1023-N5-72 **Greisy Winicki-Landman\*** (greisyw@csupomona.edu), Department of Mathematics and Statistics, 3801 W. Temple Ave, Pomona, CA 91768. Facilitating genuine discovery experiences for future high-school mathematics teachers. Preliminary report.

The first homework assignment I proposed to my students enrolled in a History of Mathematics course designed for mathematics and engineering majors, was to write a Math-Auto-Biography. The majority of them reported that they planned to become mathematics teachers. Although I didn't change the textbook of the course, that information helped me design homework assignments intended to foster the students' thinking about what mathematics is and how it develops. In this session, the assignment that led to a unique encounter with the trigonometric functions will be presented. The lesson that took place after the assignment was collected and graded will be analyzed and the pedagogical ideas modeled will be explicitly discussed. (Received July 26, 2006)