Developmental Education

Preparing Students for College Success
NECSS Partnership

- Aligning curriculum in mathematics and English
  - Transition courses
  - Dual credit general education courses
Multiple Measures for Placement into the College Curriculum

- Advanced Placement scores
- 7th semester GPA
- Dual credit college course
- Successful completion of transition course
- ACT / SAT scores
- ALEKS placement test or writing sample
Revised College Pathways

- Accelerated Learning Program and co-requisite classes
- Integrating developmental reading and writing
- Offering two distinct math pathways:
  - STEM
  - General Education
<table>
<thead>
<tr>
<th>Year</th>
<th>% enrolled college-level math</th>
<th>N enrolled college-level math</th>
<th>% enrolled college-level English</th>
<th>N enrolled college-level English</th>
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<tbody>
<tr>
<td>2010</td>
<td>45.8%</td>
<td>775</td>
<td>78.8%</td>
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<td>2011</td>
<td>53.1%</td>
<td>889</td>
<td>81.8%</td>
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<td>2012</td>
<td>57.1%</td>
<td>953</td>
<td>85.2%</td>
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<td>2013</td>
<td>67.1%</td>
<td>1,165</td>
<td>86.8%</td>
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<td>2014</td>
<td>72.9%</td>
<td>1,179</td>
<td>87.8%</td>
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<td>2015</td>
<td>74.5%</td>
<td>925</td>
<td>84.8%</td>
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</table>
• **Dr. Judi Nitsch**, Associate Professor of English

• **Kimberley Polly**, Assistant Professor of Mathematics
Bridging the Gap Project

The creation of a transition senior-year English course, which would guarantee students passing the course placement in ENG 101.
Potential pitfalls:

Recent CCRC inquiries into the content and outcomes of transition courses raise concerns about the rigor of this remediation model (Barnett, Fay, & Pheatt, 2016 & Pheatt, Trimble, & Barnett, 2016).

Faculty distrust of each other
Finding faculty dedicated to commit to a lengthy and demanding process of curriculum development and assessment.

Our solution:

Careful, sustained collaboration from planning, through piloting, and into the regular offering of the high school course

Focused placement (only a thin band of students take the course)

Frequent group assessment, beginning with a shared assignment to assess for norming

Attention to data on student success
The Bridging the Gap Process with D211

Year 1
1. Met with a lead D211 faculty and administrator to determine the means for bridging the gap (a transition course with guaranteed placement)
2. Brought in a small team of D211 high school teachers and Harper ENG 100 faculty to collaboratively design a course that mirrors ENG 100

Year 2
1. Meet monthly to assess D211 student work in the new course, starting with a shared Harper-D211 norming assessment
2. Revised existing curriculum to address reading challenges
3. Built a common language of writing instruction, assessment, and pedagogy

Year 3 & Beyond
1. Continue to meet monthly to assess D211 work.
2. Exploring the data on D211 student success/non-success in ENG 101
3. Designing surveys and focus groups to determine why some D211 students were not successful.
4. Retooling the curriculum to address those missed needs.
<table>
<thead>
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<th></th>
<th>100/BtG pass rates</th>
<th>101 pass rates</th>
<th>102 pass rates</th>
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<tbody>
<tr>
<td>BtG Students Placing into ENG 101 in Fall 2015</td>
<td>83%</td>
<td>70%</td>
<td>86%</td>
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<td>D211 Students Placing into ENG 100 in Fall 2015</td>
<td>50%</td>
<td>50%</td>
<td>X</td>
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<tr>
<td>D211 Students Placing into ENG 101 into Summer/Fall 2015</td>
<td>X</td>
<td>72%</td>
<td>78%</td>
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<td>All Students Placing into ENG 100 in Spring 2015</td>
<td>58%</td>
<td>74%</td>
<td>65%</td>
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The key to Bridging the Gap’s success: Sustained faculty collaboration
National statistics we were faced with when we began:

• Among high school graduates, only 24% of those intending to go to college meet all four ACT benchmarks of College readiness**.
  (English 18, Math 22, Reading 22, Science 23)

• Between 25% and 39% of students enrolling in community colleges with the intention of transferring will transfer successfully within 4 to 6 years.

• Less than 25% of students who enroll in community colleges will earn an associates degree in less than three years*.

Sources:
* Time is the enemy. Complete College America
**Claiming the American Dream: Community Colleges and the Nation’s future
Partnership with our sender high schools:

Why did we do this?

- Shared data opened doors for communication
- Districts were not aware that about 55% of their graduates who came to us were placing into developmental math
- Districts were not aware that their existing “catch-all” senior math course had the wrong topics
- Districts were not aware that about 1/3 of their graduates were coming directly to Harper (over 50% a year later)
- Common Core
Some important numbers from the Fall 2009 Compass data:

- **Juniors taking regular algebra 2**
  - About 84% placed below the algebra 2 level
  - Only 74% indicated that they planned to take math senior year

- **Juniors taking college prep algebra 2**
  - About 36% placed below the algebra 2 level
  - About 94% indicated that they planned to take math senior year

Spring 2010 – Spring 2012 we worked together on a course alignment project where we aligned Harper’s Intermediate Algebra and High School Algebra 2. In Spring 2012, all 12 sender high schools and Harper College gave a common final that was largely written by high school faculty.
<table>
<thead>
<tr>
<th>Instructor</th>
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<th>District</th>
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Need developmental math option for senior year

• Many students have “passed” high school algebra 1, geometry and algebra 2 but do not meet requirements for AP or dual credit coursework senior year

• New senior math course created: Algebra 3
  ✓ Replaced high school trig/stat class with Harper’s MTH080 (Intermediate Algebra) class
  ✓ Only 4 trig questions on ACT out of 60 questions
1st Check: Freshmen Year

• Communicate to parents that their child will need 4 years of high school math

• Jobs requiring only a high school diploma
  ✓ 1973 – 72%
  ✓ 2007 – 41%
  ✓ 2018 – 38% (Center on Education and the Workforce forecast of educational demand in 2018)

• Many certificate and 2-year programs require some sort of math competency (examples: fire science, nursing)
2nd Check: Junior Year End

• Look at multiple measures
  ✓ ACT math score (22 or above now)
  ✓ Compass placement score (being replaced by ALEKS)
  ✓ MTH080 final exam score (70% or above)

• Place in correct senior math
  ✓ Upper STEM: Calculus Options
  ✓ Upper Non-STEM: AP Stats
  ✓ Non-STEM: dual credit MTH101 (Quant Lit)
  ✓ Those not ready: Algebra 3 (Harper’s MTH080)
• Increased communication and trust between high school and college faculty

• More than 90% of the district seniors are taking a math class senior year even though it is not required for graduation

• Improved by 29% the percentage of high school graduates beginning college-ready in mathematics (from 45% to 74%) (Hispanic percentage increased from 36% to 62%)
Questions