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Changing from the inside out: SimCalc teacher changes in beliefs and practices.

Hegedus, Stephen J. (ed.) et al., The SimCalc vision and contributions. Democratizing access to important mathematics. Dordrecht: Springer (ISBN 978-94-007-5695-3/hbk; 978-94-007-5696-0/ebook). Advances in Mathematics Education, 271-284 (2013).

Summary: Interviews with SimCalc teachers in the democratizing access to core mathematics across grades 9–12 study led to unexpected insights into instructional practices – and teacher beliefs that informed those practices. We found that working with SimCalc, over time, changed some teachers' routine instructional practices and challenged them to reconsider their views about how children learn mathematics. These transformations were different across teachers but patterns emerged that could be linked to the amount of time teachers spent in the project, and to the instructional approaches inherent in SimCalc.

Classification: U50 C29 C70 D40

Keywords: computer aided instruction; beliefs; instructional practices; technology in mathematics instruction; instructional approaches; teaching; learning conversation

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