

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

1003-A1-896            **Martha Ellen Waggoner\*** ([waggoner@simpson.edu](mailto:waggoner@simpson.edu)), 701 North C Street, Indianola, IA 50125.

*Do Students Value the Use of Writing as a Way to Learn Mathematics?*

I currently require writing in all the mathematics courses I teach. It is crucial that the writing serve the students well, i.e., the students must value the writing as a way to learn mathematics. I believe that students do find value in the writing I require, but in the past I had no data to justify this claim. Lately I have been working on how to assess the students' perceptions of the value of the writing.

Some questions I am trying to answer are:

\* Do first-year mathematics majors value writing in mathematics courses differently than junior and senior mathematics majors?

\* Do first-year mathematics majors value writing in mathematics courses differently than first-year non-majors?

\* Do these different student groups approach the writing assignments differently?

\* Is the quality of writing different for mathematics majors than for non-majors in the same course?

\* Do students consider writing and homework equally helpful in the learning of mathematics?

Over the past 2 years, I have collected data from 8 courses. I also started a personal journal of my experiences with the writing process. I will present my observations about the students' perceptions and the effectiveness of the assessment techniques I have used. (Received September 30, 2004)