinking. (ERIC)

Classification: D32 H22 H32 F32

Keywords: early algebra; algebraic thinking; algebraic expressions

<http://www.nctm.org/Publications/Teaching-Children-Mathematics/2015/Vol22/Issue2/Just-Say-Yes-to-Early-Algebra/>