April 3, 2013

A team of college algebra instructors, along with the department’s chair, went to LSU in April 2011 to see their redesign program in action. We have modeled our redesign after that of LSU’s.

The College Algebra Committee developed a course syllabus, daily schedules, a course pack, online homework assignments, online quizzes, and online tests that are being used in all sections.

Students meet with their instructor for 50 minutes a week in a traditional classroom setting and spend an additional 3 hours in the CAVE (College Algebra Virtual Environment).

During the traditional class time the instructor:
• Covers difficult topics
• Connects topics and concepts
• Works examples pointing out common student errors and misconceptions
• Guides students through their semester responsibilities
• Discusses study strategies

In the CAVE, students:
• Complete homework assignments
• Complete quizzes (up to ten attempts)
• Complete tests and final exam
• Receive personalized help with concepts and skills

Math Is Not a Spectator Sport!
Math 1065 Instructors• http://blog.ecu.edu/sites/math1065/

Implementation of Redesign

Why Redesign?
Annually, about 2600 students enroll in Math 1065, College Algebra, a course which is characterized as a gatekeeper course at ECU with DF rates around 33%. Our goals for redesigning college algebra are:
• Improve student learning → Increase student success in future courses
• Improve student success → Decrease DF rates
• Accommodate varying levels of preparation and learning styles through customized instruction
• Reduce math anxiety
• Provide a uniform approach to Math 1065
• Lower instructional costs

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Tools of Redesign

MyMathLab with Trigsted
• Etext with Interactive videos
• Study Plan with personalized assignments
• Study aids for homework assignments
• Online homework, quizzes, and tests with immediate feedback
• Item Analysis: Instructor can identify areas of student weakness and then can provide more instruction on these concepts
• Email by Criteria: Instructor can email students for both positive or negative feedback

TestCal
• Students must schedule tests in advance using TestCal (scheduling software)
• “No Reservation” emails are generated for those students who have not scheduled their test
• Confirmation emails are sent to each student immediately after scheduling his/her test
• Reminder emails are sent to each student the night before his/her scheduled test

AccuSQL
• Software which tracks student, tutor, and instructor attendance in the CAVE
• Students, tutors, and instructors swipe in and out with their OneCard
• Weekly reports of student attendance are generated by section and emailed to the appropriate instructor
• Other reports can be generated to study CAVE usage