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Susan Elaine Thompson* (sthompson@otterbein.edu), Mathematical Sciences Department,
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Algebra for College Students*. Preliminary report.

Does the use of an artificial intelligence system in teaching intermediate algebra to college students produce better results than a more traditional lecture approach? This investigation compares the learning of two groups of intermediate algebra students at a small, private, comprehensive, baccalaureate institution with a college-wide mathematics requirement. One group will use ALEKS [Assessment and LEarning in Knowledge Spaces], an artificial intelligence system that individualizes assessment and learning, as the primary teaching/learning tool. Students will spend three days per week working individually in a computer laboratory with instructor supervision/assistance and two days per week working in groups determined by identified areas of weakness or strength. The second group will act as a control group, with traditional lecture (by the same instructor) five days per week as the primary teaching/learning tool. Data gathered will include knowledge surveys and a common final examination, among other things. Preliminary results will be shared at this session. (Received August 20, 2007)