

Students in pre-college math courses often think of mathematics as something to "get through". Even the best students don't often think of mathematics as something that can be enjoyable and engaging. The presentation will acquaint participants with this teachers use of a website and email journals as a means of direct one-to-one student/teacher communications. Also an innovative reading-writing-technology assignment will be described and student reactions shared.

For a number of years now, the website has provided both general and specific information for students. Each course has its own pages which include general information about the course as well as up-to-date assignment sheets, worksheets, and handouts. Students (high school) and their parents are able to visit the site and see what is scheduled as well as being able to print out copies of materials. The materials on each course page are left to accrete throughout the year giving a clear picture of the flow of the course.

Email journals are required at approximately two-week intervals. Students may discuss anything mathematical or pedagogical in them and this encourages an individual dialogue between student and teacher which frequently results in a more personalized and productive educational experience for the students.

A reading and technology assignment is a third component of this plan designed to broaden the mathematical experience. Students read an excerpt (although many end up reading the whole work) of about 20 pages from a book with a mathematical theme about which they then write a short exposition. The technology component of the assignment involves locating a website that is pertinent to something being studied in their course at the time. Students do this assignment once each quarter.

Informal assessment of these resources suggests that students come away from the courses with more enthusiasm for mathematics, a broader understanding that mathematics encompasses much more than "calculus", and a willingness (even an interest) in continuing to study mathematics. Email from around the world suggests that teachers in other communities have discovered these materials and found them useful as well.