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*Improving Student Success in Developmental Algebra and Its Impact on Subsequent Mathematics
Courses.*

Experiments conducted in the Fall 2009 and Fall 2010 in a developmental algebra course at UAB will be discussed. After students selected a time slot they were randomly split into the treatment groups. While all treatments shared a computer assisted instruction component in a mathematics lab, the classroom meetings differed among treatments. In Fall 2009 there were two treatments: one which had an inquiry-based meeting (involving collaborative group work) combined with computer work and another that had a lecture with computer work. In Fall 2010 the three treatments were two inquiry-based meetings, two lectures, or one each of lecture and inquiry, all with the same computer work each week. Statistical results concerning student test scores, final grades, scores on both open-ended and objective pre/post tests, and student success in subsequent mathematics courses will be presented. Factors studied influencing performance in subsequent mathematics courses include treatment, time until subsequent course taken, and nature of subsequent mathematics course. We will also present the reasons for how UAB now teaches this course based on the previously mentioned data, analysis, and student satisfaction survey. (Received September 21, 2011)