Developmental Education: What Policies and Practices Work for Students?

Thomas Bailey, Heather Wathington, Tom Brock

Webinar based on September 2010 Conference December 15, 2010



NCPR PARTNERS:

Community College Research Center, Teachers College, Columbia University MDRC Curry School of Education, University of Virginia

What is NCPR

Partners

- Community College Research Center, Teachers College, Columbia University
- MDRC
- Curry School of Education, University of Virginia
- NCPR is funded by the Institute for Education Sciences, US Department of Education
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Outline of Webinar—Three Segments

- What is the problem and overview of the Webinar and Conference—Tom Bailey
- Models evaluated by NCPR—Heather Wathington
 - Learning communities
 - Developmental summer bridge program
- Future directions—Tom Brock



What is the Problem?

- Over 60 percent of entering students are referred to developmental education
- Developmental education is not very effective for students near the cutoff (Calcagno & Long, 2008)
- Farther below, mixed results—dev ed influences students differently depending on their level of academic preparedness (Boatman & Long, 2010))
- A majority of students do not complete the sequences to which they are referred (Bailey, Jeong, & Cho)
- Current system neglects the needs of weaker "college ready" students



Assessment (Hughes & Scott-Clayton, 2010)

- Confusion about what it means to be "college ready"—no obvious cutoff point
- Tests may be reasonable predictors of college-level success, but less effective at identifying who is likely to benefit from dev ed (or alternative interventions)
- Assessments do not provide adequate diagnostic information
- A single cutoff point exaggerates the distinction between developmental and college ready—need for multiple measures including non-cognitive
- Students are confused about the process and not well advised (Venezia, Bracco, & Nodine, 2010)



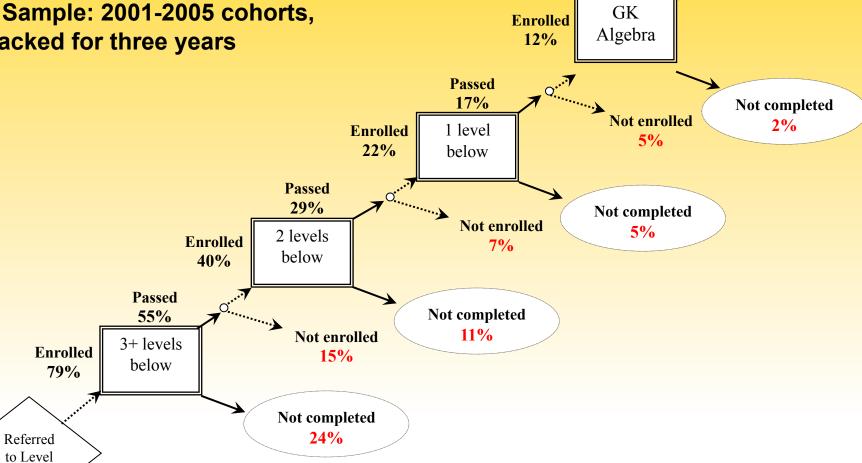
Math In-Order Course Completion and Enrollment



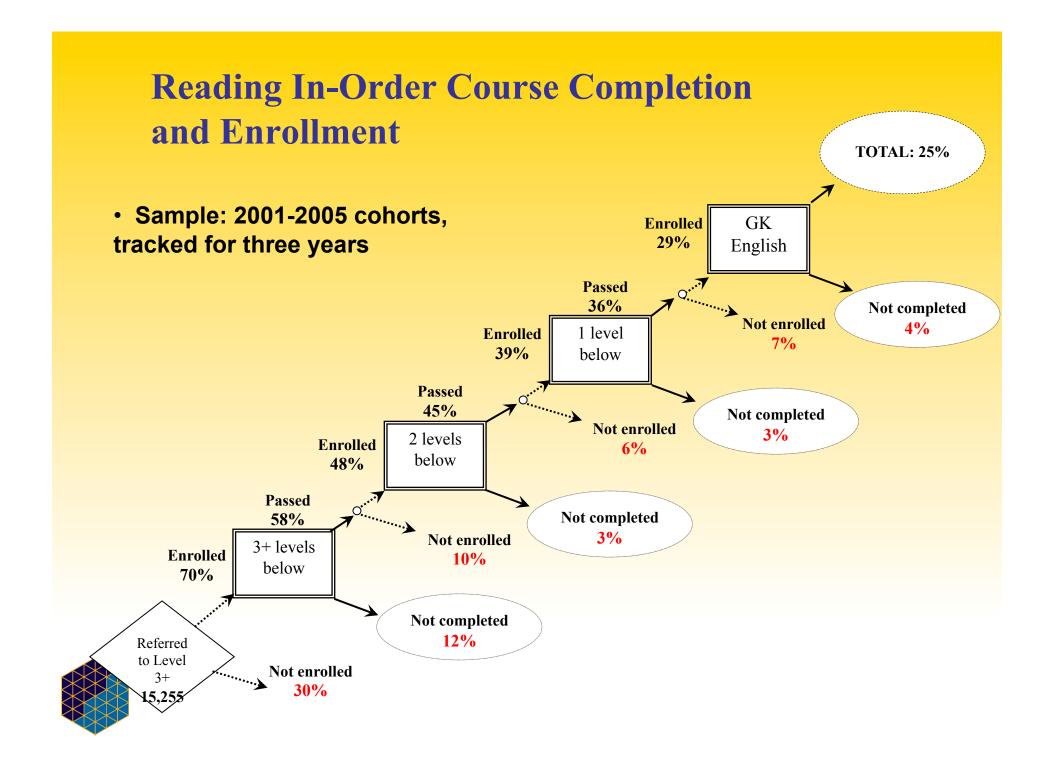
····. Not enrolled

21%

3+ 96,653



TOTAL: 10%



Potential Solutions to Specific Pipeline Problems

- Students fail to enroll—summer bridge programs, improved and earlier assessment
- Students fail or withdraw from courses learning communities, improved pedagogy including contextualized instruction
- Students exit long sequences—acceleration, diagnostic assessment, redesign and alignment of curriculum



NCPR Developmental Education Research: Findings and Implications

Heather Wathington

University of Virginia

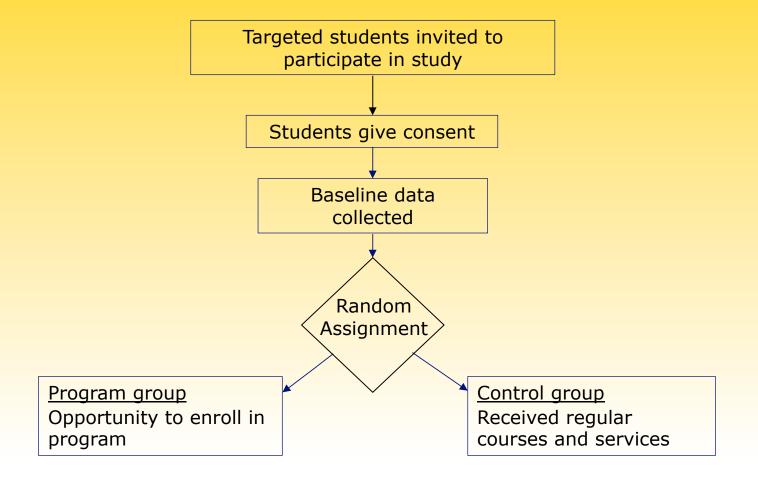


Overview

- Two studies linking developmental education practice to research designed to support causal inferences
 - Study 1 Learning communities to improve academic outcomes of students in need of remediation
 - Study 2 Summer bridge programs to improve academic outcomes of students in need of remediation prior to college entry



Random Assignment Design





Learning Communities

- Purpose: Assess the effectiveness of learning communities in improving college preparation and success for students.
- Seven studies: only sharing results for four
 ---Kingsborough (Opening Doors MDRC),
 Hillsborough, Houston, and Queensborough.



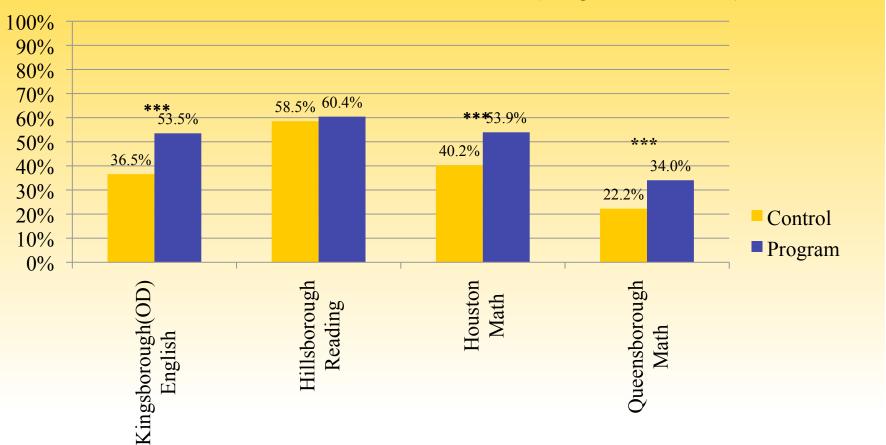
Learning Communities

- Co-enrollment of students in two or more classes
- Faculty Collaboration
- Integration
- Extra student supports



Passing Developmental Education Courses

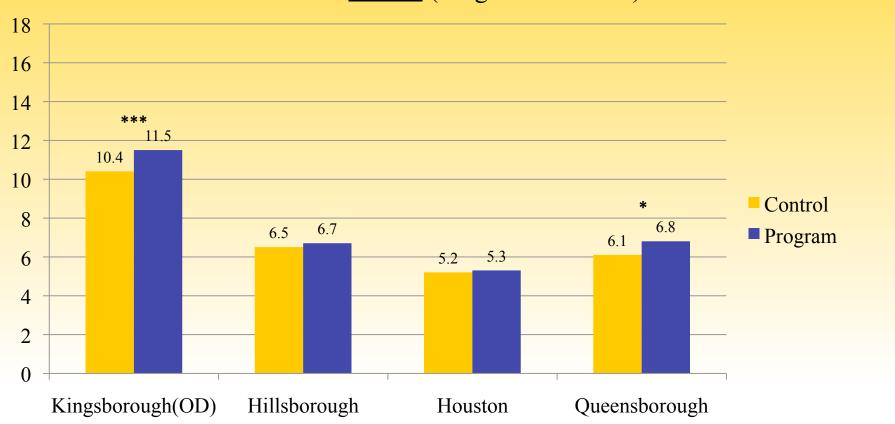
Percent Pass Dev Ed Course in LC Link (Program Semester)





Overall Credit Accumulation

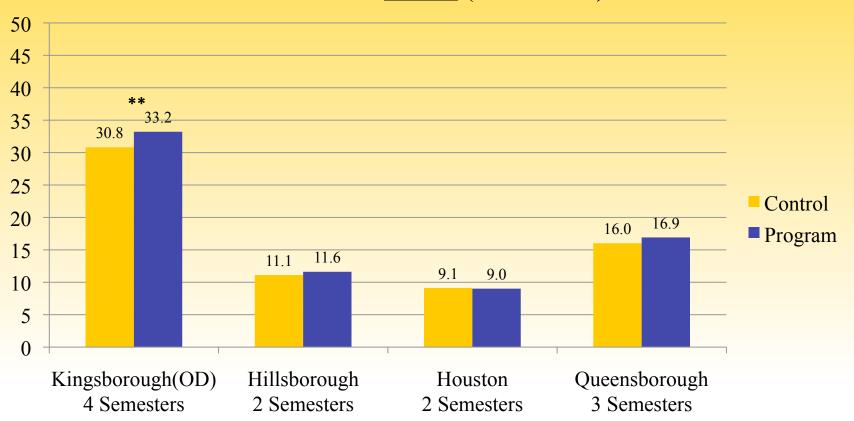
Total Credits Earned (Program Semester)





Overall Credit Accumulation

Total Credits Earned (Cumulative)





Evidence suggests that, compared to business as usual, learning communities...

- are better at helping students progress through *a particular* developmental education course sequence (during the program semester)
- are <u>no</u> better at helping students make meaningful progress through their *overall* developmental needs (during the program semester or beyond)
- are sometimes better at helping students accumulate credits (mostly during the program semester)
- are generally no better at improving rates of persistence or long term credit accumulation

Stay tuned – Findings at other colleges and longer follow-up may change the story.



Forthcoming reports

- Queensborough and Houston: Spring 2011
- Kingsborough's Career Focused Learning
 Communities for Continuing Students: Summer
 2011
- CCBC and Merced:Fall 2011
- Final Report: Summer 2012



Texas Developmental Summer Bridge Study

 Purpose: Assess the effectiveness of a summer bridge model in improving college preparation and success for students in need of remediation.

 Conducted in cooperation with the Texas Higher Education Coordinating Board.



Eight Programs in the Texas DSB Study

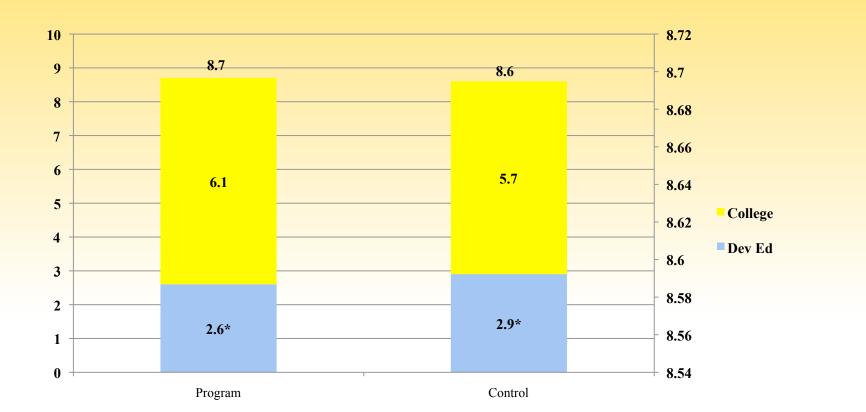
- Four to five weeks (64 -100 hours)
- Accelerated instruction in developmental math,
 English, and/or reading at the college
- Student cohorts
- Academic and student services support
- "College knowledge" component
- Student stipend of up to \$400 for completers

Programs were generally well-implemented and a fair test of the program model.



Early Impact Findings Fall 2009

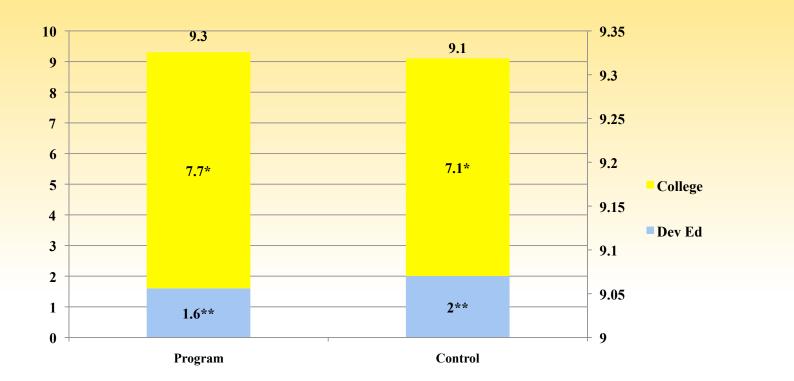
- No program impacts on college enrollment or total credits.
- Impacts on the types of credits attempted:





Early Impact Findings Spring (plus Flex terms), 2010

- Again, no impacts on college enrollment or total credits.
- Continued impacts on the types of credits attempted:





Overview of Preliminary Findings

- Did not impact college enrollment or persistence.
- Shifted average courseload from developmental towards college-level credits.
 - Reduced developmental credits attempted, and increased college-level credits attempted in the spring.
 - Increased students' ability to meet TSI (Texas Success Initiative) standards in reading, writing and math.
- More data and longer follow-up to come.



Texas Developmental Summer Bridge Study Next Steps

- Interim report, early 2011
 - Program implementation description and lessons
 - Early impacts on additional measures of college progress
- Final report, early 2012
 - Two years of follow-up on program impacts and student success



Future Directions: What Can Be Done Now?

Tom Brock
Director, Young Adults and Postsecondary Education
MDRC



Learning Communities and Summer Bridge: Some Promise, but No Magic Bullet

 Interventions can make a positive difference for students

Effects generally modest

 Too few students are progressing to collegelevel courses and degrees



How Might Learning Communities and Summer Bridge Programs Work Better?

- Allow time for new programs to mature.
- 2. Encourage more professional development for participating faculty and staff.
- 3. Increase program intensity.
- Focus on the transition points. What happens to students once they leave the program?

Other Approaches to Developmental Education Reform

No shortage of innovation.

Challenge: Without a good comparison group, hard to know what difference a program made for students.

 Next three slides point to programs that have <u>some</u> evidence of effectiveness.



(1) Early Assessment Programs

- Objective: Help students avoid developmental education in college by testing them in high school
 - Use same tests
 - Report back to students on the skills they need to master

 Examples: California's Early Assessment Program; El Paso Community College's
 College Readiness Program

(2) Accelerated Learning Programs

- Objective: Get students into college-level courses sooner
 - Fast-track courses
 - Modularized instruction
 - Placement into college-level courses with additional support ("mainstreaming")

 Example: Community College of Baltimore County's Accelerated Learning program

(3) Contextualized Instruction

 Objective: Integrate developmental education instruction into occupational fields or majors that students want to learn.

• Example: Washington State's I-BEST Program.



New Program Models Sorely Needed

- 1. Basic skills assessment and placement
 - More comprehensive strategies not predicated on single test scores
 - Better messaging to students on high stakes
 - Practice and review sessions prior to testing
- 2. Reforms in curriculum and pedagogy
 - Tailor subject matter to what students need to know to function in school and society
 - Statway example: Emphasizes quantitative reasoning and basic statistics



Closing Thoughts

- Problems faced by developmental education students not likely to be solved by short-term, single-shot interventions
- Need to focus on broader institutional context
 - Quality and frequency of academic guidance counseling
 - Availability of tutoring and other support
 - Transition points from developmental to collegelevel courses



Delivery of financial aid

Bibliography

- Bailey, T., Jeong, D. W., & Cho, S.-W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review*, *29*(2), 255–270.
- Boatman, A., & Long, B. T. (2010). Does remediation work for all students? How the effects of postsecondary remedial and developmental courses vary by level of academic preparation (NCPR Working Paper). New York, NY: National Center for Postsecondary Research.
- Calcagno, J. C., & Long, B. T. (2008). The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach: Addressing Endogenous Sorting and Noncompliance. (NCPR Working Paper). New York, NY: National Center for Postsecondary Research.
- Howell, J. S., Kurlaender, M., & Grodsky, E. (2010). Postsecondary preparation and remediation: Examining the effect of the Early Assessment Program at California State University. *Journal of Policy Analysis and Management*, 29(4), 726–748.
- Hughes, K. L., & Scott-Clayton, J. (2010). Assessing developmental assessment in community colleges: A review of the literature (CCRC Working Paper No. 19). New York, NY: Columbia University, Teachers College, Community College Research Center.



Bibliography

- Venezia, A., Bracco, K. R., & Nodine, T. (2010). One-shot deal? Students' perceptions of assessment and course placement in California's community colleges. San Francisco, CA: WestEd.
- Visher, M., Schneider, E., Wathington, H., & Collado, H. (2010). *Scaling up learning communities: The experience of six community colleges*. New York, NY: MDRC.
- Wachen, J., Jenkins, D., & Van Noy, M. (2010). *How I-BEST works: Findings from a field study of Washington State's Integrated Basic Education and Skills Training program*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Visher, M. G., & Wathington, H., Richburg-Hayes, L. (with Cerna, O., Sansone, C. & Ware, M.). (2008). Learning communities for students in developmental reading: An impact study at Hillsborough Community College (NCPR Working Paper). New York, NY: National Center for Postsecondary Research
- Zachry, E., & Schneider, E. (2010, September). Building foundations for student readiness: A review of rigorous research and promising new trends in developmental education (NCPR Working Paper). Paper presented at the National Center for Postsecondary Research developmental education conference, New York, NY.



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