Learning Communities: Emerging Findings on a Promising Strategy

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Presentation Outline
• Overview of Opening Doors demonstration and evaluation
• Description of Kingsborough Community College’s Opening Doors program
• Effects of Kingsborough’s program on students up to two years after they entered study
• Learning Communities demonstration

MDRC
• Nonprofit, nonpartisan public policy research firm
• Studies policies and programs to help low-income individuals and families
• Five policy areas: low-wage workers and communities, welfare and barriers to employment, families and children, K-12 education, higher education

Opening Doors Demonstration and Evaluation
• Project in six community colleges
• Testing effectiveness of promising programs designed to increase student persistence and achievement
• Program strategies
  – Reforms in curricula and instruction
  – Enhanced advising and support services
  – Increased financial aid
• Key desired results
  – Increased course completion and persistence
  – Longer term: Higher rates of graduation or transfer to a four-year school, higher earnings and better jobs

Using Random Assignment Design To Estimate Effects

Why Random Assignment?
• Most reliable way to measure a program’s effects
  – Ensures that personal characteristics, motivation levels, and other characteristics of students in program and control groups are same at start of study
  – Any subsequent differences in educational or other outcomes can be attributed with high level of confidence to program
• Fair way of allocating scarce resources
**Key Research Question on Program Effects**

- What is value added of Opening Doors program, over and above what students normally receive?
  - Estimated by comparing outcomes of program group to outcomes of control group
  - Outcomes examined include: credits earned, semester-to-semester persistence, students’ experiences in college

**Kingsborough Community College**

- Only community college in Brooklyn, New York
- Serves about 35,000 students annually
- Student body comes from 127 different countries, speaks 72 different languages
- Offers wide array of associate’s degree programs, including Liberal Arts and career-oriented programs

**Learning Communities**

- Typically place groups of students in two or more linked courses
- Courses have mutually reinforcing themes and assignments
- Goals are to deepen understanding of coursework, foster peer and student-faculty relationships
- Increasingly popular, but little rigorous evidence on effectiveness

**Origins of Kingsborough’s OD Program**

- In mid 1990s, college started learning communities for ESL students
- Later added learning community for students in four “career” majors: accounting, business, mental health, early childhood education
- College data showed students in learning communities had higher rates of course completion and semester-to-semester retention, higher GPAs

**Kingsborough’s Opening Doors Learning Communities**

- Operated from 2003 to 2005
- Groups of up to 25 freshmen took 3 linked courses together during first semester
  - English (31 of 40 links included developmental English)
  - Student development/college orientation
  - Standard college course, such as sociology or health

**Kingsborough’s Opening Doors Learning Communities (continued)**

- Faculty coordinated assignments, discussed student progress
- Students received extra help from student development instructor – a college counselor
- Students received textbook voucher, extra tutoring
Program Implementation

- Despite compressed start-up period, program’s key features in place when program started
- Learning communities varied in class size
- Degree to which faculty collaborated and integrated their courses varied
- Strong test of structural features of learning communities, but may not fully detect effects of tightly integrated courses

Characteristics of Students Enrolled in the Study at Kingsborough

- 1,534 students enrolled in study
- 55 percent female, 45 percent male
- Average age: 19.7
- 74 percent financially dependent on parents
- Race/ethnicity:
  - 38 percent black
  - 27 percent white
  - 20 percent Hispanic
  - 9 percent Asian
- 40 percent born outside of U.S.

Key Effects of the Program

- Improved students’ experiences in college
- Improved academic outcomes during the learning community semester, but effects diminished in subsequent semesters
- Moved students more quickly through developmental English
- Mixed results on persistence

Effects on College Experience: Rated as Good or Excellent

Effects on Academic Outcomes During Learning Community Semester

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of courses attempted</td>
<td>4.9</td>
<td>4.4</td>
<td>0.4***</td>
</tr>
<tr>
<td>No. of courses passed</td>
<td>3.8</td>
<td>3.2</td>
<td>0.6***</td>
</tr>
<tr>
<td>No. of regular credits earned</td>
<td>8.0</td>
<td>7.7</td>
<td>0.3</td>
</tr>
<tr>
<td>No. of developmental credits earned</td>
<td>3.5</td>
<td>2.6</td>
<td>0.9***</td>
</tr>
</tbody>
</table>

Effects on Credits Earned Throughout Follow-Up, by Semester

<table>
<thead>
<tr>
<th>Semester in Study</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st semester</td>
<td>11.5</td>
<td>10.4</td>
<td>1.2***</td>
</tr>
<tr>
<td>2nd semester</td>
<td>8.6</td>
<td>8.0</td>
<td>0.6*</td>
</tr>
<tr>
<td>3rd semester</td>
<td>7.1</td>
<td>6.9</td>
<td>0.2</td>
</tr>
<tr>
<td>4th semester</td>
<td>6.0</td>
<td>5.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>33.2</td>
<td>30.8</td>
<td>2.4**</td>
</tr>
</tbody>
</table>
**English Skills Assessment Exams**

- All incoming students required to take assessment tests in reading and writing
- Results determine which English course students can take
- Students who initially fail are retested after completing required developmental courses

**Effects on English Skills Assessment Tests Through Third Semester**

<table>
<thead>
<tr>
<th>Outcome (%), Test</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempted reading test after entering study</td>
<td>37.8</td>
<td>23.3</td>
<td>4.5***</td>
</tr>
<tr>
<td>Ever passed reading test</td>
<td>88.6</td>
<td>86.0</td>
<td>2.6*</td>
</tr>
<tr>
<td>Attempted writing test after entering study</td>
<td>46.8</td>
<td>39.1</td>
<td>7.7***</td>
</tr>
<tr>
<td>Ever passed writing test</td>
<td>66.2</td>
<td>60.5</td>
<td>5.7**</td>
</tr>
</tbody>
</table>

**Effects on Semester-to-Semester Retention at Kingsborough**

<table>
<thead>
<tr>
<th>Registered at Kingsborough (%)</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st semester</td>
<td>93.1</td>
<td>91.4</td>
<td>1.7</td>
</tr>
<tr>
<td>2nd semester</td>
<td>77.4</td>
<td>75.0</td>
<td>2.4</td>
</tr>
<tr>
<td>3rd semester</td>
<td>61.3</td>
<td>59.2</td>
<td>2.0</td>
</tr>
<tr>
<td>4th semester</td>
<td>52.9</td>
<td>47.8</td>
<td>5.1*</td>
</tr>
</tbody>
</table>

**Effects on Semester-to-Semester Retention at Any College**

<table>
<thead>
<tr>
<th>Registered at Any College (%)</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st semester</td>
<td>87.3</td>
<td>84.7</td>
<td>2.6</td>
</tr>
<tr>
<td>2nd semester</td>
<td>74.4</td>
<td>71.2</td>
<td>3.2</td>
</tr>
<tr>
<td>3rd semester</td>
<td>62.5</td>
<td>61.1</td>
<td>1.5</td>
</tr>
<tr>
<td>4th semester</td>
<td>58.7</td>
<td>53.0</td>
<td>5.6**</td>
</tr>
</tbody>
</table>

**Implications of the Findings**

- Kingsborough’s learning community model shows promise as strategy to help students move through developmental English
  - Key: English is part of learning community
- Enhanced services beyond one semester may have more substantial effects
  - Most of effect was in learning community semester
  - Participation in learning community after first semester or continued enhanced support may help students more

**Next Steps**

- Plan to track Kingsborough OD students for at least one more year (at least three years of follow-up)
- Test different program models targeting different groups of students in different institutions: Learning Communities Demonstration
Learning Communities Demonstration

Key Research Questions

- How can learning communities be designed to address the needs of academically underprepared students?
- What are the effects of learning communities on student achievement and persistence in higher education?
- What do learning communities cost and how do these costs compare with the costs of standard college programs for students with low basic skills?

Key Data Sources

- Student transcript data
  - Minimum 2 years follow-up data
- Assessment test score data
- National Student Clearinghouse data
- Baseline student survey data
- Implementation data
  - Transcripts of interviews with faculty and administrators
  - Transcripts of focus groups with students
- Faculty and administrator survey
- Cost data

Focus on Students Testing at the Developmental Level

- Roughly 40 percent of students entering college are enrolled in a developmental course (U.S. Department of Education, 2003)
- Roughly 76 percent of students who participated in developmental courses in community colleges are not enrolled or have not graduated after 4 years (National Study for Developmental Education)

Core Dimensions of Learning Communities

- Curricular integration – links between classes and common themes
- Instructional strategies – “active” and collaborative learning
- Social integration – student and faculty relationships and interaction
- Supplemental support services – knowledge of and access to campus resources
- Institutional transformation

Six Participating Colleges

- Community College of Baltimore County, Maryland
- Houston Community College System, Texas
- Hillsborough Community College, Florida
- Merced College, California
- Queensborough Community College, New York
- Kingsborough Community College, New York
Features of Learning Communities in Demonstration

Range of models in 6 colleges include:
• Linked classes, including at least 1 developmental education class in 5 of 6 colleges
• Themed links and shared assignments
• Tutoring, supplemental instruction, or master learners
• Extracurricular activities and career guidance

Key Demonstration Dates

• Sample enrollment and program operations: Fall 2007 – Fall 2009
• Implementation research and survey: Spring 2008 – Fall 2009
• Student records data collection and follow-up: Fall 2007 – Spring 2011

Findings and Reports

1. Design Paper – May 2008
2. Interim Report – Fall 2009
   Early impacts and implementation findings in subset of colleges
   Full impact, implementation, survey and cost findings in all 6 colleges
4. Practitioner Guide – Fall 2011
   Lessons learned about operating learning communities