College Algebra Student Interests.
This investigation studied the learning effects of example problems based on college algebra student interests. The study spanned two semesters and included three groups of students. The first group was presented with algebraic procedural examples and assessments without context. The second group was presented with algebraic class examples in contexts related to student majors and hobbies, but assessments without context. The third group was presented with class examples in contexts related to student majors and hobbies and also assessments with context.

Learning growth as measured by performance scores on examinations was analyzed quantitatively. Performance improvement was higher for Group 3 than for Group 2 than for Group 1 as context increased, but these most differences were not statistically significant and could have occurred by chance. A large effect size ( $>0.80$ ) between Group 3 students presented with class examples and homework problems based on student interests and Group 1 (control) students for $50 \%$ of quizzes given.

Student engagement was also studied. Results from scaled student survey including questions from the National Survey of Student Engagement were analyzed quantitatively. (Received September 22, 2010)

