

ZMATH 2015e.00262

O'Hanlon, Wendy A.; Barker, David D.; Langrall, Cynthia W.; Dossey, John A.; McCrone, Sharon M.; El-Zanati, Saad I.

Mathematics research experiences for preservice teachers: investigating the impact on their beliefs.

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, 171-179 (2015).

From the editors' commentary: In this chapter a group at Illinois State University describe how they used the scholarship of teaching and learning to investigate whether having preservice teachers participate in a mathematical research experience for undergraduates (REU) program influenced their beliefs about teaching and learning mathematics. Unable to find an appropriate survey instrument, they developed their own. They explain the organization and content of the survey, tell how they piloted and tested it for reliability, and describe how the results are being used to improve the REU program.

Classification: D20 D49 C29

Keywords: scholarship of teaching and learning; universities; educational research; research experience for undergraduates; preservice teachers; teacher attitudes; beliefs; change in beliefs; didactics of mathematics; educational diagnosis; analysis of learning outcomes; teaching-learning processes; academic approach; professional development; peer review