Abstract

This thesis examines a mathematics classroom where students are taught mathematics through problem solving. Weekly observations of two different classrooms were done. In addition to the observations, student interviews were conducted throughout the semester with the intent of speaking to a number of students with a broad range of ability levels and diverse attitudes about mathematics. The aim was to explore to what degree students will buy in? To what degree is it possible to create this dynamic, problem solving environment consistently within a classroom? Can it be done without sacrificing any of the prescribed curriculum? What is the impact on the low-achieving students? And how does this pedagogy influence students' relationships with mathematics? The findings show that creating this environment is possible even within the current provincial curriculum and moreover, that this pedagogy generally led students to experience a deeper engagement with mathematical ideas.

Keywords: Problem Solving; Mathematics; Education; Engagement; Relationship with Mathematics; Affect