How False Narratives, Not Data, Are Driving Reforms

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Welcome to NOSS!

- Welcome and thank you for coming!
- communitycollegedata.com and @ccollegedata (see the Resources page for PDF of this PPT)
- You are very important people; you have an exponential effect on the lives of thousands of students, the economy, the country, and the world
- Keep up the good work even if it seems too difficult sometimes; this presentation may help you in this

False Narratives Drive Reforms

- An anecdote is powerful
- Data quote: "The plural of anecdote is not data" (apparently a misquote of R. Wolfinger, but it is still true)
- Once narratives are repeated, it is difficult to counteract them; they sound true due to *repetition bias*
- Political examples abound
- Regardless of the discipline, anecdotes cause people to act in ways that may not actually be helpful

"What People Say About the Economy Can Set Off a Recession" (Shiller, 2019)

"New crises that shake up the economy often surprise economists because no exogenous cause appears to be a sufficient explanation for a downturn. People begin to suddenly frame current events in the context of stories they had heard many times before. This may seem puzzling until we realize that an old narrative has renewed itself in an epidemic, and people have begun to respond reflexively in their day-to-day decisions. If enough people begin to act fearfully, their anxiety can become self-fulfilling, and a recession, sometimes a big one, may follow" (para. 22–23).

False Narratives Drive Reforms

- Even something as critical and as large as the economy (stock markets, etc.) can be affected by a narrative, true or false
- Today we will discuss several false narratives that are driving postsecondary reforms that can be harmful
- Then we will discuss the data associated with those narratives
- Finally, we will talk about what the narrative could be

False Narrative: "Students get bored or frustrated in developmental education and drop out"

- A common narrative in developmental education or remediation is that students get bored and drop out
- This narrative has been repeated so many times that many people believe it automatically and intuitively
- Here are some quotes that demonstrate this over time
- There are far more quotes in other articles online; this is just a sample:

• Hechinger Report article (Marcus, 2012)₂:

"The studies, both by the Community College Research Center [CCRC] at Teachers College, Columbia University, found that as many as a third of students sidetracked into remedial classes because of their scores on standardized tests would have earned a B or better if they had simply proceeded directly to college-level courses....*More than 75 percent never graduate—in many cases, the researchers say, because they drop out from boredom and frustration* [emphasis added]" (para. 2–4).

• Hechinger Report article (Field, 2019)₃:

"Nearly a quarter of Minnesota's public high school grads, nearly all of them at Minnesota State colleges, enroll in one or more developmental courses within two years of graduating. The rates are even higher for students of color: Nearly half of black and 40 percent of Latino students take a remedial class. Developmental courses include remedial instruction and courses designed to help students with college-level work...Many students who start in developmental classes never make it to credit-bearing courses, much less to graduation. Bored or frustrated, they drop out after a couple of semesters [emphasis added]" (para. 35-36).

• New York Times article (Hanford, 2017)₄:

"Moderately or strongly prepared students were more likely to get a bachelor's degree if they skipped remediation altogether and went straight to college-level classes. Why? Researchers aren't sure, but *they suspect that many students assigned to remedial education, which costs money but doesn't count for credit, get frustrated and give up on college* [emphasis added]" (para. 5–6).

 Dr. Peter Adams, on remedial students (as cited in Hanford, 2016)₅:

"Or they were quitting, he realized, because they got discouraged [emphasis added]. 'A lot of students would say to us, "You know, I'm not even sure that I am college material,"' said Adams....Adams thought what students needed was a faster way of getting through their developmental classes....And they needed to feel like they were in college, not in some purgatory waiting to be admitted" (para. 107–109).

• Bailey et al. (2009) (working paper)

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

• Bailey et al. (2010) (published paper cited by 1300+)7:

"The developmental education process is confusing enough simply to describe, yet from the point of view of the student, especially the student with particularly weak academic skills who has not had much previous success in school, it must appear as a bewildering set of unanticipated obstacles [emphasis added]" (pp. 255– 56).

• A book based on a survey of 169 remedial classes in California started this narrative (Grubb, 2013)₈:

"The point for the moment is that remedial pedagogy is insidious [emphasis added], affecting not only classroom instruction itself but also the textbooks, computer programs, and certain support services that shape and supplement the classroom" (p. 71).

• A book based on a survey of 169 remedial classes in California started this narrative (Grubb, 2013)₈:

"The fact that [conventional approaches] are both uninspiring and in violation of the precepts for highquality teaching [emphasis added] presented in chapter 1 highlights the need to search for alternatives" (p. 75).

- A book based on a survey of 169 remedial classes in California started this narrative (Grubb, 2013)³:
 - "Sometimes instructors circulate to provide individualized attention, but without giving other students anything to do; in these cases *students quickly get bored and restless* [emphasis added]. So basic instructional techniques are often weak, as one might expect of instructors who have no preparation in teaching methods. One problem with remedial pedagogy is that it violates almost all of the precepts for good teaching presented in the supportive arithmetic class in the previous section" (p. 55).

What Do the Data Say? "Students get bored/frustrated and drop out"

- As many of you have experienced, some students do indeed get bored or frustrated
- A few may even drop out of college because of this
- However, first, it is not just a problem in developmental education courses; it is a problem for *all* college students (Grubb's study never observed college-level courses)
- Most importantly, boredom or frustration with classes is one of the least common reasons why students drop out

"With Their Whole Lives Ahead of Them" (2011),



With Their Whole Lives Ahead of Them



Myths and Realities About Why So Many Students Fail to Finish College

"With Their Whole Lives Ahead of Them" (2011),

MYTH AND REALITY NO. 1



MYTH NO. 1: Most students go to college full-time. If they leave without a degree, it's because they're bored with their classes and don't want to work hard.

REALITY NO. 1: Most students leave college because they are working to support themselves and going to school at the same time. At some point, the stress of work and study just becomes too difficult.

The number one reason students give for leaving school is the fact that they had to work and go to school at the same time and, despite their best efforts, the stress of trying to do both eventually took its toll. More than half of those who left higher ed before completing a degree or a certificate say that the "need to work and make money" while attending classes is the major reason they left. Balancing work and school was an even bigger barrier than finding money for tuition. Those who dropped out are almost twice as likely to cite problems juggling work and school as their main problem as they are to blame tuition bills (54 percent to 31 percent). In contrast, nearly half of those who graduated (48 percent) say this statement doesn't describe their first year in school at all.¹⁰

Few former students say they left college because they were bored or found that college "just isn't for them." Only about 1 in 10 students who have left college say a major reason they quit was that they didn't like sitting in class or thought the classes were too difficult.

WORK IS THE TOP REASON YOUNG ADULTS GIVE FOR NOT RETURNING

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CA Community College Study (Zhai & Monzon, 2001)₁₀

Table 8. Withdrawal Reasons by Type of Withdrawals

	Applied not enrolled*	Withdrew*	Not persistent*
	-Financial difficulties	-Conflict with work	-Transferred to another
	(22.8%).	schedule (31.0%).	school (28.5%).
			-Conflict with work
	-Conflict with work	-Personal reasons	schedule (19.2%).
	schedule (22.3%).	(21.1%).	
			-Course scheduling
Reasons for leaving	-Enrolled at another	-Parking issues (16.5%).	issues (10.7%).
(survey results)	school (21.8%).		
		-Family obligations	-Personal reasons
	-Courses were not	(16.0%).	(10.7%).
	available (14.5%).		
		-Financial difficulties	-Completed educational
	-Family obligations	(14.5%).	goal (10.7%).
	(11.4%).		
	(,	-Dissatisfaction with	
		instruction (14.3%).	

*General population - total student population.

Applied not enrolled - students who filed an application but did not enroll in any classes.

Withdrew - students who withdrew from all classes during a semester.

Not persistent - students who did not return in the following semester.

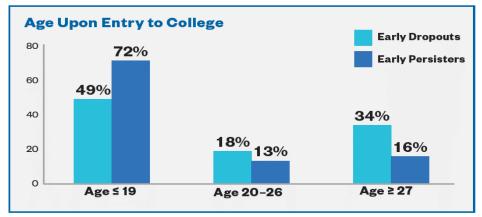
CCRC Study on Early Dropouts (Crosta, 2013)11

Findings

Age

Perhaps the most notable demographic difference between early dropouts and early persisters is that early dropouts were older. Early dropouts in our sample were about twice as likely to have started college at or after age 27. The average starting age for early dropouts was 27; for early persisters, it was 22.

Older students face substantial challenges. Compared with younger students, they are more likely to be married, working, have children. Older students thus have tighter time and financial constraints.

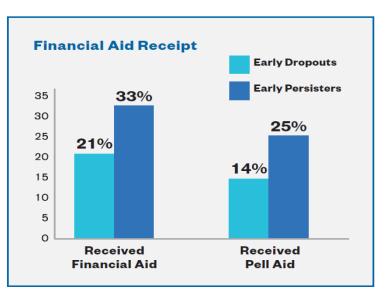


Older students have time and financial constraints

Financial Aid and Socioeconomic Status

Early dropouts in our sample were about 40 percent less likely than early persisters to receive financial aid or a Pell award in their first term of study. This finding also reflects age differences, as older students were less likely to receive federal financial support than traditional-age students.

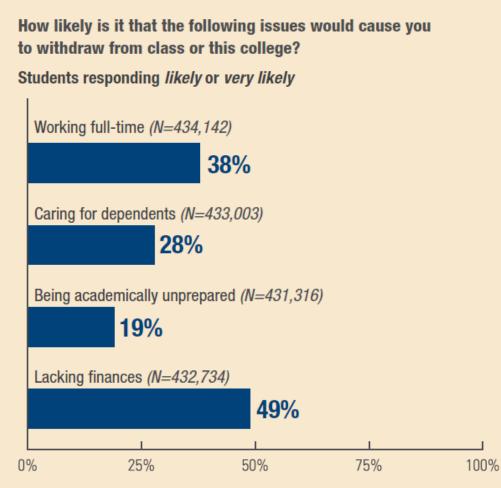
Early dropouts and early persisters did not differ on a socioeconomic status index generated from the characteristics of their census block groups. Yet the early dropouts' lower likelihood of receiving financial aid may suggest that they were of higher socioeconomic status. It is also possible that early dropouts were less likely to fill out the paperwork required to receive aid, possibly because they enrolled in fewer courses. On average, while early persisters took 10 credits in the first term, early dropouts took 7.3 credits.



Why Students Drop Out ("A Matter of Degrees," 2012)12

Student and Faculty Views: What Stands between Students and Their Aspirations

CCSSE and *CCFSSE* data indicate that many faculty are more likely than students to believe that various circumstances, including working full-time, caring for dependents, or being academically underprepared, would be likely causes for students to withdraw from classes or college.



How likely is it that the following issues would cause students to withdraw from class or this college? Faculty responding *likely* or *very likely* Working full-time (N=35,245) 81% Caring for dependents (N=35, 163) 73% Being academically unprepared (N=35,217) 78% Lacking finances (N=35,145) 73%

50%

75%

Source: 2011 CCFSSE Cohort data.

25%

0%

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100%

Source: 2011 CCSSE Cohort data.

What Do the Data Say? "Students get bored/frustrated and drop out"

- Financial stress is the most common cause for students not enrolling, withdrawing, stopping out, and not returning to college
- This is especially true if the categories of "lacking finances" and "working full time" are combined; both are a result of problems with money
- An obsessive focus in narratives on student boredom and frustration in class distracts practitioners from this primary cause

- Before almost all recent reforms had been implemented, CCRC's Bailey et al. (2009)⁶ had come to the conclusion that remediation was ineffective
- CCRC (Bailey et al., 2010), proposed a solution:
 - "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).

- The CCRC sought out examples of successful acceleration and then studied and highlighted those examples in their research and presentations
- One of the CCRC's chosen examples was the Accelerated Learning Program (ALP) of the Community College of Baltimore County (pioneered by Dr. Peter Adams)

- CCRC studied ALP and concluded it was an effective model to promote (Cho et al., 2012)¹³
- Then interest groups heavily promoted the corequisite model ("Remediation: Higher Education's Bridge to Nowhere," 2012)14
- Here is a sample of the research and news articles that have repeated the terms barrier or ineffective when referring to remediation and developmental education:

• Jenkins et al. (2010)₁₅:

"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).

• Edgecombe (2011)₁₆:

"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).

• Hughes & Scott-Clayton (2011)₁₇:

"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).

• Scott-Clayton et al. (2014)₁₈:

"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. 372).

• Scott-Clayton & Rodriguez (2012)₁₉; article is 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).

• Scott-Clayton & Rodriguez (2012)19:

"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).

• Edgecombe et al. (2013)₂₀:

"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).

- CCRC Research Overview on Dev Ed (Jaggars & Stacey, 2014)²¹ (a 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).

• A book based on a survey of 169 remedial classes in California helped start this narrative (Grubb, 2013)₈:

"We have sought out innovations that are departures from the remedial pedagogy described in chapter 3, an instructional approach that violates so many of the precepts for effective instruction that *we assume it to be relatively ineffective* [emphasis added]" (p. 75).

False Narrative: "Remediation is a barrier or ineffective"

Redesigning America's Community Colleges (Bailey et al., 2015)22:

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

False Narrative: "Remediation is a barrier or ineffective"

- American Public Media (Hanford, 2016)₅:
 - "...the nation's increasingly cumbersome problem with developmental education, a system that is intended to give students a better shot at succeeding in college but which, according to mounting evidence, is costing students time and money and actually preventing some of them from getting degrees [emphasis added]" (para. 9).

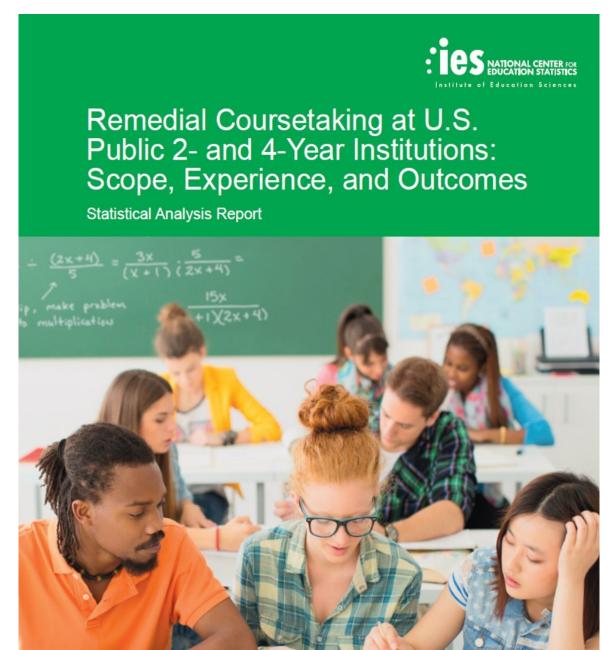
- Chen (2016)₂₃ used a sample size of about 9000 students, half of which were remedial students (tracked from 2003–2009, same starting year as Bailey et al., 2010)₇
- Chen divided remedial students into three groups: completers, partial completers, and noncompleters
- Chen has been the only researcher to view remedial students in this way; this is a type of bias in research:

If you ask a different question,

you get a different answer from the data

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"Remedial Coursetaking" (Chen, 2016)23



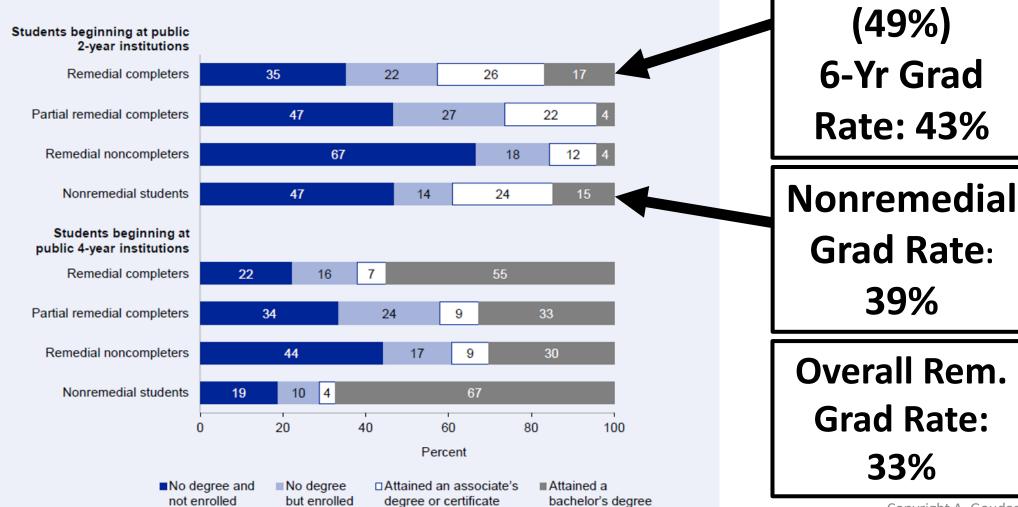
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- Forty-nine percent (49%) of all remedial students in Chen's sample completed all their remedial courses
- These students went on to graduate at a higher rate than nonremedial students after six years:
 - Nonremedial student graduation rate: **39%**
 - Remedial *completer* graduation rate: **43%**
 - Overall remedial graduation rate: 33%

"Remedial Coursetaking" (Chen, 2016)23

Figure 7.

SIX-YEAR PERSISTENCE AND ATTAINMENT: Among 2003–04 beginning postsecondary students who first enrolled in public 2- or 4-year institutions, percentage distribution of students according to their postsecondary persistence and highest degree attainment as of 2009, by remedial course enrollment and completion status: 2003–09



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Remedial

Completers

- These students participated in traditional remediation
- These students were sampled before any of the latest reforms changed the landscape
- The sample came from the same time as the Bailey et al. (2010), ATD study (analytic sample cohort started 2003)
- Chen (2016)₂₃ results directly contradict CCRC's claims
- Bailey et al. (2010), only tracked ATD students for three years and included non-enrollees

- Therefore, traditional remediation has been working for a large proportion (half) of students
- This means it cannot be automatically considered a barrier
- It also means it would be unwise to eliminate it entirely
- Research in holistic reform (ASAP)_{27,28} has demonstrated that prerequisite remediation can be included, and the reform can still double graduation rates

• Harvard research into TN coreqs (Kane et al., 2020) 31:

"Our findings also suggest that the role of remedial course requirements as a cause of low completion rates has been overstated. Prerequisite remediation is neither the major cause of low completion (as many of its critics have argued) nor a major solution for students with weak math skills" (para. 9).

False Narrative: "Corequisites are the answer to remediation"

False Narrative:

"Corequisites are the answer to remediation"

- Due to well-funded interest groups, many state systems have mandated most or all remedial courses be transformed into corequisites (Goudas, 2019)₂₄
- Proponents of remedial reform believe that this model will accelerate students without harm and increase graduation rates
- Recent research by CCRC demonstrates there has been little or no long-term positive impact on the one metric corequisites were designed to improve: completion

• CCRC's most recent study on corequisites from all 13 two-year colleges in Tennessee (Ran & Lin, 2019)₂₅:

"For students on the margin of the college readiness threshold, those placed into corequisite remediation were 15 percentage points more likely to pass gateway math and 13 percentage points more likely to pass gateway English within one year of enrollment than similar students placed into prerequisite remediation" (abstract).

• CCRC's most recent study on corequisites from all 13 two-year colleges in Tennessee (Ran & Lin, 2019)₂₅:

"The positive effects of corequisite remediation compared with prerequisite remediation in math were largely driven by efforts to guide students to take math courses aligned with the requirements for their program rather than placing most students into the algebra-calculus track by default, as has been the standard practice" (abstract).

• CCRC's most recent study on corequisites from all 13 two-year colleges in Tennessee (Ran & Lin, 2019)₂₅:

"We found no significant impacts of placement into corequisite remediation on enrollment persistence, transfer to a four-year college, or degree completion. This suggests that corequisite reforms, though effective in helping students pass college-level math and English, are not sufficient to improve college completion rates overall" (abstract).

- Initial research into corequisites is flawed due to selection bias, low numbers, and other methodological problems (Cho et al., 2012₁₃; Goudas, 2019₂₄)
- Once it is scaled up, the most recent and best evidence suggests a small improvement in gateway course pass rates; for math, almost all the gains came from the switch to statistics and not the corequisite model (Ran & Lin, 2019, p. 27)²⁵
- CCRC researchers have acknowledged this limitation

• CCRC's conclusions on recent popular reforms, including corequisites (Jaggars & Bickerstaff, 2018)₂₆:

"Research suggests that the most popular reform models (including multiple measures assessment and placement, math pathways, and the co-requisite approach) will indeed improve students' rate of success in college-level math and English, but they are unlikely to substantially improve graduation rates" (p. 496).

So what should the narrative be?

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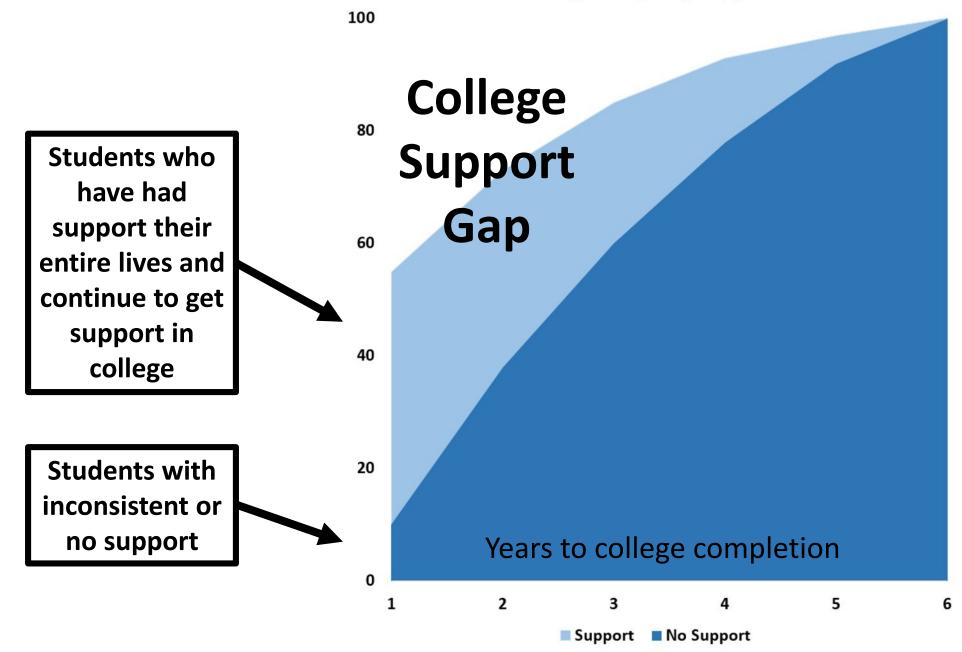
New Narrative: "Holistic problems require holistic solutions"

Holistic Problems Require Holistic Solutions

- We now know that support for at-risk students needs to be well-funded and sustained for almost their entire time at college
- At-risk students in college face what I call a long-term

Support Gap

Model of the Probability of Graduating College by Support Level



Holistic Problems Require Holistic Solutions

• Harvard researchers' conclusions after assessing all interventions in Tennessee (Kane et al., 2020)³¹:

"Many students are emerging from high school without the skills traditionally expected for college-level course work. In order to reach ambitious goals for increasing degree completion among their residents, many states are rethinking their remediation requirements. Our analysis shows that boosting degree completion will require a more effective model of math remediation—either in high school or college—or the elimination of other barriers to completion, such as inadequate advising or the level of math required in gateway college courses" (para. 34).

- CUNY ASAP comprehensiveness (Scrivener, 2015)₂₇
 - 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

- CUNY ASAP comprehensiveness (Scrivener, 2015)₂₇
 - Tuition waiver
 - Free MetroCards
 - Free books
 - Free social events
 - Consistent and repeated messages
 - Original out of pocket costs for institution are about \$5K-\$7K more per student per year
 - Good model for "free community college" discussion

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

- Dev Ed ASAP graduation rates after 3 years (newer results):
 - Control Group (no ASAP):
 - ASAP Intervention Group:

21% 48%

- Non Dev Ed ASAP graduation rates after 3 years (newer results):
 - Control Group (no ASAP): **29%**
 - ASAP Intervention Group: **60%**
- Three community colleges in Ohio are starting this program; others looking into it; in fact, some replication results are in:

Holistic Problems Require Holistic Solutions: Replication of ASAP in Ohio (Miller et al., 2020)₂₈

- Very recent research shows 74% of both intervention and control groups in ASAP study were students who required remedial coursework
- The graduation rates after 3 years:
 - Control Group (no ASAP): **19%**
 - ASAP Intervention Group: **35%**
- Cost per student per year is \$2,000 to \$2,700 per student per year, depending on how it is calculated

Holistic Problems Require Holistic Solutions

- The intractable problems students and institutions face cannot be reduced to a simple narrative of boredom and frustration, a magic pill, or a barrier
- The education pipeline is extremely complicated
- I recommend applying the Anna Karenina Principle: *All happy families are alike; each unhappy family is unhappy in its own way* (Tolstoy, 1878)₂₉

The Anna Karenina Principle in Higher Education: Holistic Problems Require Holistic Solutions

- Students who graduate tend to have similar characteristics: resources, life-long support, and some innate or learned helpful *personal qualities* (Duckworth, 2015)₃₀
- Students who stop out do so for vastly different reasons, and each situation is somewhat unique to the individual
- Therefore, any reform designed to help these students must necessarily be holistic, thoughtful, sustained, and well-supported

Thank you!

Keep up the good work!

References below and more reading available: communitycollegedata.com alexmgoudas@gmail.com

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(Sources and links on subsequent pages)

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