Team Work and Pedagogy in the Co-Requisite Mathematics Courses

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Introduction

• Remediation at Kennesaw State and Georgia
• Implementation of the co-requisite mathematics courses at Kennesaw State
• Teamwork required
• Pedagogy applied
• Data collected
Remediation in Mathematics

At Kennesaw State University after Fall 2015

- Consolidation / Transitions
- New Admission Standards
- Complete College America/Georgia
- Most Students in Co-Requisite Courses
- One Foundation Level Class Allowed

Changes for Georgia Coming Fall 2018

- No Foundations Courses
- All Students in Co-Requisite Courses
  - Math 1001 plus Math 0997
  - Math 1101 plus Math 0998
  - Math 1111 plus Math 0999
Implementation of Co-requisite at KSU

• MATH 0998-Support for Mathematical Modeling
  – Taken with MATH 1101 Intro. To Math Modeling
  – 1 credit hour course meeting 3 hour per week

• MATH 0999-Support for College Algebra
  – Taken with MATH 1111 College Algebra
  – 1 credit hour course meeting 3 hour per week

• *Different Instructors* for the credit level and support courses (Requires Teamwork)
Teamwork and Coordination

- Two instructors
- Same learning outcomes
- Sharing course websites and Desire 2 Learn
- Sharing results

- Schedule
  - (Teach opposite days)
- Focus in credit level
  - course content
- Focus in support course
  - Foundation/Just in Time
- Constant Communication
Teamwork and Coordination

Credit-Level Instructor

Inquiry & Dialog

Students

Inquiry & Dialog

Co-Requisite Instructor

Inquiry & Dialog

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Pedagogy

Credit Level Course

• Mostly Lecture
• Mixed classes
• Assigns HW’s, practice tests, tests
• Grades
• Shares information with support instructor
• Team conferences

Support Course

• Little lecture, focus on reviewing, doing, perfecting
• Apply similar methodologies
• Use correct terminology
• Group work, think-pair-share
• Brainstorming
• Inductive Method
• Team conferences
## Purposes of Support Courses

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<th>Purpose</th>
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<tr>
<td>Faculty Connection</td>
<td>Price (2009), Tinto (1991), Wheeler &amp; Montgomery (2009)</td>
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Results College Algebra

Support Class Engagement

- Support Class
- Retained
- LS Complete
- Previous Course
- 1st Course

Engaged
Non Engaged

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Results College Algebra

Grade Distribution

- A
- B
- C
- D
- F
- W

Engaged vs. Non Engaged
Results from Foundations for College Algebra

Students Enrolled for the 1st Time

- Math 0989: 24%
- Math 0998: 22%
- Math 0999: 43%
- Not Enrolled: 11%

Students Previously Enrolled

- Math 0989: 27%
- Math 0998: 0%
- Math 0999: 13%
- Not Enrolled: 60%
Conclusions

• College Algebra – Credit Level Courses
  – Students who engaged in the support class made better grades and were retained at a higher rate
  – Students for whom this was their first learning support class were more likely to be engaged in the support class
  – Students for whom this was not their first term in Learning Support were less likely to participate in the support class.

• Foundation Algebra – Non-Credit Course
  – Students for whom this was their first learning support class were more likely to progress to the co-requisite courses than those who were repeating a learning support course.
  – Time does indeed appear to be the enemy...(Complete College America, 2010)
Next Steps At KSU

• Discontinuing Learning Support at KSU.
References

Thank You

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