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Investigating how students' linking historical events to developments in mathematics changed engagement in a history of mathematics course.

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, 87-95 (2015).

Summary: The author of this chapter holds a doctorate in mathematics with a concentration in teaching collegiate mathematics. The dissertation she wrote gave her experience in conducting research in undergraduate mathematics education (RUME). More recently, she participated in her university's SoTL scholars program, undertaking an investigation prompted by frustrations encountered repeatedly when teaching a history of mathematics course. The mathematics majors in the course were reluctant to engage in historical thinking. She tried an intervention and describes how her study of its effect is an example of SoTL (and not RUME) work, thereby illuminating some of the distinctions between the two.

Classification: D20 D45 A30

Keywords: scholarship of teaching and learning; universities; educational research; history of mathematics course; research in undergraduate mathematics education; teaching methods; guided discovery; didactics of mathematics; educational diagnosis; analysis of learning outcomes; evaluation; teaching-learning processes; academic approach; professional development; peer review; experimental teaching