

DOES REMEDIATION WORK FOR ALL STUDENTS?

How the Effects Of Postsecondary Remedial And Developmental Courses Vary By Level Of Academic Preparation

Angela Boatman

Harvard Graduate School of Education

Bridget Terry Long

Harvard Graduate School of Education, NCPR, and NBER

NCPR Conference on Developmental Education . ▼ Teachers College, Columbia University . September 23*-24**, 2010.

REMEDIAL AND DEVELOPMENTAL POSTSECONDARY COURSES

- → Lack of academic prep is a significant barrier to success
- → Nationally **approx. 40%** of 1st year students are placed into college remediation (**55-60%** at CCs)
- → Student Aid and Fiscal Responsibility Act of 2009: Emphasis on increasing the number of adults with 2yr degrees → Effective remediation policies are central to this goal

Do remedial and developmental courses help to improve the outcomes of students?

NCPR Conference on Developmental Education

• Teachers College, Collingia University

• September 23rd-24th, 2010



DOES REMEDIATION IMPROVE STUDENT OUTCOMES

Past studies on the effects of remediation (FL, OH, TX):

- Mixed results, often negative or zero
- Only focus on students on the *margin* of needing remediation—do not investigate effects of remediation on students who are **extremely** under-prepared (they don't have an appropriate control group)

The Tennessee Case

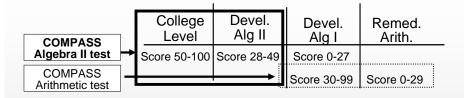
- Multiple cutoffs and changes in placement policy over time → Investigate effects of different levels of remediation using multiple RDs
- *Sample*: Fulltime students under age 21 who began at a TN public college or university in fall 2000

REMEDIATION IN Go to **TENNESSEE** College-level courses ACT/SAT Take **Developmental** score Take Algebra II determines **COMPASS** which Algebra exam Take placement ` Developmental exam (if any) Algebra I Take Take Remedial **COMPASS** Arithmetic Arithmetic exam College Devel. Devel. Remed. Level Ala II Alg I Arith. **COMPASS** Score 50-100 | Score 28-49 Score 0-27 Algebra II test **COMPASS** Score 30-100 | Score 0-29 Arithmetic test

NCPR Conference on Developmental Education . Teachers College, Columbia University . September 23rd-24th, 2010



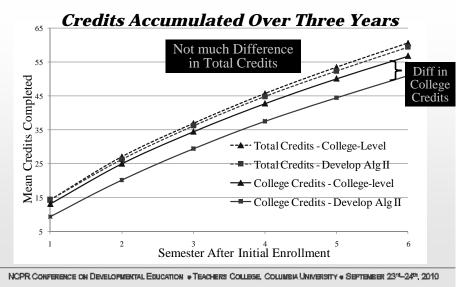
RD #1: Effects of Recommendation to DEVELOP. ALGEBRA II -vs-COLLEGE-LEVEL MATH



	Total Credits	College Credits	Completed any	
	after 3 years	after 3 years	Degree or Certif.	
Assigned to the	-1.4753	-6.4105**	-0.2333*	
Lower-level	(2.6086)	(2.6360)	(0.1297)	
Observations	490	490	490	

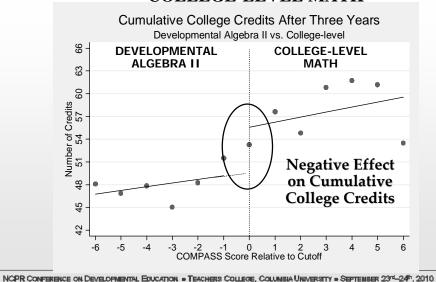
NOPR Conference on Developmental Education • Teachers College, Columbia University • September 23*-24*, 2010

RD #1: Effects of Recommendation to DEVELOP. ALGEBRA II -vs-COLLEGE-LEVEL MATH

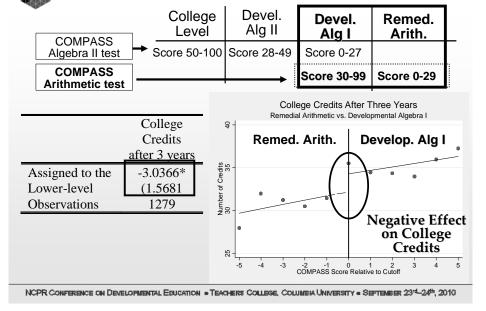




RD #1: Effects of Recommendation to DEVELOP. ALGEBRA II -vs-COLLEGE-LEVEL MATH

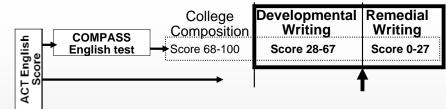


RD #3: REMEDIAL ARITHMETIC -vs- DEVELOP ALGEBRA I





WRITING -vs- REMEDIAL WRITING

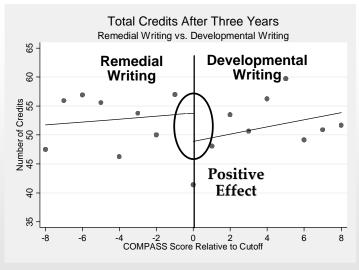


	Still	Total	College	Completed
	Enrolled	Credits	Credits	Degree or
	in Year 3	after 3 yrs	after 3 yrs	Certif.
Assigned to the	0.2197+	3.9792+	-0.4107	0.3057*
Lower-level	(0.1378)	(2.7198)	(2.5282)	(0.1623)
Observations	898	898	898	898

NCPR Conference on Developmental Education • Teachers College, Columbia University • September 23*-24*, 2010



RD #2: **DEVELOPMENTAL WRITING**-vs- **REMEDIAL WRITING**



NCPR CONFERENCE ON DEVELOPMENTAL EDUCATION . TEACHERS COLLEGE, COLUMBIA UNIVERSITY . SEPTEMBER 23^{rt}-24th, 2010



Outcome: GRADE IN FIRST COLLEGE-LEVEL COURSE

Not causal analysis, but interesting estimates...

College-Level vs. Develop. Writing (RD #1)	Develop. Writing vs. Remedial Writing (RD #2)
vs. Develop. Writing	vs. Remedial Writing
Develop. Writing	Remedial Writing
	(IXD # 2)
0.0342	0.5389***
(0.0998)	(0.1598)
782	522
TIONS ONLY	
0.2791*	0.1954
(0.1464)	(0.1803)
315	231
TIONS ONLY	
-0.1438	0.8960***
(0.1356)	(0.2765)
467	291
	(0.0998) 782 TIONS ONLY 0.2791* (0.1464) 315 TIONS ONLY -0.1438 (0.1356)

NCPR Conference on Developmental Education • Teachers College, Columbia University • September 23*-24*, 2010



SUMMARY: TENNESSEE RESULTS

- The results suggest that remedial and developmental courses do differ in their impact by the level of student preparation
- Negative effects for those students on the margins of needing any remediation (similar to other research)
- However, at the other end of the academic spectrum, the negative effects of remediation were much smaller and occasionally positive, especially in Writing
- → Remedial and developmental courses help or hinder students differently depending on their level of academic preparedness

NCPR Conference on Developmental Education . ■ Teachers College, Collingia University . September 23*1-24**, 2010



IMPLICATIONS AND ADDITIONAL QUESTIONS

- States and schools need not treat remediation as a singular policy but instead consider it as an intervention that might vary in its impact according to student needs
- Why does remediation work for some students and not for others? → How can we improve remedial and developmental programs for all?
 - What is the best way to offer remediation?
 - Characteristics of strong remedial programs?
- Found differences by institutional level Has implications for the effects of limitations on remedial course-taking (e.g., only at CCs)?
- Early Placement Testing a preventative measure?

NCPR Conference on Developmental Education . Teachers College, Columbia University . September 23*4-24**, 2010.



Contact Information

Angela Boatman, Doctoral Candidate

Harvard Graduate School of Education angela_boatman@mail.harvard.edu

Prof. Bridget Terry Long, Ph.D.

Harvard Graduate School of Education, NCPR, and NBER longbr@gse.harvard.edu

NCPR IS FUNDED BY THE INSTITUTE OF EDUCATION SCIENCES OF THE U.S. DEPARTMENT OF EDUCATION and is a partnership of the Community College Research Center, Teachers College, Columbia University; MDRC; the Curry School of Education at the University of Virginia; and faculty at Harvard University.







NCPR Conference on Developmental Education ▼Teachers College, Columbia University ▼ September 23**-24**, 2010