

Improving Mathematics Remediation and First-Year Continuation/Retention in a Challenging Budget Environment

- Jeffrey Marks, CSU San Marcos
- The focus is on students already admitted.
- Three major strategies will be presented to improve Mathematics Remediation and Freshman Retention (Continuation):
 - Examine the current processes and take action
 - Key first-year courses
 - Cohorts and Learning Communities

An Indication of a Problem

	Mathematics		Both		Combined*		Freshman Continuation Rate
Fall Terms	<u>Percent Remediated</u>		<u>Percent Remediated</u>		<u>Percent Remediated</u>		<u>Percent</u>
2007-08	148/181 = 81.8%		338/444 = 76.1%		486/625 = 77.8%		
2006-07	148/213 = 69.5%		267/425 = 62.8%		415/638 = 65.0%		70.1%
2005-06	84/103 = 81.6%		171/232 = 73.7%		255/335 = 76.1%		75.7%
					*Nearly all needing both mathematics and English do not complete mathematics remediation if not remediated.		

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2007-08	148/181 = 81.8%	338/444 = 76.1%	486/625 = 77.8%	Many more Freshmen, too!
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2005-06	84/103 = 81.6%	171/232 = 73.7%	255/335 = 76.1%	75.7%

Examining the Process

- [CAIR08\AppendixE-MathRemediation.xls](#)
- A registration examination by the Office of the First Year Academic Support Coordinator

What if those 75 Fall 2006 students had Registered?

- Fall 2006 to Fall 2007 Retention: 943 of 1345 (70.1%) freshmen students were still with us.
- *At least 75* were dis-enrolled for not registering in the required mathematics remedial course.
- If we had retained 50 of those students (about 2/3) the new retention rate would be 993 of 1345 freshmen retained or 73.8%, a 3.7% increase.

Steps Taken for Fall 2007

- Goal: To raise awareness and eliminate registration confusion in the remediation process and to make students aware of the consequences of non-remediation.
- Checking which courses students are registered for.
- Communications Campaign: Mass emails and phone banking to contact students not registered *as well as those in the correct courses*.

Findings From the Communication and Awareness Campaign

- 115 Fall 2007 students in need of mathematics remediation were not enrolled or were not in the proper courses.
- Why? Some examples of student responses—
- It was too hard and/or confusing to register.
- I thought remediation was through the Community Colleges and if you were accepted here you were OK.
- I came from a good High School and know Math.
- What is the ELM?

Action Taken as a result of the Communications and Awareness Campaign

- Of the 115 Students not properly registered: *all* students in need of Pre-Algebra (Math 15) and Beginning Algebra (Math 50) and most in need of Intermediate Algebra (Math 51) were contacted, informed and registered.
- Students were also informed of remediation requirements in their **GEL 101 course**, part of the General Education- Life Long Learning and Information Literacy sequence. (more on this course to come).
- Registration practices were changed to enable students to **pre-register for the next course** in the sequence prior to the official receipt of the grade for their previous course.
- A plan for **peer facilitated academic support** (including compensation) involving instruction and mentoring is being developed. The estimated cost would be more than made up by the FTES conserved by losing non-retained students.

How Examining the Process and Taking Action Helped

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The GEL 101 Course

(A key first-year course)

The Student, The University, The Community

Designed to equip students with the basic skills, concepts, and knowledge necessary to become a lifelong learner. Examination of current theory and research regarding the information age, health and wellness, career development, and psychological assessment. Practical application of the theory and research. **Includes information literacy and technology skills, group and teamwork, and learning styles.**

Prerequisite: Freshman standing or consent of instructor.

Students Taking the GEL 101 Course early in their careers are retained at a higher rate than those who do not.

- [CAIR08\AppendixB-GEL101.xls](#)
- Action Taken- offering more GEL 101 sections.
- Both GEL 101 and Non-GEL 101 Students had similar High School GPAs.
- The course had higher retention rates for students not requiring remediation.
- Do the *motivated* students take this course?

Cohorts and Summer Programs

- **Summer Bridge:** EOP, SSS, MAPS
 - Summer Bridge is a six-week summer transition program for first-year students, providing instruction in writing, math, computer competency, library research, and college success skills. Students also participate in co-curricular activities that promote cultural awareness and their development as a community of learners.
- **Summer Academy:** Similar to Summer Bridge but open to all students wishing to get a jump start on remediation. Launched in 2007.

Strategy Session

- Focus on the students most in need and most likely to not remediate- those needing 3 mathematics courses.
- Underrepresented students.
- Input from others.....

The Unremediatable.....

