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Teacher-Scholars: Research Experiences for Pre-service and In-Service Secondary Mathematics Teachers. Preliminary report.

We will report on two NSF funded programs that involve pre-service (and in-service) secondary mathematics teachers in undergraduate mathematics research. One of the programs is a year-long capstone research experience. The other is an REU Site for both pre-service and in-service teachers. Both programs are collaborative efforts between mathematicians and mathematics educators. Our work shows that secondary education majors are capable of undergraduate research in mathematics and benefit from the experience. The experience of doing mathematics has caused a change in our teachers' views of the nature of mathematics. This change has resulted in subsequent changes in their beliefs about teaching and learning. (Received September 16, 2008)