

Cal Poly Pomona, Mathematics Ed Colloquium

Habits of Mind: An organizing principle for mathematics curriculum and instruction

by

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Secondary students study something in school called mathematics, but which has very little to do with the way mathematics is created or applied outside of school. One reason for this has been a view of curriculum in which mathematics courses are seen as mechanisms for communicating established results and methods -- for preparing students for life after school by giving them a bag of facts. For most students, the real utility of mathematics lies in developing the habits of mind that allow one to look at the world through a mathematical lens. This view has implications for curriculum design, both in the choice of curricular topics and in how they are treated in the classroom. I will discuss the background of this "habits of mind" perspective in my own work on middle and secondary curricula. The talk will include explication of these "mathematical habits of mind," as well as examples from curricula and stories from my own teaching to explore how the idea plays out in classrooms.

This talk takes place January 18, 2007 from 12:05-12:50 in Building 8, Room 156.