1014-L1-818 Erick Brian Hofacker* (UWRFMATH@aol.com), 206D North Hall, UW-River Falls, River Falls, WI 54022. The Effect of Different College Algebra Curriculums on Students' Understanding of Function Concepts. Preliminary report.

The paper will describe preliminary results from a study conducted at a four-year university on six sections of College Algebra. One cohort of students, represented by three control sections was taught from a traditional perspective using a traditional curriculum. The other cohort of students, represented by three experimental sections, was taught from a contemporary perspective using a modeling based approach. The paper will describe differences in pedagogical techniques and emphasis of content that each of the two cohorts received.

Quantitative data was collected on common exam questions involving linear and exponential function problems given to students over five different contrasts: procedural, conceptual, multiple approaches, representation translation, and within-context. Qualitative data was gathered through interviews. 12 students from the study were asked to solve a linear function and an exponential function problem while translating it through the five different representations of the Lesh Translational Model. Quantitative data and qualitative data were also collected on student attitudes about the course and about mathematics and algebra in general through a pre-class post-class questionnaire. (Received September 24, 2005)