

## 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

2

## MDRC

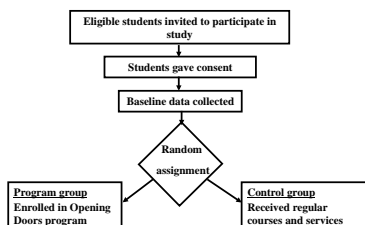
- Nonprofit, nonpartisan public policy research firm
- Studies policies and programs to help low-income individuals and families
- Five policy areas: low-wage workers and communities, welfare and barriers to employment, families and children, K-12 education, higher education

## 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

4

## Using Random Assignment Design To Estimate Effects



5

## 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

7

### 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

8

### 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

9

### 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

10

### 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

11

### 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

13

### 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.

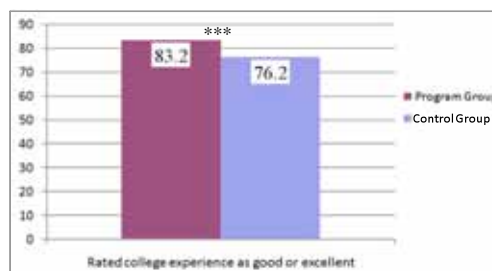
14

### 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

15

### Effects on College Experience: Rated as Good or Excellent



16

### Effects on Academic Outcomes During Learning Community Semester

Outcome	Program Group	Control Group	Difference
No. of courses attempted	4.9	4.4	0.4***
No. of courses passed	3.8	3.2	0.6***
No. of regular credits earned	8.0	7.7	0.3
No. of developmental credits earned	3.5	2.6	0.9***

17

### Effects on Credits Earned Throughout Follow-Up, by Semester

Semester in Study	Program Group	Control Group	Difference
1 <sup>st</sup> semester	11.5	10.4	1.2***
2 <sup>nd</sup> semester	8.6	8.0	0.6*
3 <sup>rd</sup> semester	7.1	6.9	0.1
4 <sup>th</sup> semester	6.0	5.4	0.5
Total	33.2	30.8	2.4**

18

### 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

19

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

Outcome (%)	Program Group	Control Group	Difference
Attempted reading test after entering study	17.8	13.3	4.5***
Ever passed reading test	88.6	86.0	2.5*
Attempted writing test after entering study	46.8	39.1	7.7***
Ever passed writing test	66.2	60.5	5.7**

20

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

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

21

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

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

22

### 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

23

### 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

24

## Learning Communities Demonstration



<http://www.PostsecondaryResearch.org>



<http://www.mdrc.org>



<http://curry.edschool.virginia.edu>



<http://ccrc.tc.columbia.edu>

25

## 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?

26

## 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

27

## 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)

28

## 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**

29

## 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

30

### 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

31

### 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

32

### Findings and Reports

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

33