

**Meeting:** 1003, Atlanta, Georgia, MAA CP A1, MAA Session on Getting Students To Discuss and To Write About Mathematics, I

1003-A1-818            **Donna Beers\*** ([donna.beers@simmons.edu](mailto:donna.beers@simmons.edu)), Mathematics Department, Simmons College, 300 The Fenway, Boston, MA 02115. *Using Writing to Promote Learning and Self-Assessment in a Mathematics Course for Prospective Elementary School Teachers.*

In this talk we will describe our work, last spring, in infusing writing into a one-semester content course for prospective elementary school teachers. In addition to homework exercises and classroom investigations, students engaged in a variety of writing activities, including mathematical autobiographies, informational essays on a field trip to a museum, and assessments of an extracurricular event on music and mathematics. Also, working in pairs, students carried out semester-long, team projects. These projects consisted of formal papers, plus oral presentations. In order to integrate writing with learning, students were required to keep reflection journals. This presentation will describe our goals for student learning outcomes and identify which writing assignments mapped with specific learning outcomes goals. We will present samples of writing assignments and student work. We will describe the results of pre- and post-attitudinal surveys and analyze the effects of the projects throughout the course on students' understanding of mathematics and on students' attitudes toward mathematics. Last, we will describe lessons learned and plans for incorporating writing into the course for the next semester. (Received September 29, 2004)