DEVELOPMENTAL SUMMER BRIDGE PROGRAMS: IMPLEMENTATION AND EARLY EVIDENCE FROM A RANDOM ASSIGNMENT STUDY

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NCPR OVERVIEW

- Partners: CCRC, MDRC and UVA
- NCPR focuses on measuring the effectiveness of programs designed to help students make the transition to college and master the skills needed to advance to a degree.
- Focus of research: summer bridge programs, learning communities, and dual enrollment programs.
- Center website: www.postsecondaryresearch.org
PRESENTATION OVERVIEW

- Introduction to developmental summer bridge programs
- Purpose of the study
- Research design
- Implementation findings
- Sample and Early impact findings
- Implications and conclusion
A WELL-KNOWN CHALLENGE

- Evidence suggests that the current developmental education system does not work well (Bailey, 2009; Pusser & Levin, 2009)
- Most students do not complete their developmental sequences (Calcagno, Crosta, Bailey, & Jenkins, 2007)
- Students placed into developmental education are less likely to complete college (Adelman, 2006)
DEVELOPMENTAL SUMMER BRIDGE PROGRAMS

Why might they work?

- Reduced need for developmental courses in college
- Exposure to college academic and social expectations
- Contact with college faculty and administrators
- Small cohorts of students
- Stipends to reduce need for summer jobs.
TEXAS DEVELOPMENTAL SUMMER BRIDGE STUDY

- Conducted in cooperation with the Texas Higher Education Coordinating Board, with principal funding from IES and supplemental funding from the Houston Endowment.

- Purpose: Assess the effectiveness of the summer bridge model in improving college preparation and success for students in need of remediation.
DEVELOPMENTAL SUMMER BRIDGE PROGRAMS

- Four to five weeks (64 - 100 hours)
- Accelerated instruction in developmental math, English, and/or reading
- Academic and student services support
- “College knowledge” component
- Student cohorts
- Student stipend for completers

College Locations

- El Paso Community College
- San Antonio College
- Palo Alto College
- Lone Star College-Kingwood
- Lone Star College-CyFair
- Texas A&M International University
- St. Philips College
- South Texas College
THE RESEARCH

Implementation (data sources: interviews, classroom observations, focus groups, surveys)
- What do the programs and students look like?
- What are the challenges in implementation?
- What program design elements show promise?

Impact (student-level data from the colleges and the THECB from Fall 2009 to Spring 2011)
- Do summer bridge programs reduce the need for developmental education and improve other college-related outcomes?
Why random assignment?

- Many studies suffer from methodological problems that prevent causal estimates of program effectiveness.
- Random assignment studies generate internally valid estimates of program effects.

Associated qualitative research

- Understand implementation and treatment variability.
- Site selection
Random Assignment Design

Targeted students invited to participate in study

Students give consent

Baseline data collected

Random Assignment

Program group
Enrolled in summer bridge program

Control group
Received regular courses and services
OUTCOMES OF INTEREST

- College enrollment rates
- Faster completion of developmental coursework
- College credit accumulation
- Completion of gatekeeper courses (such as College Algebra)
- Persistence
- Enrollment status (Full or part time)
## SUMMER BRIDGES 2009: PARTICIPATION

<table>
<thead>
<tr>
<th>College</th>
<th>Eligible for Program</th>
<th>Control</th>
<th>Started Program</th>
<th>Finished Program</th>
<th>% of starters who finished program</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso</td>
<td>165</td>
<td>108</td>
<td>139</td>
<td>138</td>
<td>99%</td>
</tr>
<tr>
<td>Lone Star-CyFair</td>
<td>74</td>
<td>48</td>
<td>65</td>
<td>64</td>
<td>98%</td>
</tr>
<tr>
<td>Lone Star-Kingwood</td>
<td>51</td>
<td>35</td>
<td>51</td>
<td>41</td>
<td>80%</td>
</tr>
<tr>
<td>Palo Alto</td>
<td>52</td>
<td>35</td>
<td>52</td>
<td>35</td>
<td>67%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>89</td>
<td>58</td>
<td>51</td>
<td>47</td>
<td>92%</td>
</tr>
<tr>
<td>St. Phillips</td>
<td>153</td>
<td>102</td>
<td>146</td>
<td>139</td>
<td>95%</td>
</tr>
<tr>
<td>South Texas</td>
<td>83</td>
<td>54</td>
<td>72</td>
<td>63</td>
<td>88%</td>
</tr>
<tr>
<td>TAMU</td>
<td>126</td>
<td>85</td>
<td>113</td>
<td>111</td>
<td>98%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>793</td>
<td>525</td>
<td>689</td>
<td>638</td>
<td>93%</td>
</tr>
</tbody>
</table>
SELECTED STUDENT SAMPLE CHARACTERISTICS

- 84% Hispanic
- 62% Female
- Mean age - 19
- 61% qualified for free/reduced lunch
- Motivations for applying to DSB: attaining college level standing, improving skills, experiencing college
IMPLEMENTATION FINDINGS

- Sites were considered to be well-implemented and a fair test of the program.

- Multiple challenges and promising practices were identified across all 8 sites.
RECRUITMENT

Challenges
- Colleges had to recruit more students than before (more time and $)
- Swine flu, floods…..

Promising practices
- Relationships with counselors
- Stipend: hooked attention and attracted lower income students

INSTRUCTION

Challenges
- Mixed ability classes
- Acceleration

Promising practices
- Use of mentors and tutors in classrooms and labs
- Varied pedagogical techniques
COLLEGE KNOWLEDGE

Challenges
- Presenters who weren’t well connected to the program

Promising practices
- Intentional, informal sharing of information
- Location on campus (power of the site)

STUDENT SUPPORTS

Challenges
- Using lab time effectively
- Finding the right mentors and tutors

Promising practices
- Highly trained and structured tutoring/mentoring
- Integration of lab work and class work
PRELIMINARY OUTCOMES

Impacts have been estimated for four key outcomes from the fall 2009 term:

- Registration at any college in Texas
- Total number of credits attempted
- Number of regular college-level credits attempted
- Number of developmental credits attempted
EARLY IMPACT FINDINGS

- No program impacts on college enrollment

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Program group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>76.73</td>
<td>75.87</td>
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</table>

2009 Fall Enrollment
EARLY IMPACT FINDINGS

- Program impacts on number of credits attempted by type, but no impacts on total number of credits attempted
IMPLICATIONS OF EARLY FINDINGS

- While findings are very preliminary, results suggest the summer bridge program
  - Does not impact whether a student enrolls in college in Texas.
  - Increases college credits attempted; decreases developmental credits attempted.
- Additional outcomes will be presented in future reports, as will longer follow-up to determine whether these results are sustained.
DEVELOPMENTAL SUMMER BRIDGE STUDY NEXT STEPS

- Interim report on implementation and early impacts will be released winter, 2010-11.
- Final report with 2 years of follow-up to be released winter, 2011-12.
- NCPR website: www.postsecondaryresearch.org