Webinar on Developmental Postsecondary Education
August 19, 2015
What is Developmental Education?

- Remedial courses in reading, writing, and math
- For students who are not college ready

What is the Challenge?

- 66% of students take dev ed courses
  - Less than half make it through dev-ed sequences
- Low-income and minority students are over-represented
- Limited research on how to improve dev ed practices
Center for the Analysis of Postsecondary Readiness (CAPR)

Federally funded center → Research reforms to developmental education instruction and assessment

Organization of the Center

- CCRC
  - Descriptive Study of National Developmental Education Practices
- MDRC
  - Research on Alternative Placement Systems (RCT in NY)
  - Evaluation of The New Mathways Project (RCT in TX)
- Supplemental Studies
Descriptive Study

- Analyze general dev ed practices and reforms
- Nationally representative sample
  - Open access/less selective
  - 2-year/4-year
  - Public private
- Survey and interviews
- Learn more about normative practices in colleges

Assessment Study

- One dev ed test = overplacement
- Include multiple measures
  - GPA, noncognitive measures
- Formula to predict outcomes \(\rightarrow\) better placement?
- 7-8 SUNY colleges
  - Place using formula or “business as usual”
- Increase successful college placement and completion?
Instruction Study: The New Mathways Project

The model
- Multiple pathways
- Acceleration
- Students develop skills as learners
- Curriculum design and pedagogy

The players
- Charles A. Dana Center - UT Austin
- Texas Association of Community Colleges

Frameworks
- Student Success Course
- Foundations of Mathematical Reasoning

STEM Prep Pathway (Algebra) 2 terms
- College Statistics
- College Quantitative Reasoning
Instruction Study: The New Mathways Project

- Research Questions
  - Do NMP pathways increase progress through dev ed and completion of college level courses?
  - How are curriculum and instruction different?
  - Is it cost-effective?

- Random assignment: NMP courses or “business as usual”

- 4 colleges, 4 cohorts (Fall 2015 - Spring 2017)
  - El Paso, Trinity Valley, Brookhaven (Dallas), and Eastfield (Dallas)

- Track outcomes for at least 1 year
  - Are NMP students more successful?
Early Qualitative Study: 1st cohort of NMP colleges
(Spring 2013 – Spring 2014)

The study

- 9 colleges
- Study
  - Implementation of courses
  - Student outcome trends

Qualitative findings

- Dana Center provides strong supports
- Faculty support multiple math pathways
  - However, some have concerns about NMP curriculum
- Obstacles to student recruitment
  - Concern over transfer to 4-year colleges
- Students like courses
## Student Outcomes: *Non-New Mathways Students*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Developmental Levels Down of Math Courses Enrolled In</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One Level</td>
</tr>
<tr>
<td>Students enrolled in a traditional dev math class in fall 2013</td>
<td>5,000</td>
</tr>
<tr>
<td>Among those enrolled in fall 2013 traditional dev math class, by spring 2014:</td>
<td></td>
</tr>
<tr>
<td>Completed dev math requirement</td>
<td>60%</td>
</tr>
<tr>
<td>Enrolled in a non-NMP college-level math class</td>
<td>37%</td>
</tr>
<tr>
<td>Passed non-NMP college-level math class with “C” or higher</td>
<td>23%</td>
</tr>
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## Student Outcomes: *New Mathways Students*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>All Colleges Offering Foundations</th>
<th>Colleges Offering Foundations that Promoted Enrollment in Statistical Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of codevelopment colleges</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Students enrolled in Foundations in fall 2013</td>
<td>233</td>
<td>136</td>
</tr>
</tbody>
</table>

*Among students enrolled in fall 2013 Foundations, by spring 2014:*

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<th>All Colleges Offering Foundations</th>
<th>Colleges Offering Foundations that Promoted Enrollment in Statistical Reasoning</th>
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</thead>
<tbody>
<tr>
<td>Completed dev math requirement by passing Foundations with a “C” or higher</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Enrolled in Statistical Reasoning or other college-level statistics course</td>
<td>46%</td>
<td>64%</td>
</tr>
<tr>
<td>Passed Statistical Reasoning or other college-level statistics course with “C” or higher</td>
<td>30%</td>
<td>49%</td>
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