

1046-97-1249

Daniel I Chazan* (dchazan@umd.edu), 2226C Benjamin Building, University of Maryland, College Park, MD 20742. *Teaching students to be life-long learners of mathematics: Algebra I and Mathematics for Mathematics Education Doctoral Students.*

Recent scholarship on learning (see, e.g., www.ewenger.com) suggests that we consider identity in addition to cognition. In this talk, I will present my efforts to help students, both lower track Algebra 1 students in high school and mathematics education doctoral students, to become life-long learners of mathematics. As a result of their different educational trajectories, the nature of the tasks used to support these different kinds of learners are different, but there is a similarity in my attempts to explore issues of identity in order to understand and predict how students will respond to the tasks I create for them. The presentation will describe a project for high school students that used the notion of repeated calculations on measured or counted quantities to generate a new quantity, as a vehicle for finding mathematics in the world around them. It will also share the outline of a course for mathematics educational doctoral students and illustrate how students were engaged in the study of continued fractions. This study was intended to provide an experience doing research in mathematics, as well as providing a deeper understanding of issues in the representation of number. The students also viewed this study as an illustration of a particular kind of pedagogy. (Received September 15, 2008)