Barbara E. Edwards* (edwards@math.oregonstate.edu), Oregon State University, Department of Mathematics, 368 Kidder Hall, Corvallis, OR 97331. Revitalizing Algebra for First-Year College Students: An Attempt to Change Students’ Beliefs and Attitudes.

In 2005 College Algebra (the first 10 weeks of our pre-calculus sequence) was the largest course in terms of enrollment at Oregon State University. However, fewer than 50% of students enrolled in the course passed with an A, B, or C each term. In an attempt to improve student success we have created a new preparatory course; one that is based upon research in mathematics education, involves modeling authentic real-world situations with algebraic functions and employs a student-centered pedagogy. One of our primary goals has been to change students’ attitudes, help them attain more confidence and teach them some mathematics along the way. In this talk we will discuss our efforts over the past three and one-half years – the successes, failures and on-going revisions - and share some of our results. (Received September 22, 2009)