Accelerated Mathematics Initiatives and the College Completion Agenda

Christine Mirbaha
AMATYC
Session S091
November 9, 2012
10:10 a.m. – 11:00 a.m.
Accelerated Mathematics Program (AMP)

- Introductory algebra with one-credit arithmetic component
  - Placement in basic mathematics class
    - Upper quartile of Accuplacer placement score interval
  - Pilot run twice
    - Abandoned as alternate initiatives emerged
Accelerated Mathematics Program (AMP)

- Seven & Seven
  - Two separate seven-week courses taught back-to-back in same timeslot
  - Students can sign up for both courses at the same time
  - Students need to pass first course to take second course
    - Removed from second course roster if first course failed
  - Requires manual scanning of rosters
Seven & Seven Offerings

- Each course independent and self-contained
- Other than timing, no changes to structure of full-semester courses
- Pairs well with our adult basic education arithmetic review course
- 43 sections of classes offered in Fall 2012
Accelerated Mathematics Program (AMP)

- Combo (combination)
  - Part of CCBC’s Achieving the Dream plan
  - Two sequential courses paired
  - Developmental mathematics pairings
  - Developmental and general education mathematics pairings
  - Training and follow-up meetings for all instructors teaching these offerings
  - Students must remain enrolled in both courses or drop both courses
  - Students receive separate grades for each course
Current AMP Offerings

Seven & Seven Courses

* ASE
* MATH 081
* MATH 082
* MATH 083
* MATH 111
* MATH 135

Combo Pairings

* MATH 081/082
* MATH 082/083
* MATH 083/163
* Math 083/135
  * New Fall 2012 semester
## Student Success Rates

### First pilot design results

<table>
<thead>
<tr>
<th></th>
<th>Number of Sections Run</th>
<th>Total Number of Students</th>
<th>Pass</th>
<th>Fail</th>
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</thead>
<tbody>
<tr>
<td>Fall 2008</td>
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<td>41</td>
<td>18</td>
<td>23</td>
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<tr>
<td>Spring 2009</td>
<td>1</td>
<td>11</td>
<td>8</td>
<td>3</td>
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## Student Success Rates
**MATH 081/082 Combo Offerings**

<table>
<thead>
<tr>
<th></th>
<th># of Sections</th>
<th># of Students</th>
<th>Pass 081</th>
<th>Pass 082</th>
<th>Fail 081</th>
<th>Fail 082</th>
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<td>Fall 2009</td>
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<td>0</td>
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<td>22</td>
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<td>65</td>
<td>63%</td>
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<tr>
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<td>76%</td>
<td>55%</td>
<td>24%</td>
<td>45%</td>
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## Student Success Rates
### MATH 082/083 Combo Offerings

<table>
<thead>
<tr>
<th></th>
<th># of Sections</th>
<th># of Students</th>
<th>Pass 082</th>
<th>Pass 083</th>
<th>Fail 082</th>
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<td>Pass 163</td>
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<tr>
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<tr>
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Fall 2012 Combo Offerings

- MATH 081/082
- MATH 082/083
- MATH 083/135
  - In first semester of pilot for this combination
  - Part of CCBC College Completion Agenda efforts
- MATH 083/163
Designing an Accelerated Mathematics Program (AMP)

* Determining which courses to use
  * Population of courses involved
  * Examination of topics
    * Depth and breadth of topic covered in each course
    * Overlapping topics
  * Method of delivery (design of offerings)
    * Seven & Seven versus Combo design
    * Scheduling concerns
Assessing an Accelerated Mathematics Program (AMP)

- Assessment
  - Effectiveness of design
  - Effectiveness of delivery
  - Student performance
  - Feedback (formal and informal)
    - Students
    - Faculty teaching AMP sections
  - Retention rates
Promotion of AMP offerings
  * advisors and students

Program expansion plan
  * Additional course combinations
  * Balancing AMP offerings with traditional classes
  * Longitudinal study to determine efficacy
Commitment by AMP Faculty

* Required training program participation prior to teaching integrated pairing
* Meetings to discuss issues and course organization changes before/after each semester
* Weekly activity summaries/feedback by faculty during the semester
Other CCBC College Completion Initiatives

- Lumina Grant
- Lumina Foundation and Carnegie Foundation
- Course redesign for MATH 081
- Additional combo course offerings
- Summer Bridge program
- Assessment preparation short course offerings
- Complete College America Grant
What AMPs Are at Your College?

- Current Initiatives?
- Future plans?
  - College completion
  - AMPs
  - Course redesigns
Thank you!