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RESEARCH IN FOCUS:

Remediation

INTRODUCTION

The National Center for Education Statistics estimates that approximately 1 in 5 college freshmen at four-year institutions required remedial coursework for the 2007-08 academic year (Sparks & Malkus, 2013). Though students' reasons for enrolling in remedial courses vary, the predominant reason is that they entered college unprepared for higher-level coursework. Remedial classes are a student's only recourse should they find themselves in this position. However, with little evidence to support its function as a retention and graduation aid, researchers and educators continue the search for better alternatives.



Roughly **1 in 3** incoming students at community colleges require remediation.

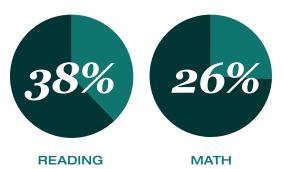
1 in 5 college freshman at 4-year universities require remediation.

(Bahr, 2010)

UNDERSTANDING REMEDIATION

Researchers Venezia and Jaeger stated in a 2013 article, "Transitions from High School to College," that "College readiness is commonly understood as the level of preparation a student needs to enroll and succeed in a college program (certificate, associate's degree, or baccalaureate) without requiring remediation" (p. 118). They cite the National Assessment of Educational Progress as the best (though somewhat imprecise) indicator of U.S. high school students' readiness.





NAEP scores in 2013 found that only 38 percent of 12th grade students performed at or above minimum level requirements for reading, and a mere 26 percent scored at or above proficient in mathematics; remaining unchanged since 2009. Students who test below or barely above college readiness benchmarks are typically steered toward remedial college courses in an attempt to help them catch up with their peers. Remedial course enrollment is particularly prevalent in community colleges; roughly one in three incoming students at two-year institutions requires remediation, as opposed to one in five at four-year institutions (Bahr, 2010).

Ideally, remediation should help students overcome their academic shortfalls, enabling them to stay in higher education and obtain their degree. Unfortunately, studies are inconclusive; some indicate the opposite is true, while others suggest success depends on earlier education and is not affected by remediation itself. Testing both academic and eventual financial trends, researchers Martorell and McFarlin (2011) reported, "Our results provide little indication that students benefit from remediation . . . the estimated effects of remediation are small in magnitude and statistically insignificant. If anything, we find some evidence that remediation might worsen the outcomes of some students" (p. 437). Within Martorell and McFarlin's sample of 255,878 students at two-year colleges, only 12% of students who remediated graduated within four years, and 23% graduated within six years. However, other researchers interpret remediation data differently. Davis and Palmer (2010) found identified several studies in which postsecondary remediation appeared to have little impact; however, the majority of the research seems to indicate that remedial programing increases both student persistence and successful course completion.

POTENTIAL INTERVENTIONS & CASE STUDIES

The following interventions have been put forth by policymakers and researchers as possible methods for preventing remediation while students are still in high school.

High School Curriculum & Early Assessment

Researchers agree that the most immediate and accessible high school intervention is early assessment. State-level programs that use tests like ACT, Plan, COMPASS, and ACCUPLACER, or even localized partnerships in which high schools use actual placement tests from local community colleges, are the most accurate gauge for student academic preparedness.

Case Studies

California's Early Assessment Program (EAP) is an oftcited example of a successful assessment program. High school juniors are given a test to gauge their readiness based on California State University campuses' requirement. Students with scores that indicate likely remediation are given interventions in 12th grade. The EAP also includes teacher professional development so high school faculty can be up-to-date on requirements and effective strategies. In Long's proposal, "Addressing the Academic Barriers to Higher Education," she praised the California EAP, writing,

An evaluation of the program found that participation in the EAP reduced a student's probability of needing remediation in college by 6.2 percentage points (Howell, Kurlaender, & Grodsky, 2010) . . . EAP increased students' academic preparation in high school but did not discourage poorly prepared students from applying to college. (2014, p. 74)

El Paso Community College, the University of Texas-El Paso and 12 local school districts collaborated to create a protocol for students to prepare for the ACCUPLACER college placement exam. Students were given an exam orientation in high school, and those whose scores indicated deficiencies visited counselors to discuss individual plans. After two years, students were placing in college-level courses at a higher rate, and those who did remediate placed in higher-level remedial courses in greater numbers (Radford, Pearson, Ho, Chambers, & Ferlazzo, 2012).

Students from high schools with a college-going culture are



more likely to enroll in a matched college

Dual Enrollment

Also known as concurrent enrollment, students engaged in dual enrollment take entrance-level college courses as seniors in high school. Radford and colleagues (2012) dismiss the common misconception that dual enrollment is only for high-achieving students, asserting that "such programs are increasingly seen as a way to increase college-readiness for a range of students" (p. 14).

Case Study

City University of New York (CUNY) has established a dual enrollment program called College Now. Intended for disadvantaged and underprepared students, through College Now, students are able take their college remedial courses before graduating, either on a CUNY campus or from a specially-trained high school teacher. Enrollment is determined based on placement test scores. A 2007 internal evaluation found that College Now students earned more credits in their first year of college (not including their dual enrollment hours) and were more likely to persist into their third year when compared to students who didn't participate (Radford et al., 2012.

College-Going Culture

Though much of the responsibility to help college-student hopefuls falls on a school counselor, research indicates that teachers, counselors, and administrators together can greatly affect high school students' prospects by establishing a college-going culture. Sampling a 2005 cohort of Chicago Public Schools students, Roderick, Coca, and Nagaoka (2011) attempted to quantify the effect of a college-going culture by measuring percentages of graduates who enrolled in four-year colleges, graduates who applied to three or more colleges, graduates who reported completing a FAFSA, and teacher assessment of their school's college-going culture. Teachers were asked about whether they expected most of their students to attend college, whether they helped students plan for college outside of class time, whether the curriculum was college-focused, and whether they felt it was a part of their job to prepare students for college.

Through the study, Roderick and colleagues found that strong, high numbers of FAFSA completion at high schools was particularly associated with good college choice and behavior in the student cohort (2011, pp. 201-203).

They ultimately determined that students attending a high school strong in their chosen indicators (see above), were between 12 to 17 percentage points more likely to enroll in a match or overmatch 4-year college than students of similar background/ qualification who attended a weak collegegoing culture school (2011).

REFERENCES

Bahr, P. R. (2010). Preparing the underprepared: An analysis of racial disparities in postsecondary mathematics remediation. The Journal of Higher Education, 81(2), 209-237.

Davis, R. J., & Palmer, R. T. (2010). The Role of postsecondary remediation for African American students: A review of research. The Journal of Negro Education, 503-520.

Long, B. T. (2014). Proposal 6: Addressing the Academic Barriers to Higher Education. In Kearney, M.S., and Harris, B. H. (Eds.), Policies to Address Poverty in America, 67.

Martorell, P., & McFarlin, I., Jr. (2011). Help or hindrance? The effects of college remediation on academic and labor market outcomes. The Review of Economics and Statistics, 93(2), 436-454.

National Center for Education Statistics. (2013). Nation's Report Card: Are the Nation's 12th-Graders Making Progress in Mathematics and Reading? (NCES 2014–087)Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://nces.ed.gov/nationsreportcard/subject/publications/main2013/ pdf/2014087.pdf

Radford, A. W., Pearson, J., Ho, P., Chambers, E., & Ferlazzo, D. (2012). Remedial Coursework in Postsecondary Education: The Students, Their Outcomes, and Strategies for Improvement. MPR Associates, Inc.

Roderick, M., Coca, V., & Nagaoka, J. (2011). Potholes on the road to college high school effects in shaping urban students' participation in college application, four-year college enrollment, and college match. Sociology of Education, 84(3), 178-211.

Sparks, D., & Malkus, N. (2013). First-Year Undergraduate Remedial Coursetaking: 1999-2000, 2003-04, 2007-08. Statistics in Brief (NCES 2013-013). Brief prepared for the National Postsecondary Education Cooperative, Washington, DC: U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences.

Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. The Future of Children, 23(1), 117-136.

The University of Oklahoma

The K20 Center for Educational and Community Renewal 3100 Monitor Avenue, Suite 200 Norman, Oklahoma 73072-7808

(405)325-1267 | k20center@ou.edu