The Impact of Remedial Coursework on Student Persistence and Completion

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$1.3 billion

[estimated cost of remedial coursework for students and parents annually in 2015]

Source: Generation Progress and the Center for American Progress
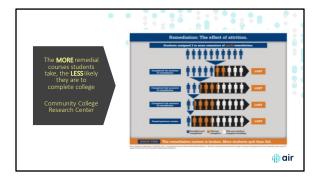
Remedial & developmental coursework: gateway or gatekeeper

Generation Progress and the Center for American Progress estimate that remedial courses cost students and their families approximately $1.3 billion annually.
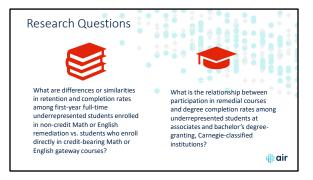Source: https://www.americanprogress.org/issues/education-k-12/reports/2016/09/28/144000/remedial-education/

According to research from the Community College Research Center, the more remedial courses students are required to take, the less likely they are to complete college.

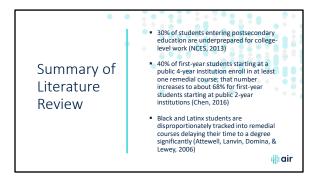Headlines from popular news journal:

Board of Regents votes to axe remedial classes, replace with corequisite system by 2021
Bill aims to cut need for college remedial courses
Diploma in hand, they are shocked to learn they still need remediation

Research Questions

What are differences or similarities in retention and completion rates among first-year full-time underrepresented students enrolled in non-credit Math or English remediation vs. students who enroll directly in credit-bearing Math or English gateway courses?
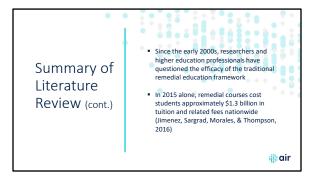
What is the relationship between participation in remedial courses and degree completion rates among underrepresented students at associates and bachelor's degree-granting, Carnegie-classified institutions?
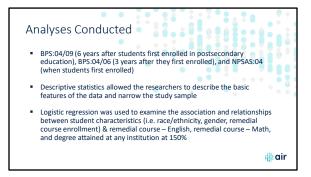
Summary of Literature Review

30% of students entering postsecondary education are underprepared for college-level work (NCES, 2013)

40% of first-year students starting at a public 4-year institution enroll in at least one remedial course; that number increases to about 68% for first-year students starting at public 2-year institutions (Chen, 2016)

Black and Latinx students are disproportionately tracked into remedial courses delaying their time to a degree significantly (Attewell, Lanvin, Domina, & Lewey, 2006)

Summary of Literature Review (cont.)

- Since the early 2000s, researchers and higher education professionals have questioned the efficacy of the traditional remedial education framework
- In 2015 alone, remedial courses cost students approximately $1.3 billion in tuition and related fees nationwide (Jimenez, Sargrad, Morales, & Thompson, 2016)
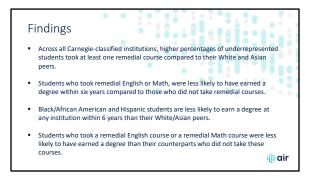
Summary of Literature Review - continued

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- In 2015 alone, remedial courses cost students approximately $1.3 billion in tuition and related fees nationwide (Jimenez, Sargrad, Morales, & Thompson, 2016)

Analyses Conducted

- BPS:04/09 (6 years after students first enrolled in postsecondary education), BPS:04/06 (3 years after they first enrolled), and NPSAS:04 (when students first enrolled)

- Descriptive statistics allowed the researchers to describe the basic features of the data and narrow the study sample

- Logistic regression was used to examine the association and relationships between student characteristics (i.e. race/ethnicity, gender, remedial course enrollment) & remedial course – English, remedial course – Math, and degree attained at any institution at 150%

air

Analyses performed included descriptive statistics, correlations, and logistic regression. Descriptive statistics allowed the researchers to describe the basic features of the data in a study and narrow the study sample. Correlations were used to examine and quantify relationship between the selected variables. Finally, logistic regression was used to examine the association and relationships between student characteristics (i.e. race/ethnicity, gender, remedial course enrollment) and degree attainment.

For the purposes of the regression analyses, underrepresented refers to one group that was collapsed for comparison to their White and Asian counterparts: Group 1: American Indian, Alaska Native, Native Hawaiian, and Pacific Islander, Black/African American and Hispanic. Underrepresented was intentionally collapsed based on previous findings in the literature that identified those groups as most likely to be placed into remedial coursework and confirmed by our descriptive statistics.
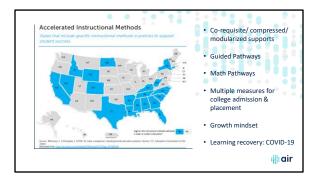
Findings

- Across all Carnegie-classified institutions, higher percentages of underrepresented students took at least one remedial course compared to their White and Asian peers.
- Students who took remedial English or Math, were less likely to have earned a degree within six years compared to those who did not take remedial courses.
- Black/African American and Hispanic students are less likely to earn a degree at any institution within 6 years than their White/Asian peers.
- Students who took a remedial English course or a remedial Math course were less likely to have earned a degree than their counterparts who did not take these courses.

As summarized in Appendix A descriptive statistics from this study support previous research (Attewell et al., 2006; Chen, 2016; Crisp and Delgado, 2014; Radford and Horn, 2012; Snyder and Dillon, 2012; Bahr, 2010; Deli-Amen, 2011); across all basic Carnegie-classified institutions, higher percentages of underrepresented students took at least one remedial course compared to their White and Asian peers. Logisitic regression models indicate that students from underrepresented populations are more likely to enroll in remedial coursework than their white and Asian counterparts (Appendices B & C).
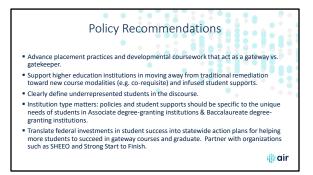
The logistic regression model in Appendix D helps narrow the potential impact of selected variables on degree attainment. The model did not include non-degree and special focus and basic classification. Specifically, Black/African American and Hispanic students are less likely to earn a degree at any institution within 6 years than their White peers. Students who took a remedial English course or a remedial Math course were less likely to have earned a degree than their counterparts who did not take these courses.

Slide includes a map of states in the United States that include specific instructional methods in policies to support student success (Source: Education Commission of the States0
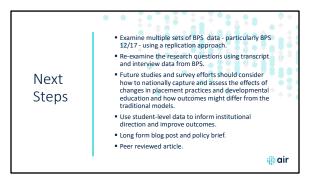
Accelerated methods include:
- Co-requisite/ compressed/ modularized supports

- Guided Pathways

- Math Pathways

- Multiple measures for college admission & placement

- Growth mindset

- Learning recovery: COVID-19

Policy Recommendations

- Advance placement practices and developmental coursework that act as a gateway vs. gatekeeper.
- Support higher education institutions in moving away from traditional remediation toward new course modalities (e.g. co-requisite) and infused student supports.
- Clearly define underrepresented students in the discourse.
- Institution type matters: policies and student supports should be specific to the unique needs of students in Associate degree-granting institutions & Baccalaureate degree-granting institutions.
- Translate federal investments in student success into statewide action plans for helping more students to succeed in gateway courses and graduate. Partner with organizations such as SHEEO and Strong Start to Finish.

Next Steps

- Examine multiple sets of BPS data - particularly BPS 12/17 - using a replication approach.
- Re-examine the research questions using transcript and interview data from BPS.
- Future studies and survey efforts should consider how to nationally capture and assess the effects of changes in placement practices and developmental education and how outcomes might differ from the traditional models.
- Use student-level data to inform institutional direction and improve outcomes.
- Long form blog post and policy brief.
- Peer reviewed article.

Thank you!

Questions & Discussion

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