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**Bar-On, Rann; Bookman, Jack; Cooke, Benjamin; Hall, Donna; Schott, Sarah**  
**(Re)discovering SoTL through a fundamental challenge: helping students transition to college calculus.**

Dewar, Jacqueline M. (ed.) et al., Doing the scholarship of teaching and learning in mathematics. Washington, DC: The Mathematical Association of America (MAA) (ISBN 978-0-88385-193-7/pbk; 978-1-61444-318-6/ebook). MAA Notes 83, 59-65 (2015).

Summary: In this chapter, the authors describe how one faculty member's attempt to improve student success in a special freshmen calculus sequence for underprepared students evolved into scholarship of teaching and learning. Key to this progression was collaboration with academic support professionals and non-tenure track faculty. Thoughtful discussions, a few trial interventions, and examining the research literature enabled the group to move from reflection and experimentation to scholarly teaching and then to the scholarship of teaching and learning. After several years of collaborative effort, a grant application to further develop, study, and share the results of this work was submitted to the NSF.

*Classification:* D20 D45 I15

*Keywords:* scholarship of teaching and learning; universities; educational research; teaching-learning processes; educational diagnosis; didactics of mathematics; institutional assessment; academic approach; professional development; peer review; teacher education; cognitive science; first year students; remedial teaching; preparatory courses; analysis of learning outcomes; experimental teaching