Yvonne Lai*, laixl@umich.edu, Hillel M Raz, hraz@math.ucdavis.edu, and Marion Moore, marion@math.ucdavis.edu. Teaching Math Majors How to Teach.

This project was motivated by a desire to understand how students, in particular math majors, view teaching and preparing how to teach. We report on a small seminar program in which a few mathematics undergraduates worked with graduate students at a weekend outreach program for high school students. During the pilot year 2007, we found that the undergraduate participants were uniformly surprised that teaching requires mathematical and pedagogical foresight. Additionally, while they were curious about techniques such as group work, in practice, they were hesitant to use them out of lack of confidence. These observations informed the design of the 2008 seminar, in which all participants became more comfortable teaching in a "non-traditional" classroom setting. We will discuss the design of the 2008 seminar, share some stories about the undergraduate participants' insights into the process of becoming teachers, and how this influenced the design of the 2009 seminar. (Received September 16, 2008)