

# IN DEFENSE OF DEVELOPMENTAL EDUCATION

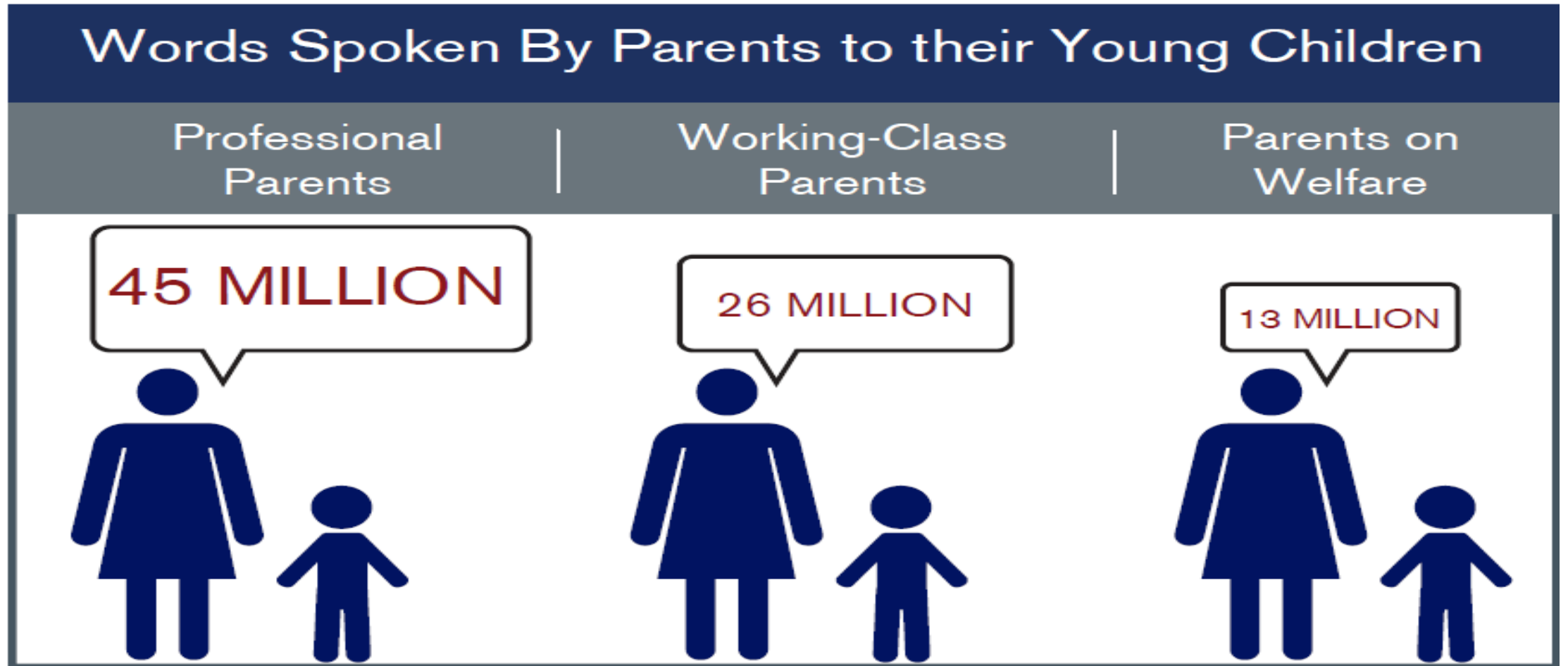
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NCADE Western Regional Conference, 22 Apr 2016  
CPCC Levine Campus: Charlotte, NC 11:45 a.m. – 12:45 p.m.

# In Defense of Developmental Education

- Good news: Developmental Education and remediation are not as ineffective as people are claiming: Let's step back and look at data in context
- Forthcoming paper will be entitled "In Defense of Developmental Education"
- Much like Socrates, I question those who claim to know Dev Ed is ineffective; I question some reforms
- Here are six arguments in defense of Dev Ed:

1. Investments in all  
levels of education  
pay us back

# Early Childhood Education (“30M Word Gap”<sub>1</sub>)



# Early Childhood Education

- High/Scope Perry Study <sup>2</sup>
  - 1962 in Ypsilanti, Michigan
  - 123 randomly selected low-income Af-Am 3-4 yrs. old
  - High-quality daycare
  - Tracked for 40 years
- Abecedarian program <sup>3, 4, 5</sup>
  - 1972 in Chapel Hill, North Carolina
  - Full-time high-quality daycare for low-income African-Americans, infancy to age five (111 total participants)

# Early Childhood Education

- Both the High/Scope Perry Study and the Abecedarian programs' participants showed many positive results:
  - Less likely to need special education
  - Higher reading and math skills
  - More years of school (higher HS grad rate)
  - More likely to attend college
  - More likely to have a skilled job
  - Higher income
  - Half the arrest rate

# High School: “HS Dropouts and The Economic Losses from Juvenile Crime” (2009)<sub>6</sub>

Table 10  
Possible Interventions to Raise the Rate of High School Graduation in California

		Costs per additional graduate	Percent of intervention costs offset by savings in juvenile crime	Ratio of costs to total benefits
<u>Interventions demonstrated to raise the graduation rate:</u>				
CPC	Chicago-Child Parent Center program	\$36,940	24%	7.47
TSI	Increasing teacher salaries by 10% for the K-12 years	\$50,150	17%	5.51
PPP	High/Scope Perry Pre-school Program	\$56,880	15%	4.85
FTF	First Things First high school reform	\$29,720	15%	9.30
CSR - minorities	Reducing class sizes in elementary school for minority students only (Project STAR)	\$62,920	14%	4.39
CSR – population	Reducing class sizes in elementary school for all students (Project STAR)	\$102,970	8%	2.68

# High School: “HS Dropouts and The Economic Losses from Juvenile Crime” (2009)<sub>6</sub>

**Table 7**  
**Economic Losses from Juvenile Crime From Low Education in California (2008)**

	Economic Loss from Juvenile Crime per Cohort (\$ millions)			
	Method (a)	Method (b)	Method (c)	Average of Methods (a)- (c)
<b>Fall in dropout rate:</b>				
<b>100%</b> (Range)	<b>\$399</b> (\$230-\$380)	<b>\$1,334</b> (\$1,130-\$1,540)	<b>\$1,655</b> (\$1,400-\$1,910)	<b>\$1,129</b> (\$960-\$1,300)
<b>50%</b> (Range)	<b>\$200</b> (\$180-\$220)	<b>\$667</b> (\$560-\$770)	<b>\$827</b> (\$700-\$960)	<b>\$565</b> (\$510-\$650)
<b>20%</b> (Range)	<b>\$100</b> (\$80-\$120)	<b>\$267</b> (\$230-\$310)	<b>\$331</b> (\$280-\$380)	<b>\$226</b> (\$190-\$260)
<b>10%</b> (Range)	<b>\$50</b> (\$40-\$60)	<b>\$133</b> (\$110-\$150)	<b>\$165</b> (\$140-\$190)	<b>\$113</b> (\$100-\$140)

*Notes:* Method (a) adapts estimates from Levitt and Lochner (2001); Method (b) adapts estimates from Merlo and Wolpin (2009); and Method (c) adapts estimates from Sweeten (2006). Range is plus and minus one standard deviation of cost estimates, rounded to nearest \$10 m. Figures in 2008 dollars.



# “The Economic Value of Opportunity Youth” (2012)<sub>7</sub> (Cost of Undereducated Youth)

“We calculate the lost earnings, lower economic growth, lower tax revenues and higher government spending associated with opportunity youth” (p. 1).

“Considered over the full lifetime of a cohort of 6.7 million opportunity youth who are aged 16-24 [in the nation], **the aggregate taxpayer burden amounts to \$1.56 trillion in present value terms. The aggregate social burden is \$4.75 trillion**” (p. 2).

# High School: “The Economic and Fiscal Consequences of Improving U.S. Ed” (2015)<sub>8</sub>

TABLE 3

## The Economic Consequences of Improving U.S. Educational Outcomes Over the Next 35 and 60 Years

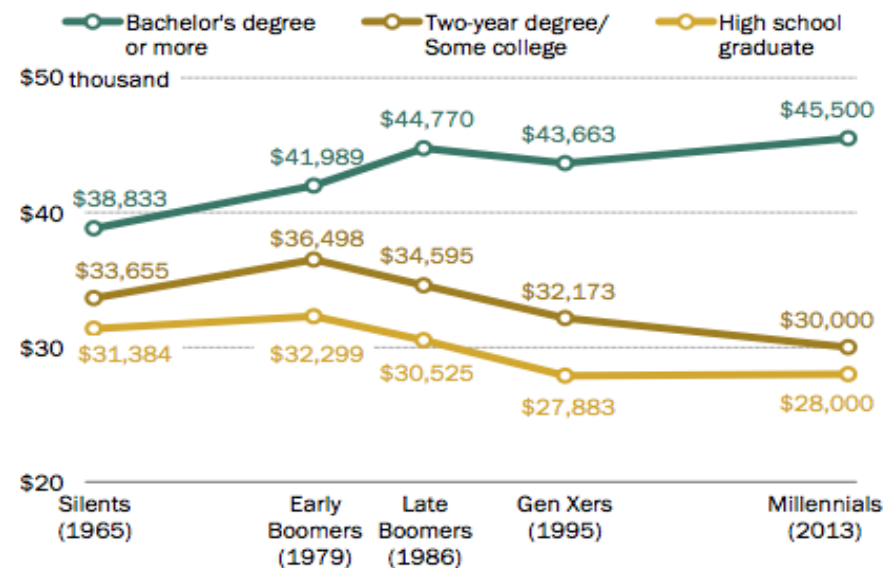
Changes in economic growth due to rising educational achievement under three scenarios, 2015 to 2050 and 2015 to 2075.

Outcomes	Scenario 1:	Scenario 2:	Scenario 3:
<b>2050</b>	Matching OECD average PISA score	Matching Canadian PISA score	Matching top quartile U.S. PISA score
Increase in GDP in 2050 in %	1.7%	6.7%	10.0%
Increase in GDP in 2050	\$678 billion	\$2.7 trillion	\$4.0 trillion
Cumulative increase of present value GDP growth* 2015-2050	\$2.5 trillion	\$10.0 trillion	\$14.7 trillion

# “The Rising Cost of Not Going to College” (2014)<sub>9</sub>

## Rising Earnings Disparity Between Young Adults with And Without a College Degree

*Median annual earnings among full-time workers ages 25 to 32, in 2012  
dollars*



Notes: Median annual earnings are based on earnings and work status during the calendar year prior to interview and limited to 25- to 32-year-olds who worked full time during the previous calendar year and reported positive earnings. “Full time” refers to those who usually worked at least 35 hours a week last year.

Source: Pew Research Center tabulations of the 2013, 1995, 1986, 1979 and 1965 March Current Population Survey (CPS) Integrated Public Use Micro Samples

PEW RESEARCH CENTER

# “Is It Still Worth Going to College?” (2014)<sub>38</sub>

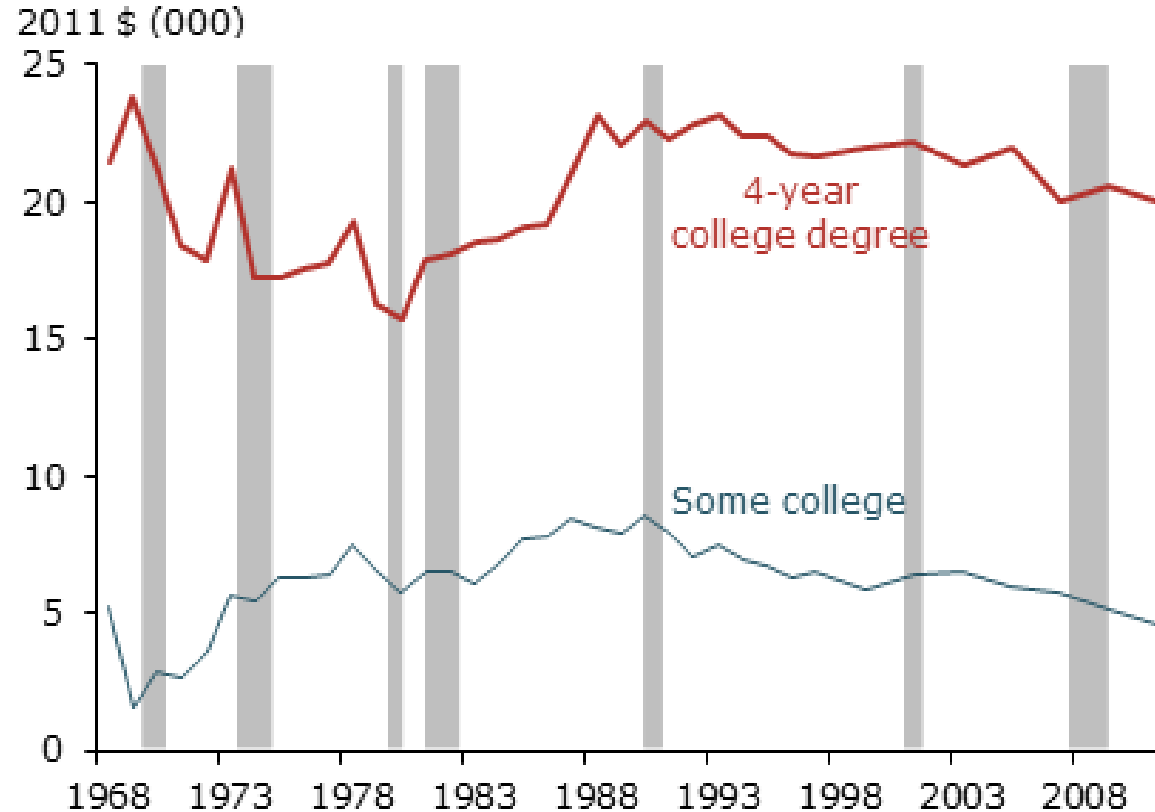
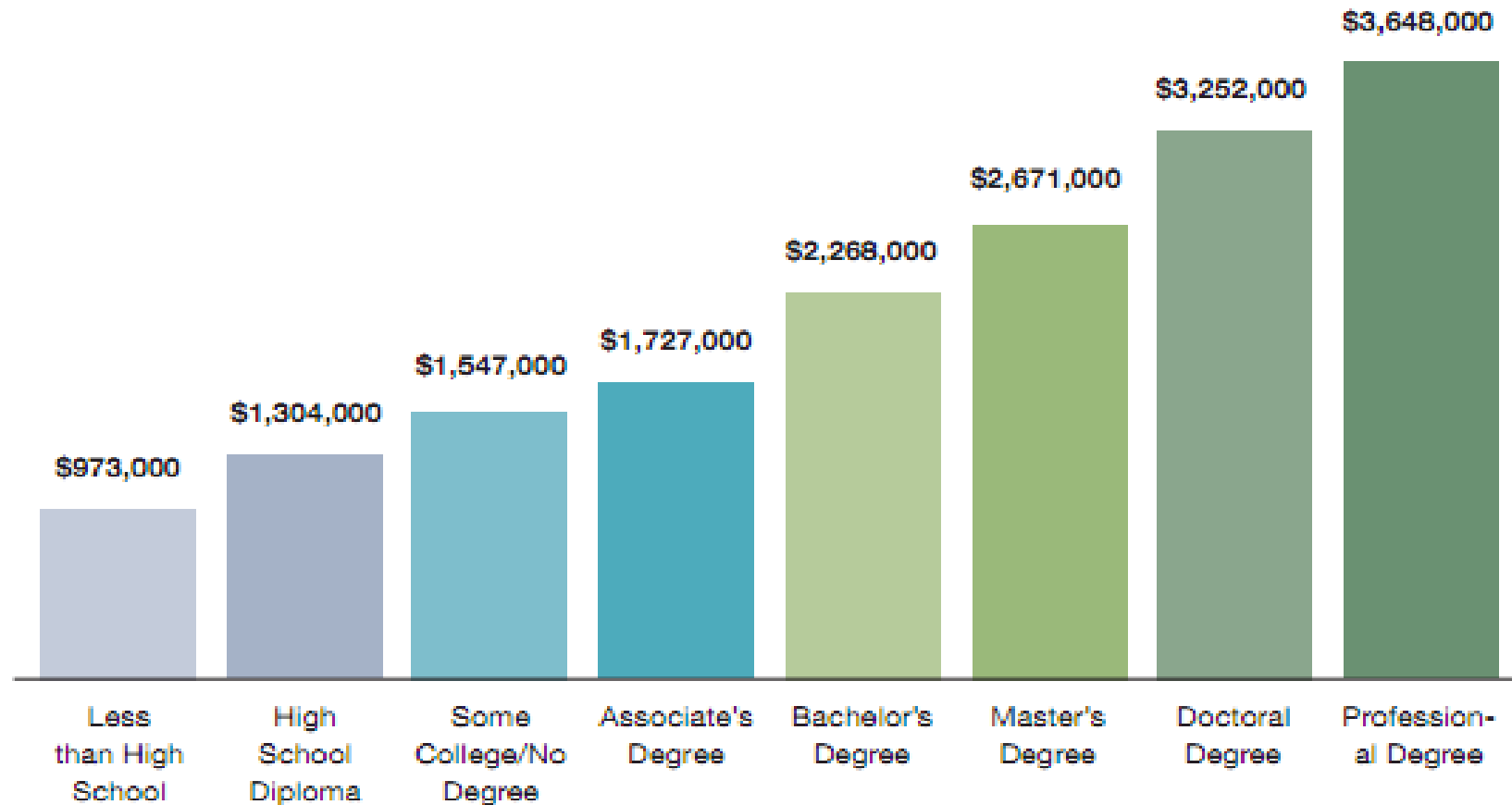


Figure 1. Earnings premium over high school education

# “The College Payoff” (2009)<sub>10</sub>

FIGURE 1: MEDIAN LIFETIME EARNINGS BY HIGHEST EDUCATIONAL ATTAINMENT, 2009 DOLLARS



# Investments in Education Pay Us Back

- *Redesigning America's CCs* (2015)<sup>43</sup> (New book on Guided Pathways by Bailey, Jaggars, & Jenkins):

“...evidence from studies...shows very large returns on many health measures, even after controlling for income, health insurance, and family background. Other benefits from higher education include less involvement in the criminal justice system and less reliance on welfare” (p. 192).

# Investments in Education Pay Us Back

- *Redesigning America's CCs* (2015)<sup>43</sup> (New book on Guided Pathways by Bailey, Jaggars, & Jenkins):

“Community colleges produce favorable returns for taxpayers as well. One analysis from 2010 found that for each associate degree from a community college, taxpayers gain an additional \$142,000 in revenue” (p. 192).

# Investments in Education Pay Us Back

- To recap:
  - Pre-K: Relatively small investments in education pay off greatly in the long-term
  - 9-12 grades: More investments would pay back greatly in long-term and short-term
  - College pays back over a lifetime and immediately, and some college is better than no college
  - All of these are well-established facts



# Investments in Education Pay Us Back

- By simply participating in the education of college students, you are directly improving the quality of life for your students, your community, and the nation
- Proven by return on investment (ROI) data
- But money isn't everything
- You have improved the social and emotional well-being of thousands of students: No data on that yet!

# Investments in Education Pay Us Back

In Defense of Developmental Education:

## **1. An investment in any education pays us back**

- Even teaching traditional remediation, you are contributing to an ROI of tens of millions of dollars, and you are improving citizens' lives, communities, and our country: All shown with hard data
- But could remediation in particular not be helpful?

2. Remediation is  
indeed effective

# Remediation is Indeed Effective

- Researchers claim remediation is ineffective primarily due to three theories:
  1. Remediation itself is ineffective (not helping)
  2. Remediation is simply a barrier or diversion
  3. Most students underplaced
- Most of these claims originate from the Community College Research Center, headed by Dr. Thomas Bailey

# What Researchers are Saying About DE

- Bailey (2008)<sup>11</sup>:

“...on average, developmental education as it is now practiced is not very effective in overcoming academic weaknesses, partly because the majority of students referred to developmental education do not finish the sequences to which they are referred” (abstract).

# What Researchers are Saying About DE

- Bailey (2008)<sup>11</sup>:

“I suggest a broad developmental education reform agenda based on a comprehensive approach to assessment...and strategies to streamline developmental programs and accelerate students’ progress toward engagement in college-level work” (abstract).

# What Researchers are Saying About DE

- Bailey, Jeong, & Cho (2009) (cited by 493 papers)<sup>17</sup>:

“As it stands now, developmental education sequences must appear confusing, intimidating, and boring to many students entering community colleges. And so far, developmental education has at best shown limited success” (p. 28).

# What Researchers are Saying About DE

- Bailey (2009)<sup>18</sup>:

“...on average, developmental education is not very effective in overcoming student weaknesses” (p. 1).

“If particular practices really are effective, the disappointing research on the overall effects of remediation suggests that they have not so far been widely adopted” (p. 2).



# What Researchers are Saying About DE

- Bailey, Jeong, & Cho (2010) (cited by 493 papers)<sup>19</sup>:

“Given the confusion and ineffectiveness of the developmental system, one possible objective would be to reduce the length of time before a student can start college courses—to accelerate the remediation process” (p. 6).

# What Researchers are Saying About DE

- Jenkins et al. (2010)<sup>20</sup>:

“These studies generally show little positive effects for developmental education, although their results are most reliable for students at the upper end of the developmental range...(Bettinger & Long, 2005; Calcagno & Long, 2008; Martorell & McFarlin, 2007)” (p. 1).

# What Researchers are Saying About DE

- Edgecombe (2011)<sup>21</sup>:

“There is mounting evidence that following the traditional sequence of developmental education courses is hindering community college students from progressing to college-level coursework and ultimately earning a credential” (p. 1).

# What Researchers are Saying About DE

- Hughes & Scott-Clayton (2011)<sub>22</sub>:

“More than half of entering students at community colleges are placed into developmental education in at least one subject, based primarily on scores from these assessments, yet recent research fails to find evidence that placement into remediation improves student outcomes” (abstract).

# What Researchers are Saying About DE

- Scott-Clayton, Crosta, & Belfield (2012)<sup>23</sup>:

“Indeed, several studies using regression-discontinuity (RD) analysis to compare students just above and just below remedial test score cutoffs have generally found null to negative impacts of remediation for these ‘marginal’ students” (p. 2).

# What Researchers are Saying About DE

- Scott-Clayton & Rodriguez (2012)<sup>24</sup>:

Article entitled, “Development, Discouragement, or Diversion? New Evidence on the Effects of College Remediation”:

“The primary effect of remediation appears to be diversionary: students simply take remedial courses instead of college-level courses. These diversionary effects are largest for the lowest-risk students” (abstract).

# What Researchers are Saying About DE

- Scott-Clayton & Rodriguez (2012)<sup>24</sup>:  
“Remedial education, or ‘developmental’ education as it is called in the field, may be the most widespread and costly intervention aimed at addressing *a perceived lack of preparation* [emphasis added] among incoming college students” (p. 1).

# What Researchers are Saying About DE

- Edgecombe, Baker, & Bailey (2013)<sup>25</sup>:

“One potential reason for the disappointing results of the traditional developmental system is the length of time required for most students to complete it ” (p. 2).



# What Researchers are Saying About DE

- CCRC Research Overview on Dev Ed (2014)<sub>26</sub>  
(Compilation of all research they chose to consider):  
  
“Research evidence suggests that, for the most part, the traditional system of developmental education is not achieving its intended purpose: to improve outcomes for underprepared students” (p. 5).

# What Researchers are Saying About DE

- *Redesigning America's CCs* (2015)<sup>43</sup> (New book on Guided Pathways by Bailey, Jaggars, & Jenkins):

“The current system of developmental education is hampered by inadequate placement information, lengthy prerequisite sequences, and, in many cases, uninspiring instruction. As a result, most students who enter [DE] never successfully emerge from it...” (pp. 14-15).

# What Researchers are Saying About DE

- The repetition of these words by reputable and well-funded institutions has had and will have some negative effects (“Legislative Fixes,” 2015<sub>27</sub>):
  - Florida, Connecticut, Tennessee, North Carolina, Minnesota, Colorado, Georgia, and Ohio
- Many more are looking into changes to decrease or eliminate remedial courses and/or funding, or restructuring them significantly based on little research from essentially ONE institution

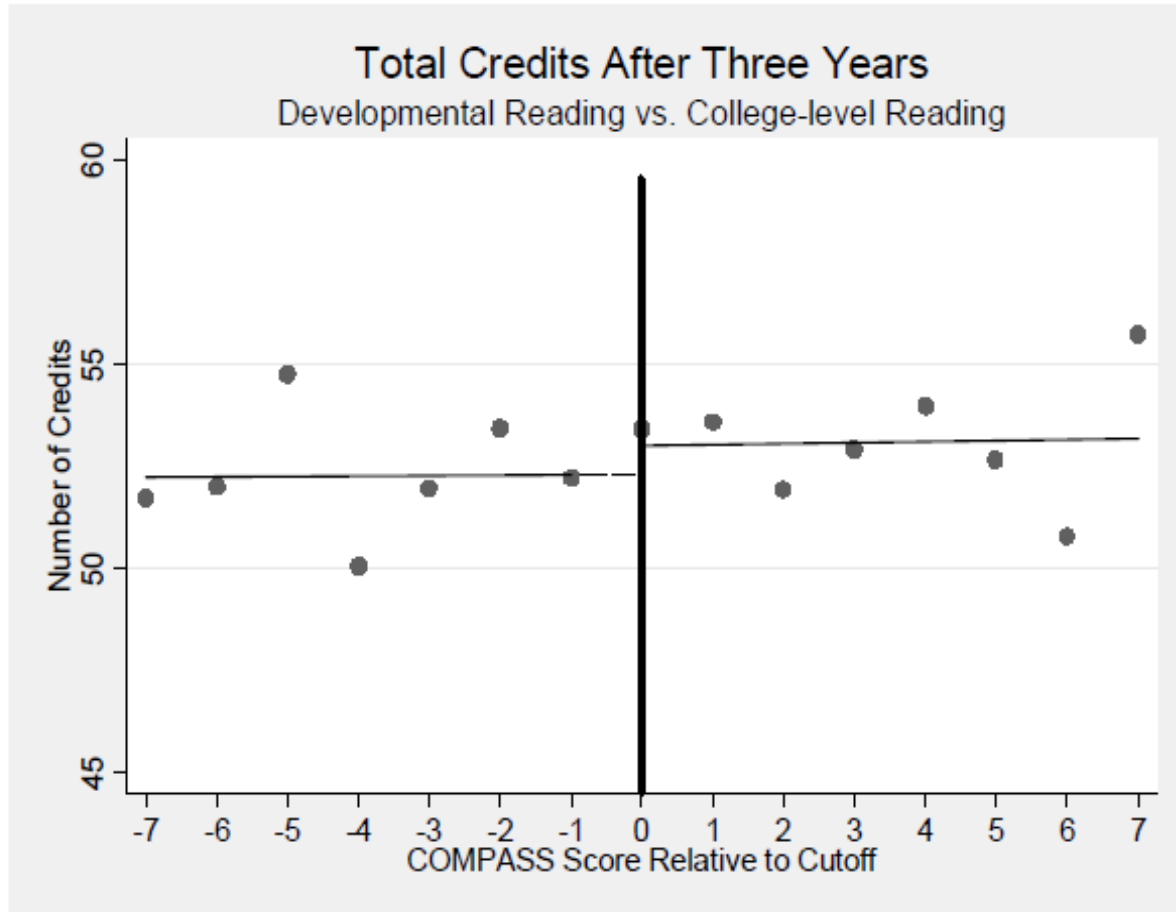
# Remediation is Indeed Effective

- CCRC definition of remediation: Null = failure  
Calcagno and Long (2008)<sub>37</sub>: “It would be expected that after successfully learning the skills needed for college-level work, a remedial student would be more likely than an academically-equivalent nonremedial student to complete [college-level] courses” (p. 16).
- Traditional definition of remedial courses:  
Designed to get students to college-level starting line

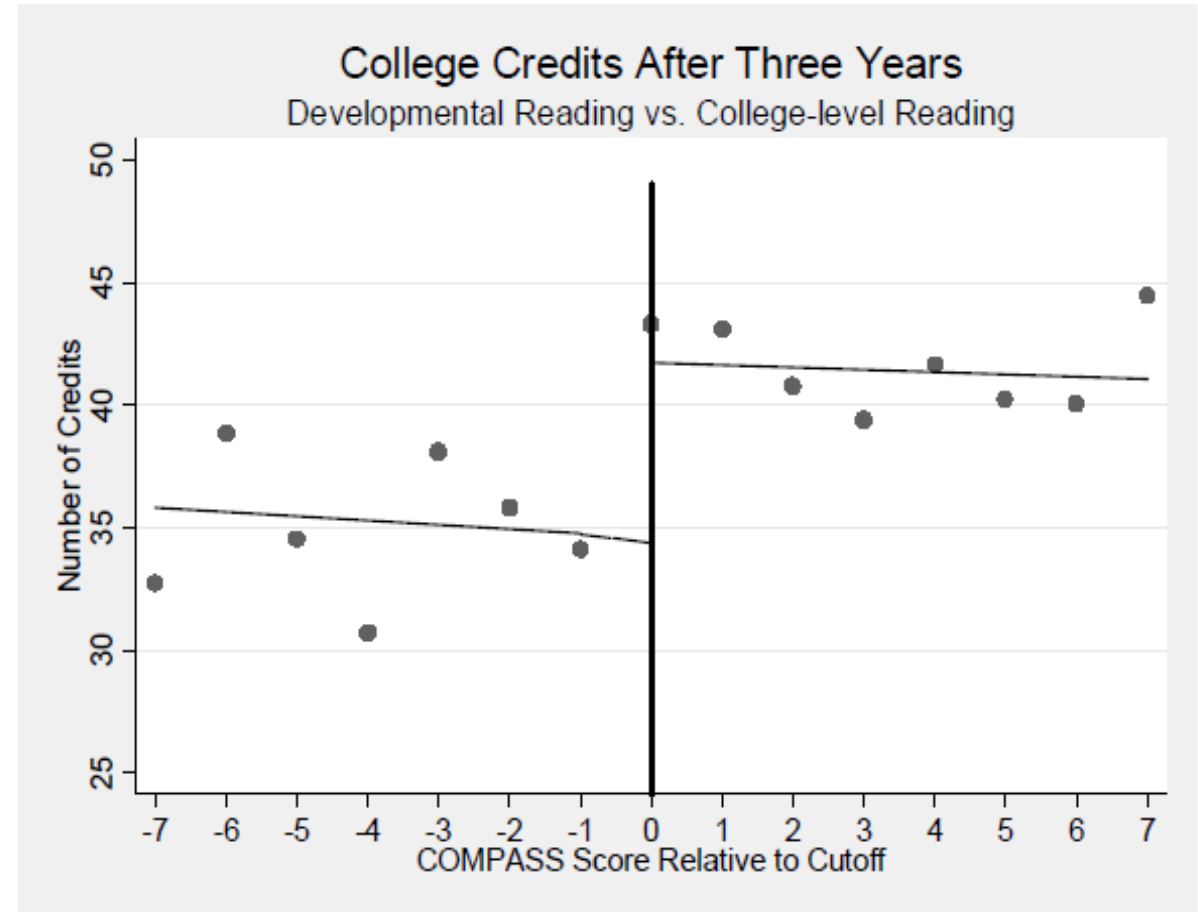
# Boatman & Long (2010)<sup>52</sup>

**Figure 4a: Reading – College-Level vs. Developmental Course (RD #1)**

*No statistically significant effect*



*Statistically significant effect*



# Remediation is Indeed Effective

- Out of 79 separate RDD analyses of math, reading, and writing Dev Ed outcomes by the CCRC<sub>26</sub>:
  - 7 Positive
  - 52 Null
  - 20 Negative

# CCRC “What We Know About Dev Ed” (2014)<sup>26</sup>

## DEVELOPMENTAL MATH STUDENTS

Short-Term Impacts					Medium- & Long-Term Impacts		
Study	Level	Persistence	Passed College-Level Math	Grade in College-Level Math	Persistence	College-Level Credits Earned	Credential and/or Transfer
TENNESSEE <sup>10</sup>	UPPER	NEG		NULL (conditional)	NULL	NULL (conditional)	NEG (credential)
TEXAS <sup>11</sup>	UPPER	NULL					NULL
OHIO <sup>12</sup>	UPPER				NULL		POS (transfer)
LUCCS <sup>13</sup>	UPPER		NEG	NEG	NULL	NULL	NULL
FLORIDA <sup>14</sup>	UPPER	NULL	NULL			NULL	NULL
VIRGINIA 1 <sup>15</sup>	LOWER vs. MIDDLE		NULL				NEG (credential)
TENNESSEE	LOWER vs. MIDDLE	NULL		NULL (conditional)	NULL	NULL (conditional)	POS (credential)

# CCRC “What We Know About Dev Ed” (2014)<sup>26</sup>

## DEVELOPMENTAL READING STUDENTS

Short-Term Impacts					Medium- & Long-Term Impacts		
Study	Level	Persistence	Passed College-Level English	Grade in College-Level English	Persistence	College-Level Credits Earned	Credential and/or Transfer
TENNESSEE	UPPER	POS		NULL (conditional)	NULL	NULL (conditional)	NULL (credential)
TEXAS	UPPER	NULL					NULL
OHIO	UPPER				NULL		NULL
LUCCS	UPPER		NEG	NEG	NEG	NEG	NEG (credential)
FLORIDA	UPPER	NULL	NEG			NULL	NULL
VIRGINIA 2 <sup>16</sup>	UPPER	NULL	NULL (conditional)			NULL	NEG
VIRGINIA 2	LOWER vs. UPPER	NEG	NULL (conditional)			NEG	NEG
TENNESSEE	LOWER vs. MIDDLE	NULL		NULL (conditional)	POS	POS (conditional)	NULL (credential)



# CCRC “What We Know About Dev Ed” (2014)<sup>26</sup>

## DEVELOPMENTAL WRITING STUDENTS

Short-Term Impacts					Medium- & Long-Term Impacts		
Study	Level	Persistence	Passed College-Level English	Grade in College-Level English	Persistence	College-Level Credits Earned	Credential and/or Transfer
TENNESSEE	UPPER	NEG		NULL (conditional)	NULL	NEG (conditional)	NEG (credential)
VIRGINIA 2	UPPER	NULL	NULL (conditional)			NULL	NULL
LUCCS	Writing & Reading vs. Reading Only		NULL	NULL	NULL	NULL	NULL
VIRGINIA 2	LOWER vs. UPPER	NEG	NULL (conditional)			NEG	NULL
TENNESSEE	LOWER vs. UPPER	POS		POS (conditional)	NULL	NULL (conditional)	NULL (credential)

*Note. “Conditional” signifies that only outcomes for students who enrolled in college-level courses, or persisted in college, were compared. LUCCS stands for large urban community college system.*

# Remediation is Indeed Effective

- If the accepted definition of the purpose of remediation applies, meaning that a “null” result is the intended goal, then 75% of these studies show positive results
- This is the CCRC’s own data, yet they interpret it vastly differently than experts in the field
- Most CCRC researchers have PhDs in economics and public policy, which may explain misunderstandings

# Remediation is Indeed Effective

- Dr. Peter Bahr from the University of Michigan interprets “null” scores traditional way (2010)<sup>29</sup>:  
“...skill deficient students who attain college-level English and math skill experience the various academic outcomes at rates very similar to those of college-prepared students who attain college-level competency in English and math. Thus, the results of this study demonstrate that postsecondary remediation is highly efficacious...” (p. 199).

# Remediation is Indeed Effective

- Dr. Paul Attewell from CUNY (2006)<sup>16</sup>:

“In two-year colleges, we found that taking remedial classes was *not* associated at all with lower chances of academic success, even for students who took three or more remedial courses” (p. 915).

# Remediation is Indeed Effective

- ACT study on effectiveness of Dev Ed (2013)<sub>30</sub>:  
“Particular subgroups of developmental students... benefited from taking the developmental course. In particular, students who received an A (or sometimes a B) grade in the developmental course appeared to benefit from taking it. Moreover, part-time students appeared to derive more benefit from taking developmental courses than full-time students did” (p. iii).

# Remediation is Indeed Effective

- ACT study on effectiveness of Dev Ed (2013)<sub>30</sub>:

“Further consideration of time to degree, however, showed that developmental students typically completed a Bachelor’s degree in six years at a rate similar to or higher than that of non-developmental students in five years” (p. ii).

# Remediation is Indeed Effective

In Defense of Developmental Education:

- 1. Any investment in education pays us back**
  - 2. With a change in definition, current research shows remediation is functioning as intended:  
to get students to the gateway starting line and  
to perform the same as nonremedial students**
- CCRC/CCA: But most students don't even get there!

3. Low retention and success rates not caused by remedial courses



# Interpreting Remedial Data

ANNALS OF IMPROBABLE RESEARCH

## The Dead Grandmother/Exam Syndrome

*by Mike Adams*

*Department of Biology*

*Eastern Connecticut State University*

*Willimantic, Connecticut*

It has long been theorized that the week prior to an exam is an extremely dangerous time for the relatives of college students. Ever since I began my teaching career, I heard vague comments, incomplete references and unfinished remarks, all alluding to the “Dead Grandmother Problem.” Few colleagues would ever be explicit in their description of what they knew, but I quickly discovered that anyone who was involved in teaching at the college level would react to any mention of the concept. In my travels I found that a similar phenomenon is known in other countries. In England it is called the “Graveyard Grannies” problem, in France the “Chere Grand’mere,” while in Bulgaria it is inexplicably known as “The Toadstool Waxing Plan” (I may have had some



# Low Success Rates Not Caused by Remediation

- *Redesigning America's CCs* (2015)<sup>43</sup> (New book on Guided Pathways by Bailey, Jaggars, & Jenkins):

“...the conventional developmental education does not increase an underprepared student's probability of succeeding in relevant college-level courses [and transfer, graduation]...in large part because most students referred to developmental education never finish their developmental sequence” (p. 121).

# Low Success Rates Not Caused by Remediation

- What this means is that researchers are blaming remedial courses for their low retention rates, gateway passrates, and completion rates
- For many students in CCs, remediation just happens to be their first-year, first-semester course
- What about nonremedial students' first-year, first-semester courses?
- If remediation is a barrier, then are gateway courses not a barrier?

# The Education Trust (2014)<sup>49</sup>

**Table 6: Success Rates in the First Three Mathematics Courses at the University of Alabama Over Time**

	Math 005	Math 100	Math 110
Fall 2005	64.2%	67.2%	66%
Fall 2006	73.6%	73.8%	70.3%
Fall 2007	74%	75.2%	74.8%
Fall 2008	67.8%	78.1%	65.5%
Fall 2009	67.2%	70.5%	77.7%
Fall 2010	64%	72.2%	73.3%
Fall 2011	66.7%	65.3%	72.7%
Fall 2012	84.6%	65.1%	80.1%

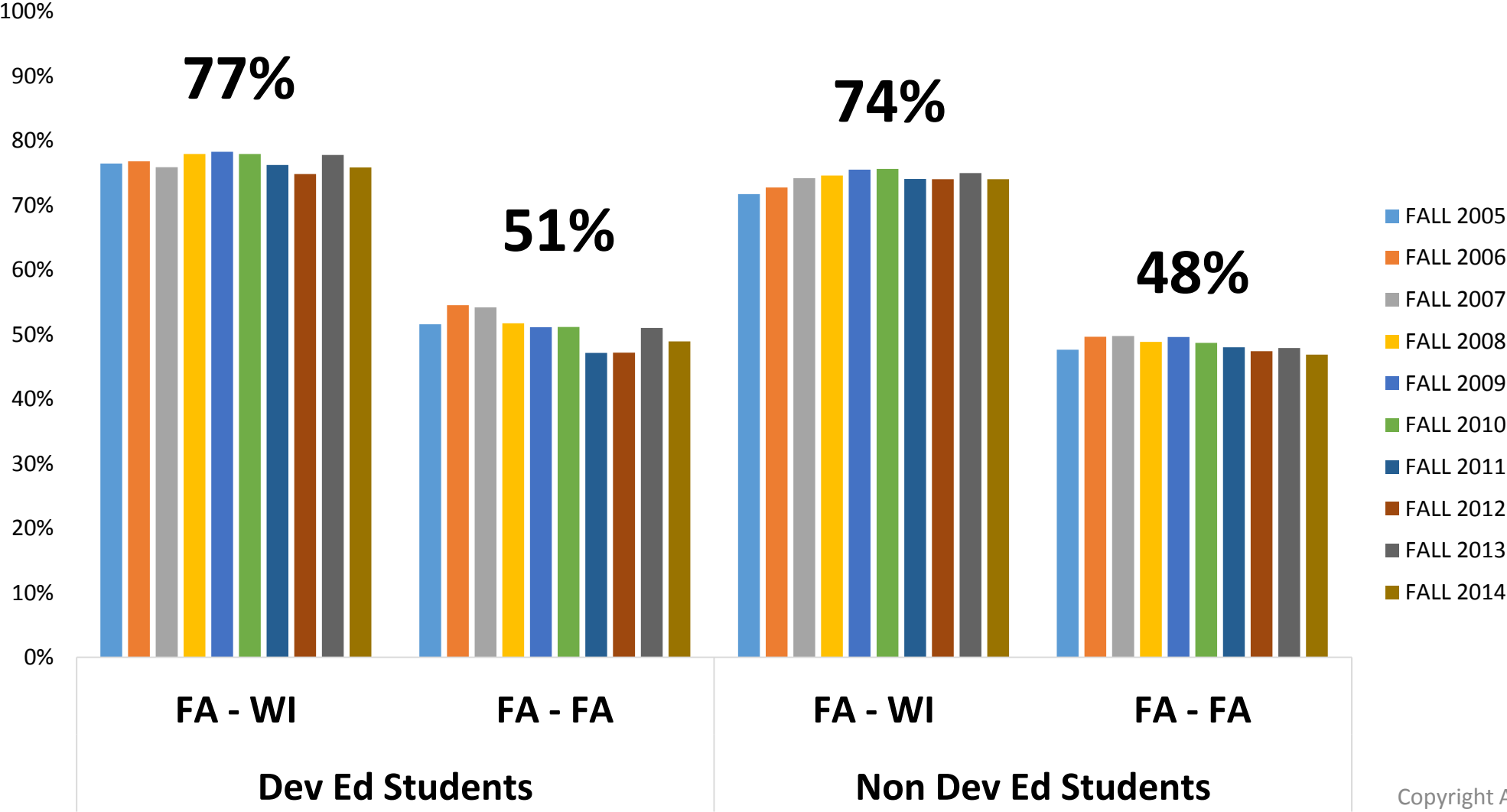
# The Education Trust (2014)<sup>49</sup>

**Table 7: Drop-Failure-Withdrawal Rates for Mathematics, 2000**

	Passrates	
Georgia State University	45%	55%
Louisiana State University	36%	64%
Rio Salado Community College	41%	59%
University of Alabama	60%	40%
University of Missouri–St. Louis	50%	50%
UNC–Greensboro	77%	23%
UNC–Chapel Hill	19%	81%
Wayne State University	61%	39%

# Delta College Retention Data 2005-2014

Average Retention Delta College Fall-to-Winter, Fall-to-Fall  
2005-2014



# Low Success Rates Not Caused by Remediation

- Any course students take first will cause 25%+ fail or w-rate
- College classes are a barrier to college success!
- Barrier effect is primarily due to other factors, and it is *normal in college* (and it is unfortunate)
- The CCRC and others blame remediation for low retention and passrates (do not generalize problem)
- CCRC is not focused on gateway passrates and gateway acceleration (Alg. I to Alg. II)—only recently did I hear CCRC say low success is a “gen ed” problem

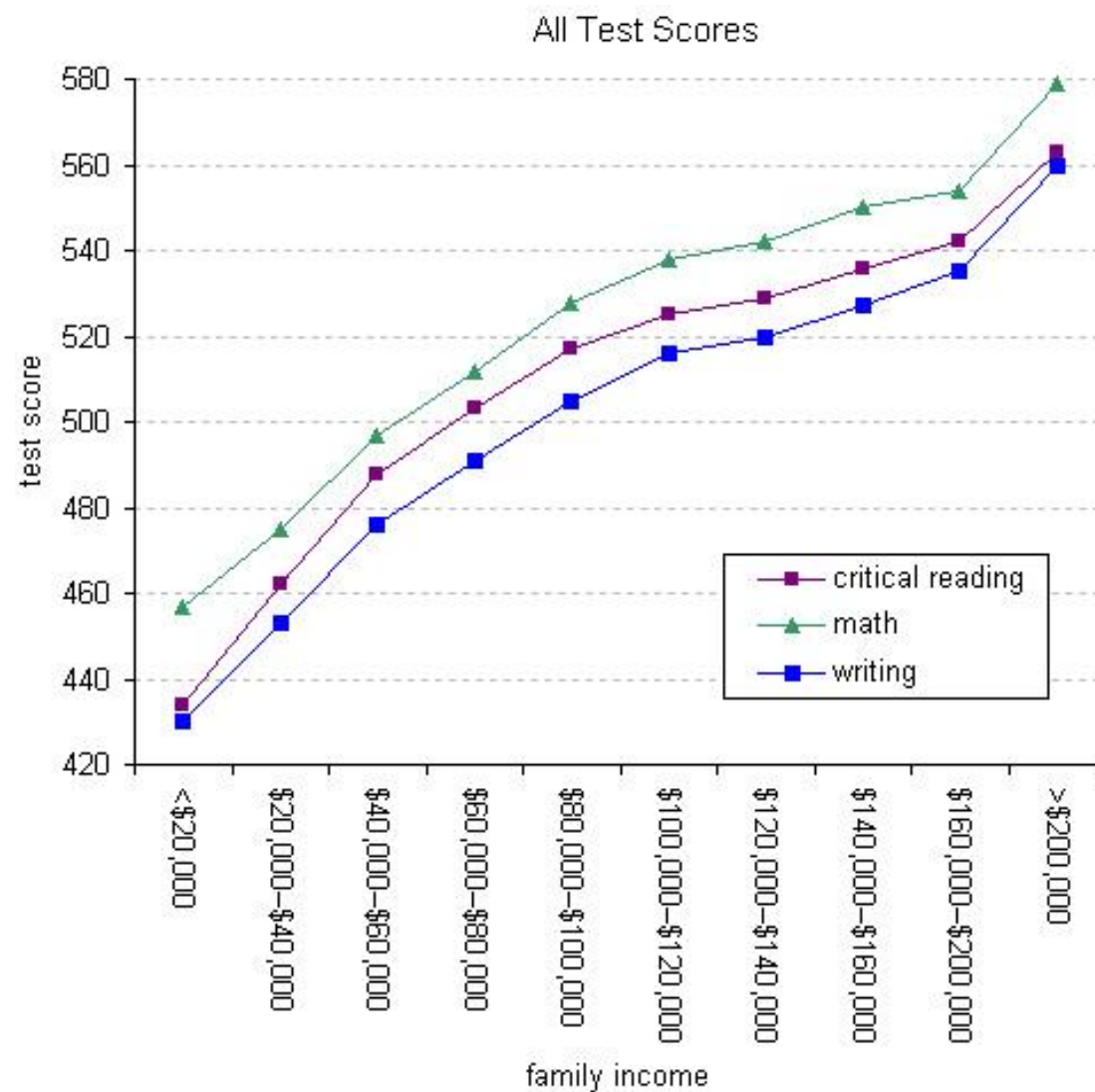
# Low Success Rates Not Caused by Remediation

- Again, despite being economists and policy experts trained at MIT, Harvard, and Columbia, many researchers almost solely blame remedial courses and their poorly designed pathways for low retention, passrates, and graduation rates
- Could there be more powerful and well-documented links explaining remedial students' (and nonremedial, first-year, first-semester) low success rates?

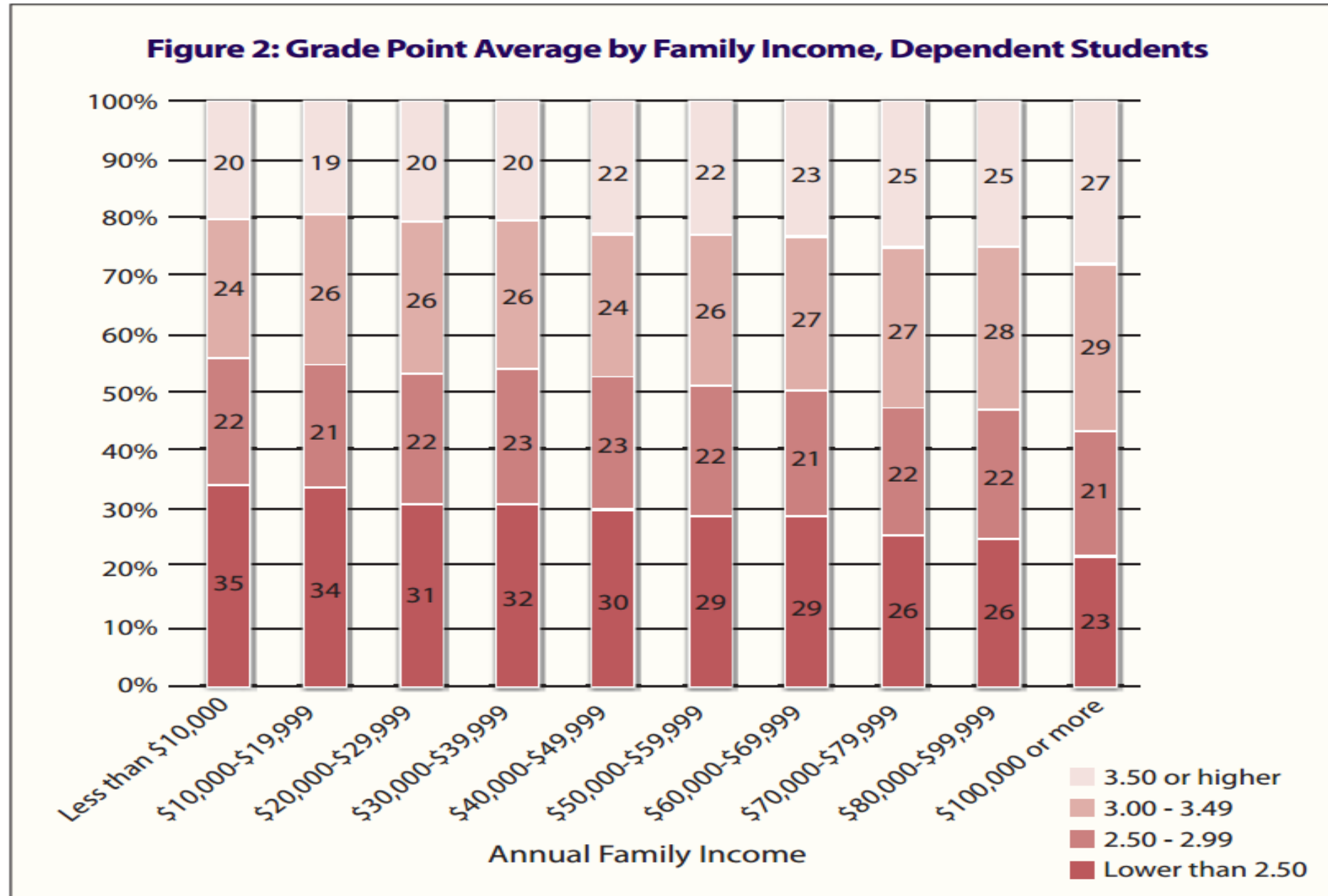


# College Board SAT Data ( $r = .95$ )<sub>12</sub>

**SAT Cutoffs  
are around  
470-500 for  
college-level  
in Community  
Colleges**

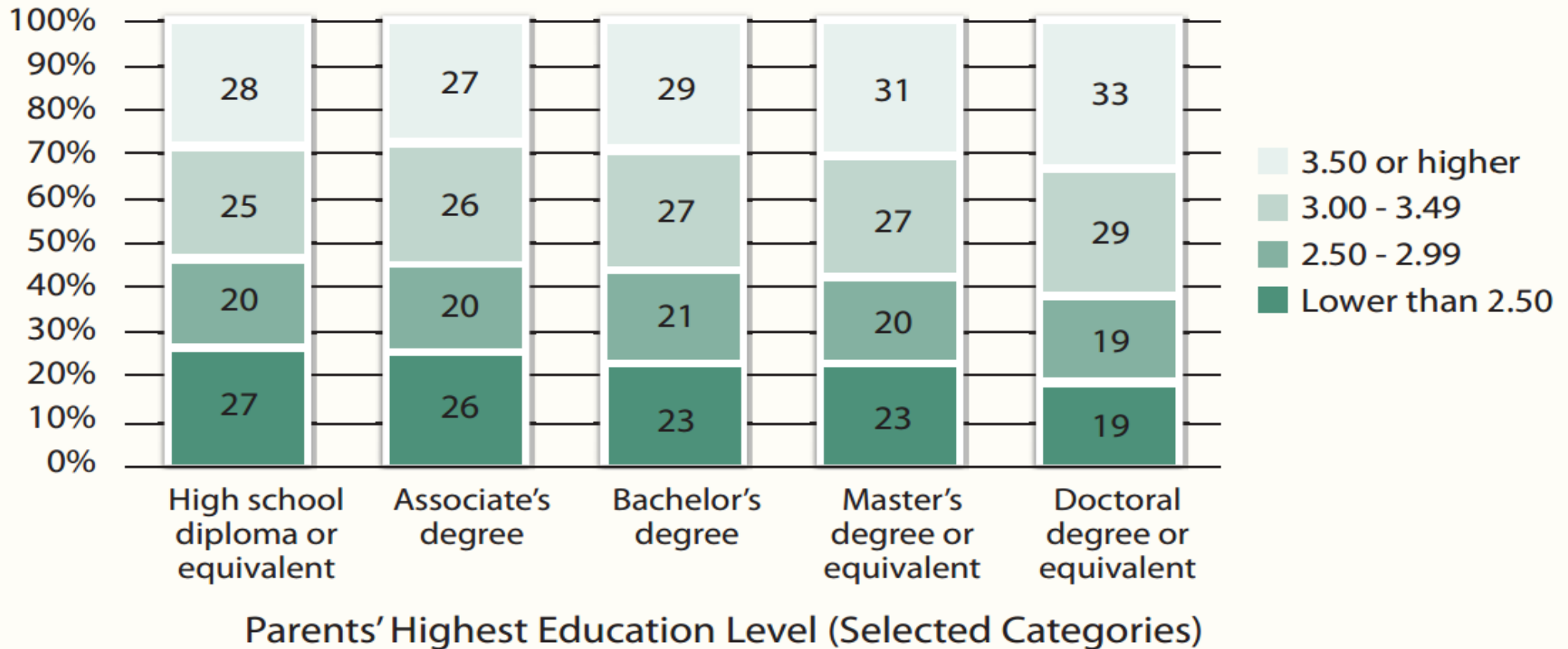


# Association of American Colleges and Unis (2010)<sub>42</sub>

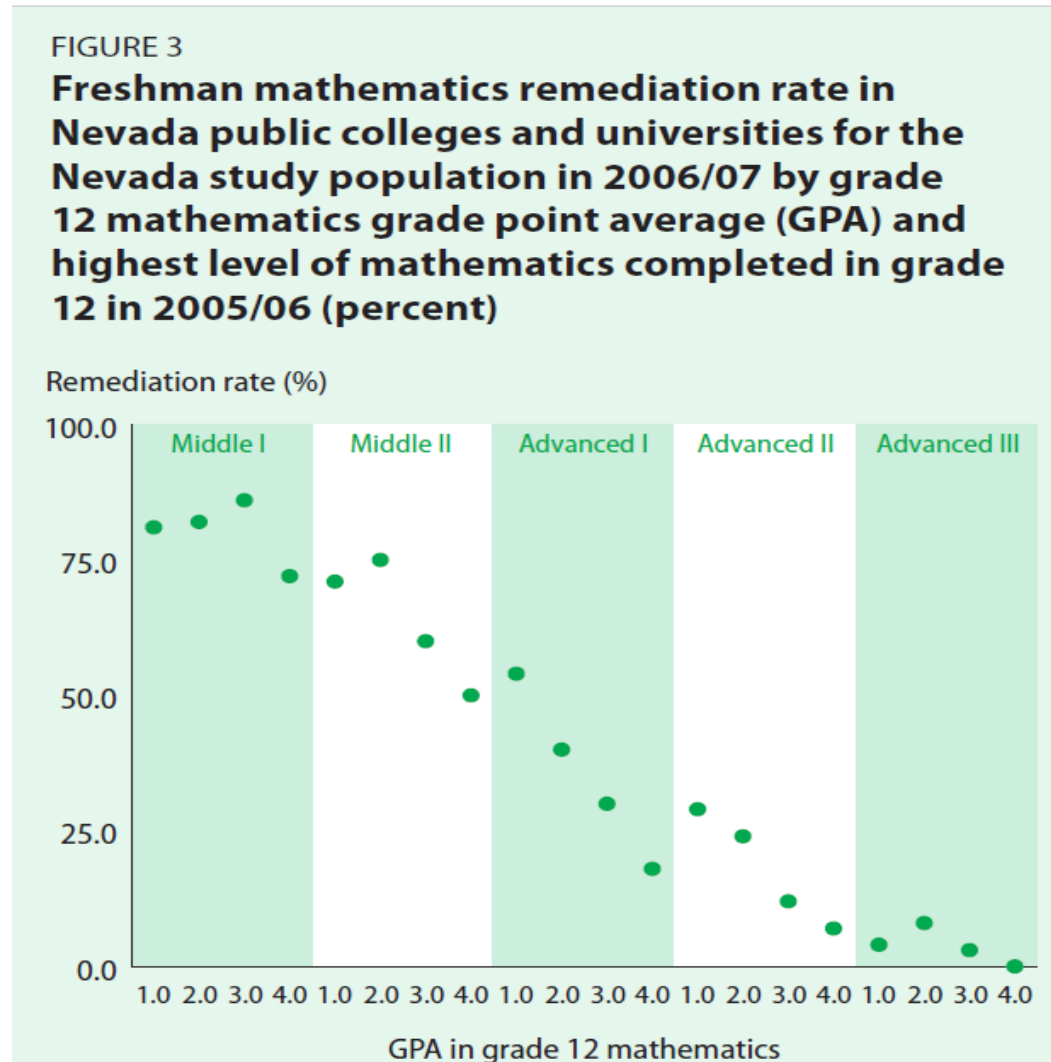


# Association of American Colleges and Unis (2010)<sup>42</sup>

**Figure 1: Grade Point Average by Parents' Highest Education Level**

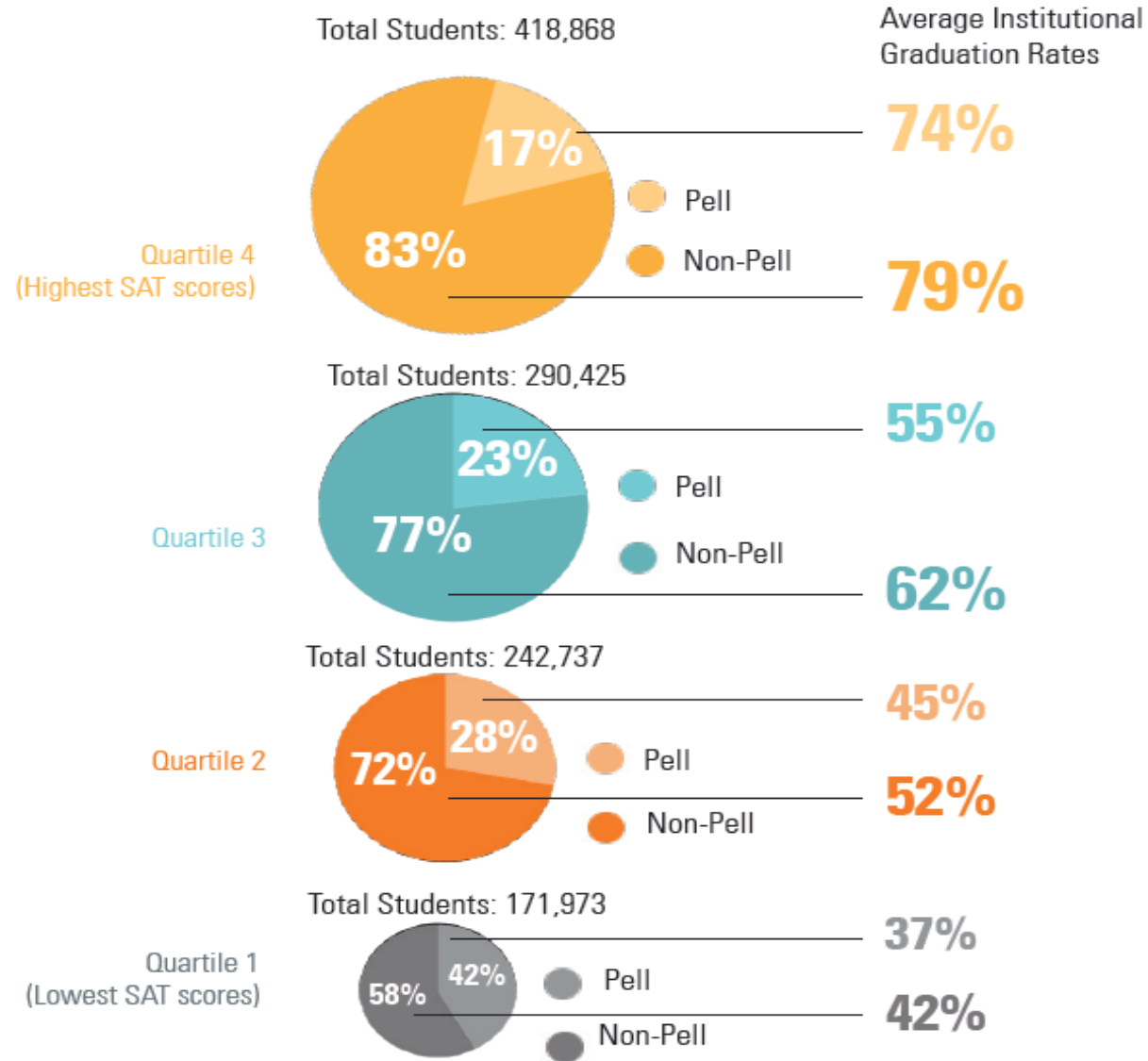


# “Examining the Links Between Grade 12 Math and Remediation” (2008)<sup>41</sup>



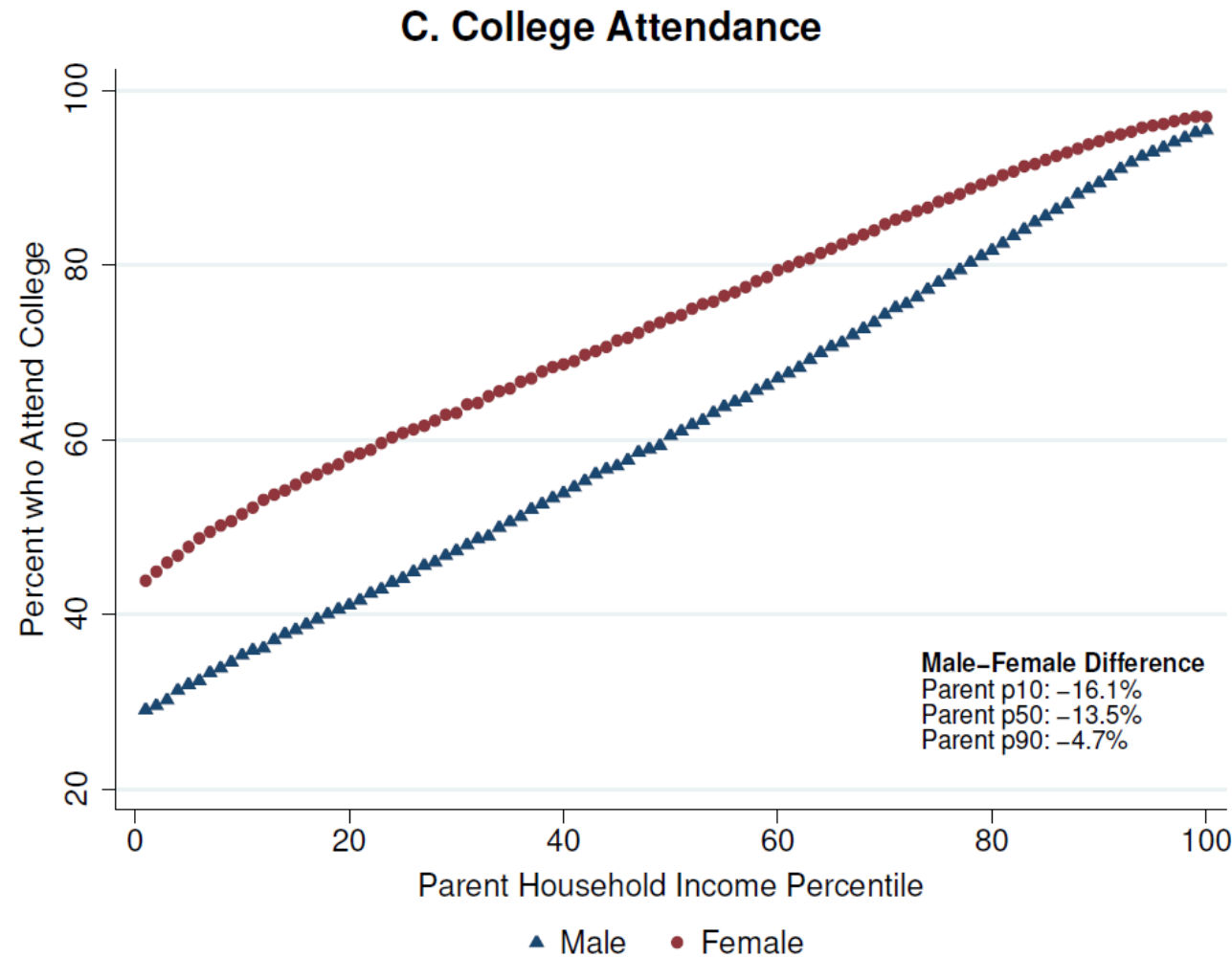
# “The Pell Partnership” (2015)<sup>50</sup>

**Figure 5:** Enrollment and Graduation Rates Within SAT Quartile



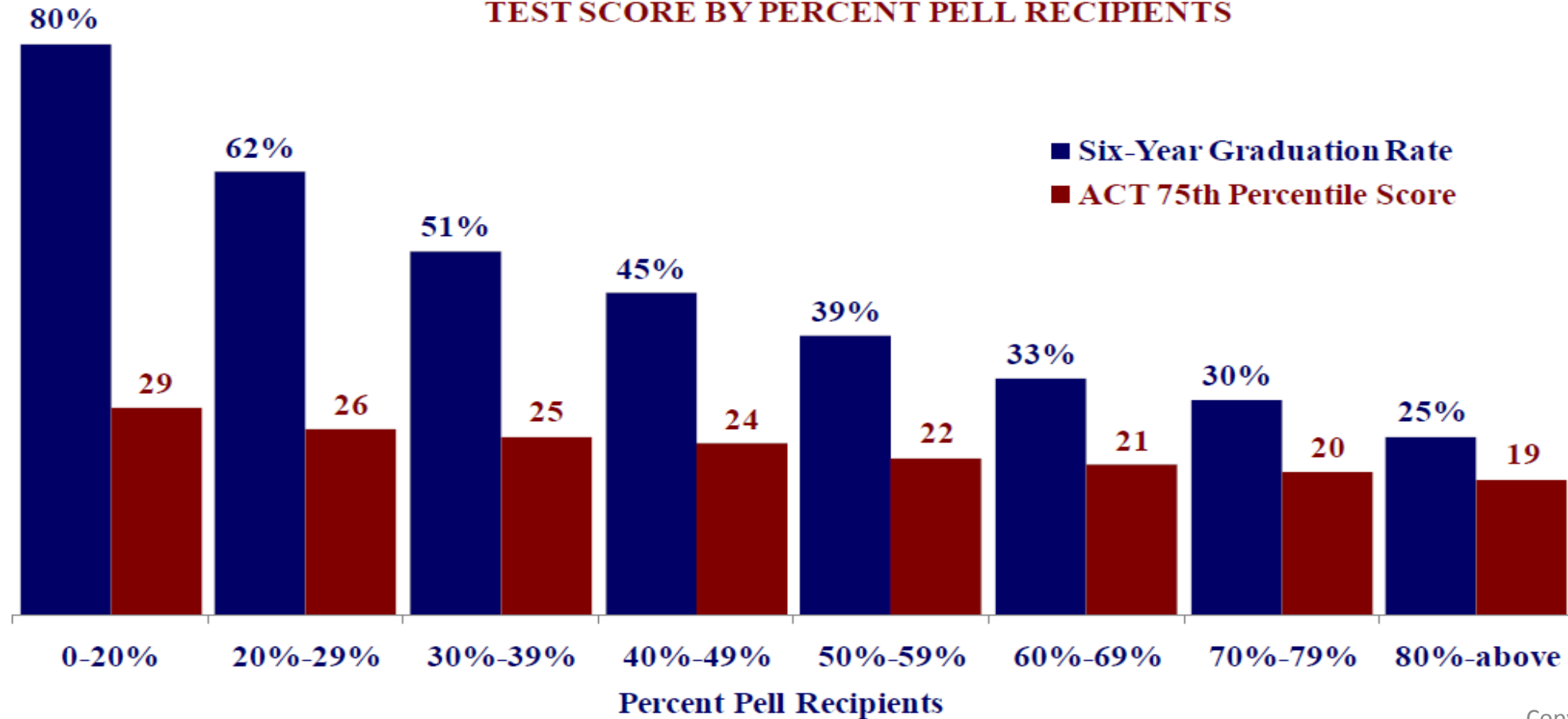
# “Childhood Environment And Gender Gaps in Adulthood” (2016)<sub>40</sub>

Study of  
children  
born in the  
1980s.

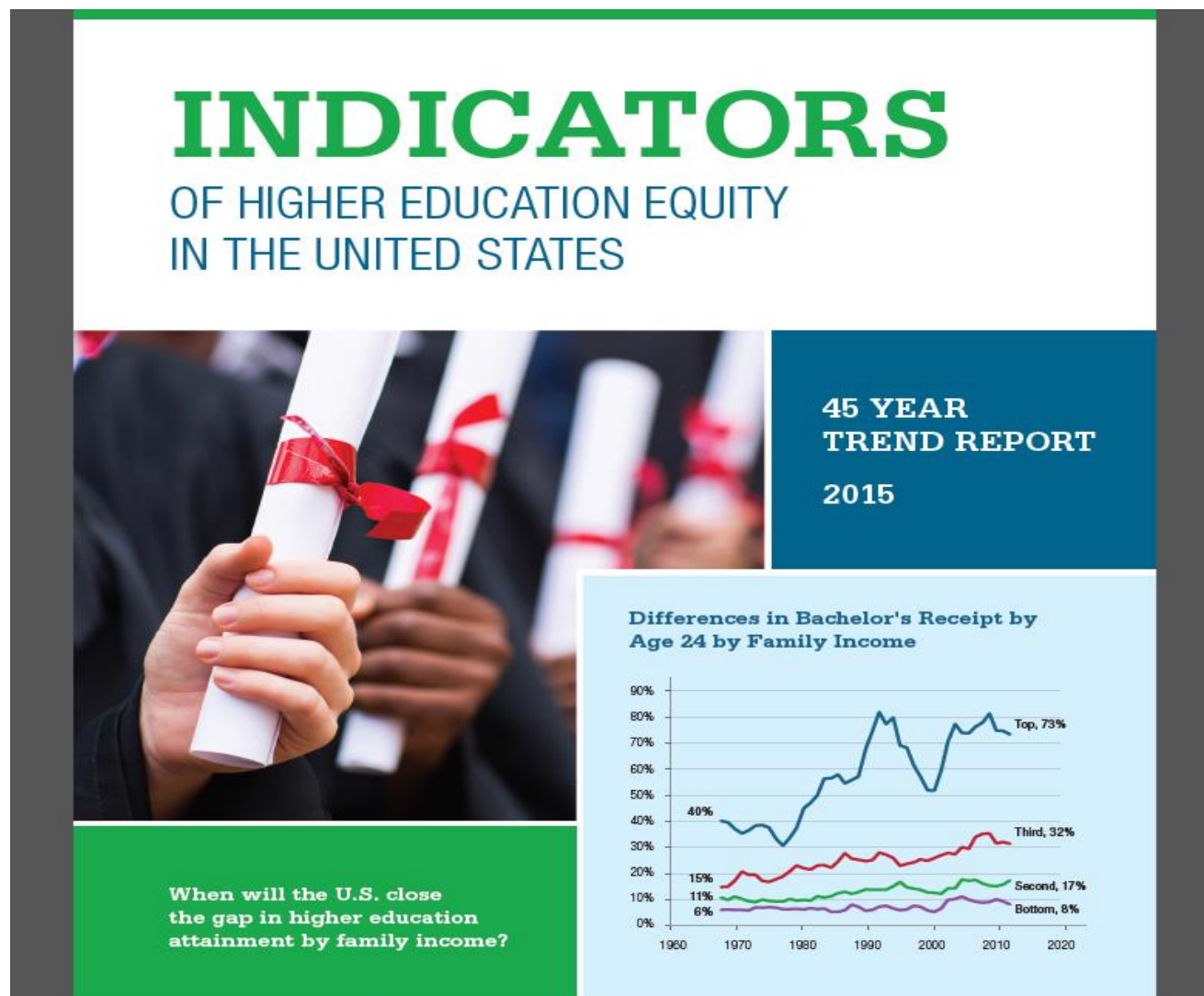


# “Measure Twice” (2013)<sup>14</sup>

**FIGURE 1: SIX-YEAR GRADUATION RATE AND  
TEST SCORE BY PERCENT PELL RECIPIENTS**



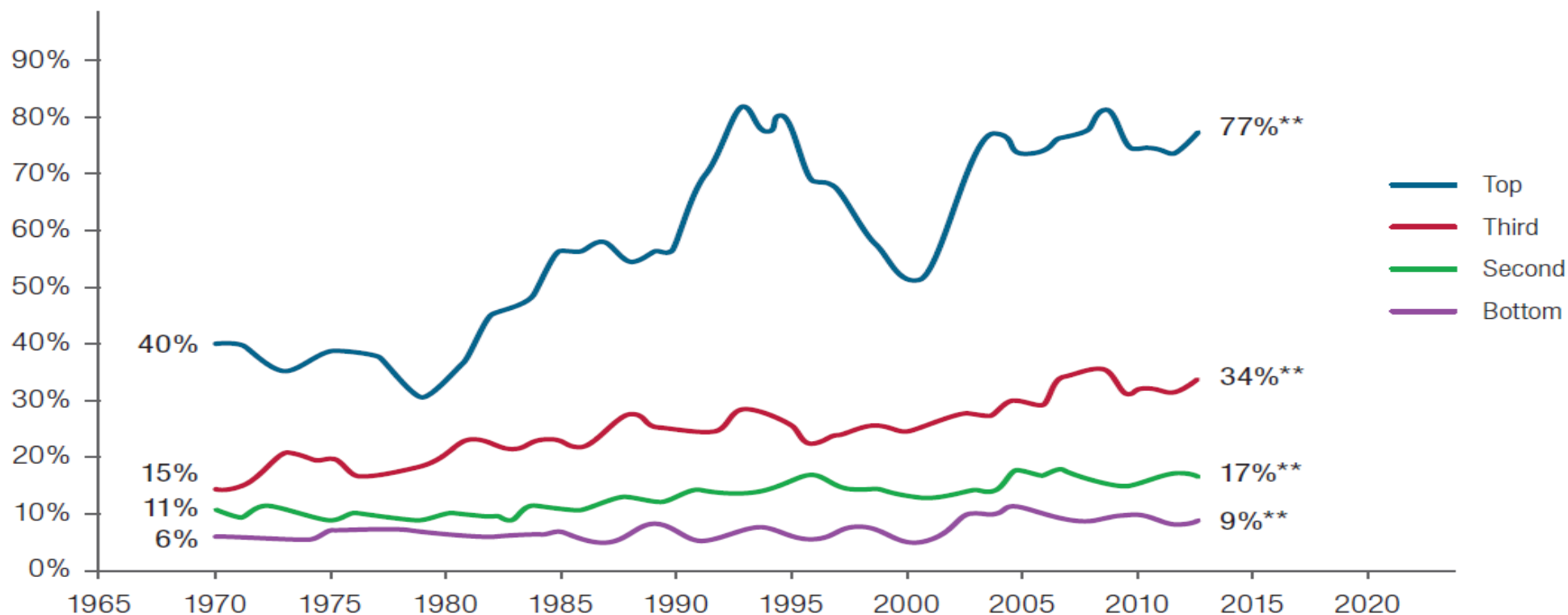
# Pell Institute “Indicators of Higher Education Equity in the United States” (2015)<sup>15</sup>





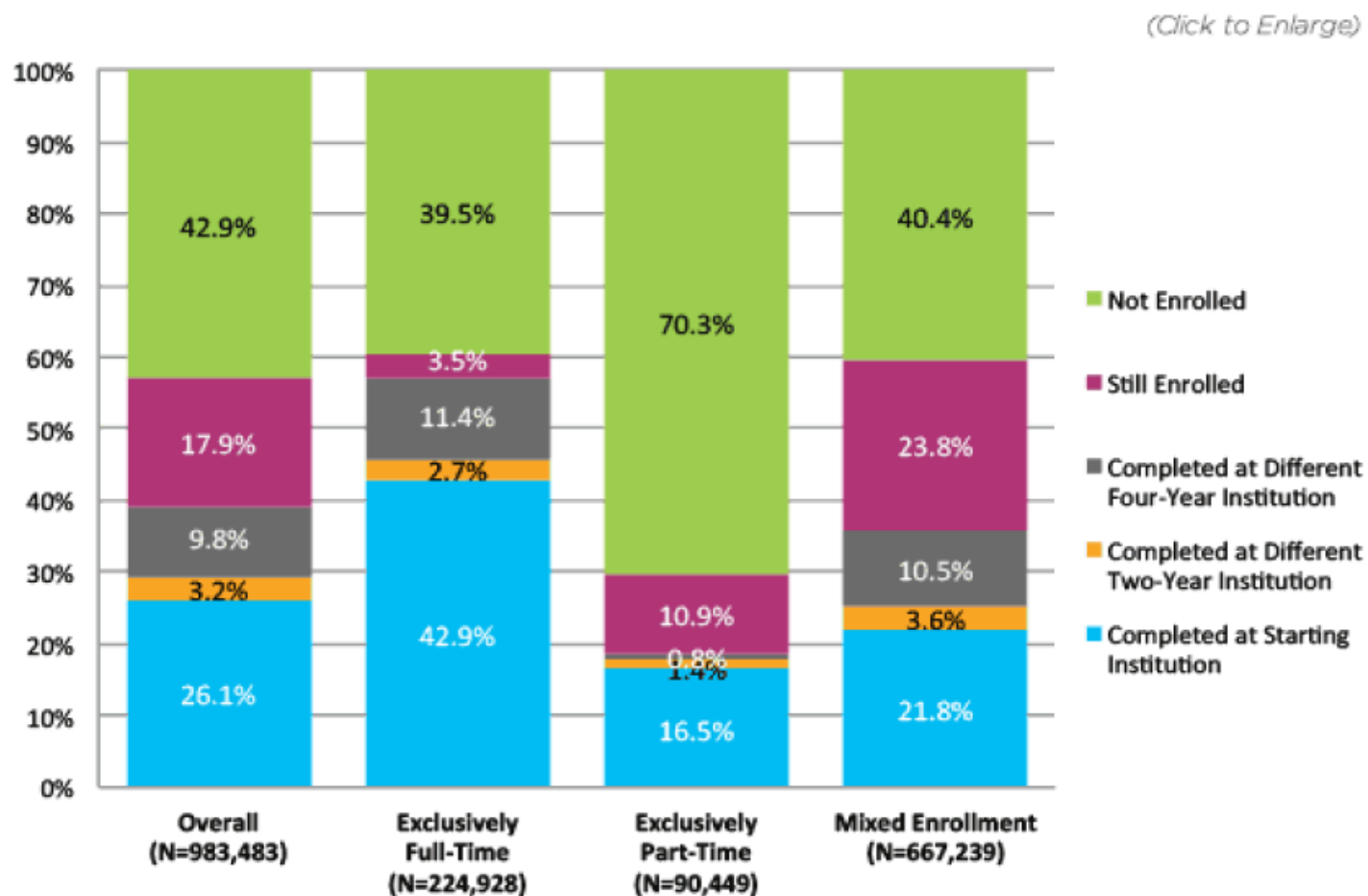
# Pell Institute “Indicators of Higher Education Equity in the United States” (2015)<sup>15</sup>

**Equity Indicator 5a: Bachelor's degree attainment by age 24 for dependent family members by family income quartile: 1970-2013**



# National Student Clearinghouse data (2014)<sup>39</sup>

**Figure 19. Six-Year Outcomes and First Completion for Students Who Started at Two-Year Public Institutions by Enrollment Intensity (N=983,433)**



# USDOE “The Condition of Education” (2014)<sup>13</sup>

**Figure 3.** Percentage of students seeking a bachelor’s degree at 4-year degree-granting institutions who completed a bachelor’s degree within 6 years, by institutional applicant acceptance rate: Starting cohort year 2006



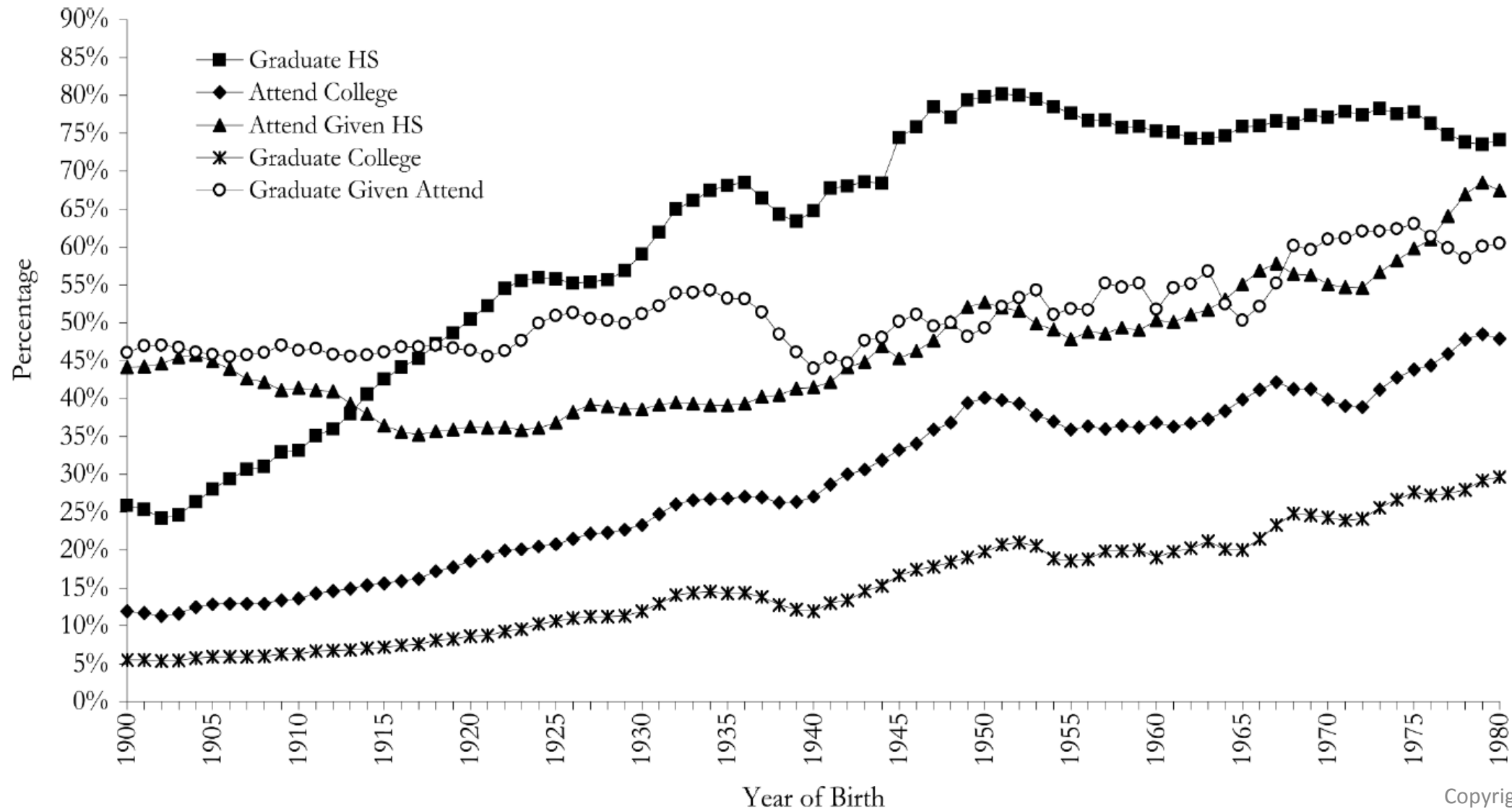
Institutional applicant acceptance rate

# Low Success Rates Not Caused by Remediation

- CCRC Research Overview “What We Know” (2014)<sub>26</sub>:

*“Only [emphasis added] 28 percent of community college students who take a developmental education course go on to earn a degree within eight years, and many students assigned to developmental courses drop out before completing their sequence and enrolling in college-level courses” (p. 1).*

# “The American High School Graduation Rate” (2010)<sup>51</sup>



# Low Success Rates Not Caused by Remediation

- The data show that completion rates of remedial students in community colleges, while low in number, are in line with all higher education data currently and historically, when demographics are controlled for
- While low completion is a cause for concern, it should not be used to blame a few sequential courses which happen to be at the beginning of college
- This effectively causes *less access* and *lower quality*

# Low Success Rates Not Caused by Remediation

- In Florida, where they made remediation optional, some results of their experiment are in:
- Remedial students allowed to choose to enter college-level courses unprepared fail at a higher rate:
  - ENG college-level pass-rates: Down 4% points
  - MTH college-level pass-rates: Down 9% points
- Higher math fail rate because more students opted into college-level math

# IHE “When You’re Not Ready” (2015)<sub>28</sub>

## Miami-Dade College

Developmental Education Enrollment			
	Math	Writing	Reading
2012-13 to 2014-15	-42%	-44%	-46%
College-level Enrollment	Math	English	
2012-13 to 2014-15	+30%	+10%	
Pass Rates	Math	English	
2012-13	55.7%	74%	
2014-15	46.8%	70.3%	



4. Remediation isn't perfect, but poor implementation = worse outcomes

# Poor Implementation = Worse Outcomes

- Again, researchers claim remediation is ineffective due to three main theories:
  1. Remediation itself is ineffective (not helping)
  2. Remediation is simply a barrier or diversion
  3. Many students underplaced

# Poor Implementation = Worse Outcomes

- While these claims may be true for some courses and institutions, recent implementations of some reforms are extreme and may decrease access for poor and minority students, and relegate remediation to a very limited or non-existent role in higher education
- The “right to fail” is coming back in many places
- Remember, Complete College America and some other organizations’ goal is to remove remediation completely

# Poor Implementation = Worse Outcomes

- Here are a few of the most recent reforms:
  - Guided Pathways (from CCRC book, 2015)
  - Corequisite designs: ALP (Accelerated Learning Program, CCBC) and similar models
  - HSGPA to place students into college-level courses
  - Acceleration (paired, linked, compressed)
  - Integrated reading and writing
  - Modularization, esp. for math

# Poor Implementation = Worse Outcomes

- Guided Pathways = restricting programs and options
- Corequisites = removing trad. remediation (ALP will)
- HSGPA to place students = lowering the standards for college-level courses (2.6! 3.0 is avg.)
- Acceleration = too fast for many students
- Integrated R&W = not enough time on both
- Modularization = only students with high *personal qualities* (Duckworth) are successful

# Poor Implementation = Worse Outcomes

- Some of these reforms have relatively little research supporting them (some just a few years, most not randomly assigned<sup>19,20,44</sup>)
- Have been adopted quickly (not always thoroughly)
- Unintended consequences are not clear yet
- Even when they work, individual changes will not move the needle greatly (CCRC admits this in 2015 book, pp. 10-11<sup>43</sup>)

# Flawed Research in Developmental Education

- Ioannidis (2005)<sup>46</sup> and Nosek et al. (2015)<sup>47</sup> both find that within medical and psychology journals, 60-90% of peer-reviewed, published studies cannot be reproduced due to errors in methodology, p-hacking, and improper analyses of results
- Read “Science Isn’t Broken”<sup>48</sup> on Fivethirtyeight.com for more about methodological problems in studies
- Remedial research not immune

# Poor Implementation = Worse Outcomes

In Defense of Developmental Education:

- 1. An investment in any education pays**
  - 2. Remediation works, even in traditional form**
  - 3. Largest barrier is SES, not remediation**
  - 4. Poor implementation = worse outcomes**
- If small reforms are at best helping a little, and also harming some, what actually works, then?



5. Actual  
*Developmental*  
*Education* model is  
most effective

# Developmental Education is Most Effective

- Given that remedial students are currently graduating at an expected rate, how do we actually move the needle in response to the completion agenda, without unnecessarily restricting or removing access?
- What works best is if we follow the original definition of *Developmental Education*, as outlined by Dr. Boylan and others, which is a system of support including remedial courses (Boylan & Bonham, 2014)<sup>31</sup>:

# Developmental Education is Most Effective

- Boylan & Bonham (2014)<sup>31</sup>:

“The concept of developmental education grew from the realization that remedial courses needed to be accompanied by a variety of student support services if colleges and universities were to effectively provide true educational opportunity” (p. 59).

# Comprehensive Reform: What Works Best

- City University of New York (CUNY) Accelerated Study in Associate Programs (ASAP)<sup>32, 33, 34, 35</sup>
- The ASAP program implemented a randomized, controlled study, and the intervention was a comprehensive overhaul of Dev Ed (and non-Dev Ed) community college participation, including the infusion of a great deal of time and resources (\$4,000 to \$6,800 per student per year)

# Comprehensive Reform: What Works Best

- ASAP Comprehensiveness
  - Dev Ed courses first
  - Full time
  - Block scheduling
  - Learning communities for first year
  - Group advising sessions every week (60-80 caseload)
  - Meetings with adviser at least twice per month
  - Mandatory tutoring
  - Career specialist meeting once per semester

# Comprehensive Reform: What Works Best

- ASAP Comprehensiveness
  - Tuition waiver
  - Free MetroCards
  - Free books
  - Free social events
  - Consistent and repeated messages
  - Out of pocket costs for institution are about \$5K-\$7K more per student per year
  - Good model for “free community college” discussion

# Comprehensive Reform: What Works Best

- Dev Ed ASAP results:
  - 896 students in total sample
  - 44% Hispanic, 34% Black, 10% White, 8% Asian
  - Increased credits over control group by 25%
  - Increased retention second semester (80 to 90%)

# Comprehensive Reform: What Works Best

- Dev Ed ASAP graduation rates after 3 Years:

- Control Group (no ASAP): **22%**

- ASAP Intervention Group: **40%**



# Comprehensive Reform: What Works Best

- Non Dev Ed ASAP graduation rates after 3 Years:
  - Control Group (no ASAP): **28%**
  - ASAP Intervention Group: **56%**
- Three community colleges in Ohio are starting this program; others looking into it

6. Act to support  
education: Invest in  
Dev Ed

# Act to Support Education: Invest in Dev Ed

- How can we support investment in Dev Ed?
  - Vote for officials who support education
  - Contact elected officials and urge them on issues
  - Participate in thoughtful college reform
  - Confront researchers, administrators, and board members when necessary, and use data!
  - Provide research to them showing alternative data and interpretations of CCRC data

# Act to Support Education: Invest in Dev Ed

- Remember you have a measureable effect on well-being of students, colleges, communities, and nation
- Speak about “investment” when talking to decision-makers: \$5K to \$7K more per student per year with a well-organized system will double graduation rates (We spend \$12K on public school students per year)<sup>36</sup>
- Thoughtful, comprehensive changes and funding add up to large effects

# Act to Support Education: Invest in Dev Ed

- Read and refer to Bailey, Jaggars, & Jenkins (2015)<sup>43</sup>  
*Redesigning America's Community Colleges: A Clearer Path to Student Success*
- Use their ethos to argue for holistic, well-funded, thoughtful, and well-supported reforms
- If you're forced to have some reforms of the book, you should argue to have other reforms as well
- Here are some select quotes from the book to help you get started:

# Quote Bailey, Jaggars, & Jenkins (2015)<sup>43</sup>

- *Redesigning America's CCs* (2015)<sup>43</sup>:

“...guided pathways reforms typically require additional upfront and transitional costs [and will affect ongoing costs]...common transitional costs include: (1) faculty and staff time to review and redesign programs, instruction, and support services; (2) professional development in key areas...” (p. 182).

# Quote Bailey, Jaggars, & Jenkins (2015)<sup>43</sup>

- *Redesigning America's CCs* (2015)<sup>43</sup>:

“...Miami Dade College...launched the new intake system...who reached out to the approximately 9,000 students entering directly from high school. [S]tudents who met with advisors and developed plans were 8 percentage points more likely to persist...” (p. 183).

# Quote Bailey, Jaggars, & Jenkins (2015)<sup>43</sup>

- *Redesigning America's CCs* (2015)<sup>43</sup>:

“...positive results persuaded college's senior leadership to approve the hiring of twenty-five new full-time professional (master's degree-level) advisors...[which] required an additional annual investment of \$1 million...,which the college incorporated into its operating budget” (p. 184).



# Quote Bailey, Jaggars, & Jenkins (2015)<sup>43</sup>

- *Redesigning America's CCs* (2015)<sup>43</sup>:

“...community colleges are experiencing fiscal pressure and continue to look for ways to lower costs. Yet the ways in which they typically cut spending—by increased reliance on part-time instructors, increased student-teacher ratios, and growing use of fully online instruction—reduce completion rates and likely hurt quality” (p. 197).

# IN DEFENSE OF DEVELOPMENTAL EDUCATION

1. An investment in any education pays us all back
2. Remediation works, even in its traditional form
3. Low success rates not caused by remediation, but SES
4. Remediation is not perfect, but poor implementation of reforms may be harmful
5. *Actual Developmental Education* is most effective
6. We should act to support thoughtful investments and redesign in Dev Ev; and quote that book!

# IN DEFENSE OF DEVELOPMENTAL EDUCATION

Most importantly, what all this means is that you do make a difference, regardless of whether others recognize the facts, so...

**Keep up the hard work for our fellow citizens!**

Questions welcome during follow-up session

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