CORE PRINCIPLES IN DEFENSE OF DEVELOPMENTAL EDUCATION

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NADE Presentation, 18 Mar 2016
Anaheim, CA 7 – 7:50 a.m.
Room: La Jolla
Core Principles 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, and I question reforms

• I offer you six Core Principles in Defense of Dev Ed:
1. Investments in all levels of education pay us back.
Early Childhood Education ("30M Word Gap")

<table>
<thead>
<tr>
<th>Words Spoken By Parents to their Young Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Parents</td>
</tr>
<tr>
<td>Working-Class Parents</td>
</tr>
<tr>
<td>Parents on Welfare</td>
</tr>
<tr>
<td>45 MILLION</td>
</tr>
<tr>
<td>26 MILLION</td>
</tr>
<tr>
<td>13 MILLION</td>
</tr>
</tbody>
</table>

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Early Childhood Education

• High/Scope Perry Study 2
  • 1962 in Ypsilanti, Michigan
  • 123 randomly selected low-income Af-Am 3-4 yrs. old
  • High-quality daycare
  • Tracked for 40 years

• Abecedarian program 3, 4, 5
  • 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
Table 10  
Possible Interventions to Raise the Rate of High School Graduation in California

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

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High School: “HS Dropouts and The Economic Losses from Juvenile Crime” (2009)
Table 7
Economic Losses from Juvenile Crime From Low Education in California (2008)

<table>
<thead>
<tr>
<th>Economic Loss from Juvenile Crime per Cohort ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method (a)</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>100% (Range)</td>
</tr>
<tr>
<td>50% (Range)</td>
</tr>
<tr>
<td>20% (Range)</td>
</tr>
<tr>
<td>10% (Range)</td>
</tr>
</tbody>
</table>

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), (Cost of Undereducated Youth)

For a 16 year old opportunity youth, therefore, the total taxpayer burden is $258,240 and the total social burden is $755,900.

The economic potential of an opportunity youth cohort is very large. Considered over the full lifetime of a cohort of 6.7 million opportunity youth who are aged 16-24, the aggregate taxpayer burden amounts to $1.56 trillion in present value terms. The aggregate social burden is $4.75 trillion. These costs ‘roll over’ each year because each year brings a new cohort of opportunity youth.
# The Economic and Fiscal 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.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Scenario 1: Matching OECD average PISA score</th>
<th>Scenario 2: Matching Canadian PISA score</th>
<th>Scenario 3: Matching top quartile U.S. PISA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in GDP in 2050 in %</td>
<td>1.7%</td>
<td>6.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Increase in GDP in 2050</td>
<td>$678 billion</td>
<td>$2.7 trillion</td>
<td>$4.0 trillion</td>
</tr>
<tr>
<td>Cumulative increase of present value GDP growth* 2015-2050</td>
<td>$2.5 trillion</td>
<td>$10.0 trillion</td>
<td>$14.7 trillion</td>
</tr>
</tbody>
</table>
TABLE 4
The Economic Consequences of Improving U.S. Educational Outcomes Over the Next 35 and 60 Years
Changes in government revenues, due to rising educational achievement, under three scenarios, 2015 to 2050 and 2015 to 2075.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Scenario 1: Matching OECD average PISA score</th>
<th>Scenario 2: Matching Canadian PISA score</th>
<th>Scenario 3: Matching top quatrile U.S. PISA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative increase in all present value* federal and state and local revenues 2015-2050</td>
<td>$902 billion</td>
<td>$3.6 trillion</td>
<td>$5.3 trillion</td>
</tr>
<tr>
<td>Cumulative increase in Social Security revenues 2015-2050</td>
<td>$256 billion</td>
<td>$1.0 trillion</td>
<td>$1.5 trillion</td>
</tr>
<tr>
<td>Cumulative increase in Medicare revenues 2015-2050</td>
<td>$77 billion</td>
<td>$306 billion</td>
<td>$452 billion</td>
</tr>
</tbody>
</table>

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“The Rising Cost of Not Going to College” (2014)

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

- Bachelor’s degree or more
- Two-year degree/Some college
- High school graduate

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.


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"Is It Still Worth Going to College?" (2014)\textsuperscript{38}

Figure 1. Earnings premium over high school education
“The College Payoff” (2009)
Investments in All 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

Core Principle in Defense of Developmental Education:

1. An investment in any education pays us back

• Again, 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. Many students underplaced

• Most of these claims originate from the Community College Research Center, headed by Dr. Thomas Bailey
What Research is Saying About DE

• Bailey, Jeong, & Cho (2009) (cited by 493 papers)  

“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 Research is Saying About DE

• Bailey (2009)\textsuperscript{18}:
  “...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 Research is Saying About DE


“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 Research is Saying About DE

• Jenkins et al. (2010):

“This 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 Research is Saying About DE

• Edgecombe (2011)²¹:

“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 Research is Saying About DE

• Hughes & Scott-Clayton (2011):22:

“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 Research is Saying About DE

• Scott-Clayton, Crosta, & Belfield (2012):

“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 Research is Saying About DE

• Scott-Clayton & Rodriguez (2012)\textsuperscript{24}: 
  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 Research is Saying About DE

• Scott-Clayton & Rodriguez (2012):24

“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 among incoming college students” (emphasis added) (p. 1).
What Research is Saying About DE

• Edgecombe, Baker, & Bailey (2013):25

“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 Research is Saying About DE

• CCRC Research Overview (2014) \(^{26}\) (A compilation of all the 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 Research is Saying About DE

• *Redesigning America’s CCs (2015)* (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 Research is Saying About DE

• The repetition of these words by reputable and well-funded institutions has had and will have negative effects (“Legislative Fixes,” 2015):
  • 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

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Remediation is Indeed Effective

• Speaking of Florida...
  ...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
<table>
<thead>
<tr>
<th>Miami-Dade College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Education Enrollment</td>
</tr>
<tr>
<td>2012-13 to 2014-15</td>
</tr>
<tr>
<td>College-level Enrollment</td>
</tr>
<tr>
<td>2012-13 to 2014-15</td>
</tr>
<tr>
<td>Pass Rates</td>
</tr>
<tr>
<td>2012-13</td>
</tr>
<tr>
<td>2014-15</td>
</tr>
</tbody>
</table>
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..."
Remediation is Indeed Effective

• CCRC definition of remediation: Null = failure
  Calcagno and Long (2008)\textsuperscript{37}: “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
Remediation is Indeed Effective

• The CCRC studies show remediation works, even the traditional model, depending on how data is analyzed

• Out of 79 separate RDD analyses of math, reading, and writing Dev Ed outcomes by the CCRC\textsuperscript{26}:
  • 7 Positive
  • 52 Null
  • 20 Negative
## CCRC “What We Know About Dev Ed” (2014)

### Developmental Math Students

<table>
<thead>
<tr>
<th>Study</th>
<th>Level</th>
<th>Short-Term Impacts</th>
<th>Medium- &amp; Long-Term Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Persistence</td>
<td>Passed College-Level Math</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>UPPER</td>
<td>NEG</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>TEXAS</td>
<td>UPPER</td>
<td>NULL</td>
<td>NULL</td>
</tr>
<tr>
<td>OHIO</td>
<td>UPPER</td>
<td></td>
<td>NULL</td>
</tr>
<tr>
<td>LUCCS</td>
<td>UPPER</td>
<td></td>
<td>NULL</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>UPPER</td>
<td>NEG</td>
<td>NEG</td>
</tr>
<tr>
<td>VIRGINIA</td>
<td>LOWER vs. MIDDLE</td>
<td>NULL</td>
<td>NULL</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>LOWER vs. MIDDLE</td>
<td>NULL</td>
<td>NULL (conditional)</td>
</tr>
</tbody>
</table>

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### CCRC “What We Know About Dev Ed” (2014)

**DEVELOPMENTAL READING STUDENTS**

<table>
<thead>
<tr>
<th>Study</th>
<th>Level</th>
<th>Short-Term Impacts</th>
<th>Medium- &amp; Long-Term Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Persistence</td>
<td>Grade in College-Level English</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>UPPER</td>
<td>POS</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>TEXAS</td>
<td>UPPER</td>
<td>NULL</td>
<td>NEG</td>
</tr>
<tr>
<td>OHIO</td>
<td>UPPER</td>
<td>NULL</td>
<td>NULL</td>
</tr>
<tr>
<td>LUCCS</td>
<td>UPPER</td>
<td>NEG</td>
<td>NEG</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>UPPER</td>
<td>NULL</td>
<td>NEG</td>
</tr>
<tr>
<td>VIRGINIA 2</td>
<td>UPPER</td>
<td>NULL</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>VIRGINIA 2</td>
<td>LOWER vs. UPPER</td>
<td>NEG</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>LOWER vs. MIDDLE</td>
<td>NULL</td>
<td>NULL (conditional)</td>
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</tbody>
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## DEVELOPMENTAL WRITING STUDENTS

<table>
<thead>
<tr>
<th>Study</th>
<th>Level</th>
<th>Short-Term Impacts</th>
<th>Medium- &amp; Long-Term Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Persistence</td>
<td>Passed College-Level English</td>
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<td>UPPER</td>
<td>NULL</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>LUCCS</td>
<td>Writing &amp; Reading vs. Reading Only</td>
<td>NULL</td>
<td>NULL (conditional)</td>
</tr>
<tr>
<td>VIRGINIA 2</td>
<td>LOWER vs. UPPER</td>
<td>NEG</td>
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<tr>
<td>TENNESSEE</td>
<td>LOWER vs. UPPER</td>
<td>POS</td>
<td>POS (conditional)</td>
</tr>
</tbody>
</table>

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):
  “...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):¹⁶

“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):30
  “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): 30:

“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).

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Remediation is Indeed Effective

Core Principles 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 non-remedial students

• CCRC/CCA: But most students don’t even get there!
3. Low success rates not caused by remediation, but SES
What is a Normal Graduation Rate?

• CCRC/CCA/JFF/etc./some educators state remediation is “ineffective” because few remedial students enter gateway courses, are retained, and graduate

• 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 these rates

• Could there be a more powerful and well-documented link explaining remedial students’ low success rates?
We all know incoming students are not prepared:

• The Nation’s Report Card (NAEP): 74% of US 12\textsuperscript{th} graders below proficient in math, 62% in reading

• ACT: 1 of 3 HS grads failed to meet any of the four college readiness benchmarks in English, math, reading, and science

• College Board: 57% of SAT takers failed to qualify as “college ready”
SAT Cutoffs are around 470-500 for college-level in Community Colleges
“Examining the Links Between Grade 12 Math and Remediation” (2008)
Figure 1: Grade Point Average by Parents’ Highest Education Level

Parents’ Highest Education Level (Selected Categories)

- High school diploma or equivalent
- Associate’s degree
- Bachelor’s degree
- Master’s degree or equivalent
- Doctoral degree or equivalent

Legend:
- 3.50 or higher
- 3.00 - 3.49
- 2.50 - 2.99
- Lower than 2.50

Data from: Association of American Colleges and Unis (2010)
Figure 2: Grade Point Average by Family Income, Dependent Students
“Childhood Environment And Gender Gaps in Adulthood” (2016)

Study of children born in the 1980s.
USDOE “The Condition of Education” (2014)
“Measure Twice” (2013)
Pell Institute “Indicators of Higher Education Equity in the United States” (2015)
Pell Institute “Indicators of Higher Education Equity in the United States” (2015)
Equity Indicator 3a (iii): Percent of average cost covered by maximum Pell Grant: 1974-2012

How Are We doing? High Inequality and Widening Gap
Percent of average college costs covered by the maximum Pell declined from a high of 67 percent in 1975 to 27 percent in 2012 – a 40 percentage-point decline

Note: The figure shows the maximum Pell grant as a percent of average college cost. The maximum Pell is the highest amount allowed by law.

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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)
Low Remedial Success Rates Caused by SES

• CCRC Research Overview “What We Know” (2014): “Only 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).
Low Remedial Success Rates Caused by SES

• The data show that completion rates of remedial students in community colleges, while low in number, are in line with all higher education currently and historically, when controlled for demographic data.

• 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 a college career.

• It ends in restricting access and lowering quality.
4. Dev Ed isn’t perfect, but be wary of new reforms claiming quick results
Be Wary: New Reforms Claiming Quick Results

• 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

• While these claims may be partially true, some reforms are extreme and may decrease access, cut programs, and relegate remediation to a limited role
Be Wary: New Reforms Claiming Quick Results

• Here are a few of the most recent reforms:
  • Guided Pathways
  • Corequisite designs like ALP (Accelerated Learning Program from CCBC)
  • HSGPA to place students into college-level courses
  • Acceleration
  • Modularization, esp. for math
Be Wary: New Reforms Claiming Quick Results

• These reforms have relatively little research supporting them (some just a few years, most not randomly assigned)
• They have been adopted extremely quickly
• Unintended consequences are not clear
• Even when it works, small changes will not move the needle greatly; healthy skepticism is a good thing (CCRC admits this in new book)
The Corequisite Model

• The corequisite model is being touted by Complete College America as being the solution to remediation
• First we must understand what it is
• Founded on one program from CCBC, and two studies by the CCRC (2010, 2012)
• What is it, and what could explain the positive results?
• Are there unintended consequences?
The Corequisite Model

• Remedial students put together with nonremedial students into a gateway course (10 and 10)
• Remedial students also have “companion course”
• Original research done with 3 credits and 3 credits, same instructor for both courses, but “just in time” support ranges from lab time to 3 credit-course
• Claims to increase passrates in ENG 101 and 102, and overall credits
Remediation as a Corequisite—Not a Prerequisite

Corequisite Remediation is doubling and tripling gateway college course success in half the time or better.

In Corequisite Remediation, students enroll directly into college-level courses and receive academic support alongside their regular classes. Rather than facing a long sequence of prerequisite, non-credit courses, students get up to speed while working toward their degree. Additional, mandatory class periods or customized support in a lab provide just-in-time academic support within the college-level course.
Understanding the 70%+ Increase in Passrates

70%+ Increase in passrates in gateway course is mostly due to the way they compare the numbers (total of first class passing second class compared to passrate of starting in second class)

Conceptualizing Corequisite Data Comparisons

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Pass</th>
<th>No Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Remedial Course</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Traditional Gateway Course</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>ALP Remedial and Gateway</td>
<td>70</td>
<td>30</td>
</tr>
</tbody>
</table>

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Screening Effect / First-Class Fail Effect

Conceptualizing “Screening Effect" for Average CC Students
Out of 100 Students Starting in Any Course

Retention Rises Every Semester

<table>
<thead>
<tr>
<th>Semester</th>
<th>No Pass/Stop Out</th>
<th>Pass/Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem 1</td>
<td>68%</td>
<td>20%</td>
</tr>
<tr>
<td>Sem 2</td>
<td>50%</td>
<td>32%</td>
</tr>
<tr>
<td>Sem 3</td>
<td>39%</td>
<td>50%</td>
</tr>
<tr>
<td>Sem 4</td>
<td>32%</td>
<td>50%</td>
</tr>
<tr>
<td>Sem 5</td>
<td>28%</td>
<td>50%</td>
</tr>
<tr>
<td>Sem 6</td>
<td>26%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Comparison of Delta College Remedial (Lev 2) Students in Traditional Model to ALP Model from CCBC Data (Out of 100 Students Starting in Both)
The Corequisite Model

• Every tiered course structure has same problem and can be manipulated this way, i.e., college algebra 1 and 2
• Exploits “Screening Effect” by comparing apples to oranges
• Initial numbers in most programs are very low; check your own numbers before implementing changes
• In return for a slight increase in passrates, there is a great deal more college-level fails
• Doubles the cost of remediation (CCRC 2010^{19}, 2012^{20})
• Nonremedial students have lower outcomes
Flawed Research in Dev Ed

• Dr. Eric Nelson from the CCCCO spoke about flawed research yesterday: I had fun listening!

• To add to his comments, Ioannidis (2005) and Nosek et al. (2015) both find that within medical and psychology journals, well over 50% of peer-reviewed, published studies cannot be reproduced due to errors in methodology, p-hacking, and analyses of results.

• Read “Science Isn’t Broken” on Fivethirtyeight.com for more
Using HSGPA for Placement

• A similar reform is using HSGPA for placement
• The research from the CCRC recommended that multiple measures be used, but net result was to add an “or” to the placement options
• This simply allows more students into college-level courses, which may be many people’s goal because they don’t believe remediation is effective
• NC results: Not working for those below 3.0
Developmental Education is Most Effective

Core Principles 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. Be wary of new reforms claiming quick results

• If small reforms are helping a little, and perhaps harming, what actually works best, 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 remediation?

• 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).
Developmental Education is Most Effective

- Boylan & Bonham (2014):

  “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)\textsuperscript{32, 33, 34, 35}

• 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 $4,000 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%

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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! Anyone here involved?
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 measurable effect on well-being of students, colleges, communities, and nation

• Speak in terms of investment when talking to decision-makers: $5,000 more per student per year with a well-organized system will double graduation rates! ($12K avg. public school students)\textsuperscript{36}

• Thoughtful, comprehensive changes and funding add up to large effects
CORE PRINCIPLES 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 some recent reforms may be harmful (Think: always faster, cheaper, and easier!)
5. Actual Developmental Education is most effective
6. We should act to support thoughtful investments and redesign in Developmental Education

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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!
References


44. “Corequisite remediation: Spanning the completion divide.” (Not dated.) Complete College America.