

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

1003-A1-1118 **Linda McGuire*** (lmcguire@muhlenberg.edu), Department of Mathematical Sciences, Muhlenberg College, Allentown, PA 18104. *Storytelling Strategies in the Calculus Classroom*. Preliminary report.

As a result of reform calculus pedagogies being adopted throughout the United States, students are being asked to interpret large amounts of graphical and numerical information about mathematical objects. This often leaves students confused as to what mathematical features they can discern from a graph as opposed to a formula as opposed to a table of data.

This talk will highlight a series of assignments designed to help students become more comfortable with these multiple representations. They involve "short writes" in which students are asked to write a story whose plot is evidenced by a given graph, table or formula. Students write these together in groups and share their stories with the class.

These projects forced students to be accurate in their mathematical analysis, precise with their word choice and careful to clearly communicate with their audience. Yet, they still could be extremely creative and have a lot of fun doing mathematics. This presentation will address the problems given, show several samples of student work, and share with the audience the positive evidence that these assignments helped students to improve their problem-solving skills. (Received October 04, 2004)