POLICY REPORT

Issues in Remedial Education at the Postsecondary Level

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"In short, those halcyon days when all students who enrolled in college were adequately prepared, all courses offered at higher education institutions were 'college level,' and students smoothly made the transition from high school and college simply never existed. And they do not exist now" (Merisotis & Phipps, 2000, p. 69).

INTRODUCTION

As the current economic crisis deepens, remedial education will once again become a significant issue in postsecondary education. Increasingly, individuals are turning to colleges and universities for help in getting or keeping jobs. Today's students not only transition into college from high school but experienced workers are returning to school due to job loss or a need to upgrade their credentials (Parry & Fischer, 2009). A significant number of these individuals are underprepared to do college-level work (Greene & Forster, 2003) and must complete remedial education courses (Jenkins & Boswell, 2002) .

Critics of remedial education often express concern for both the costs of remediation as well as the efficacy of the process (Attewell, Lavin, Domina, & Levey, 2006; Lavin, 2000). There is some evidence that students who are enrolled in remedial courses have more negative outcomes than those not enrolled in these courses (Bettinger & Long, 2004). Placement in math remediation seems to be related to students dropping out or transferring to lower level colleges or to those that are less selective. Remediation also appears to exert a negative effect on completing a degree within four years (Bettinger & Long, 2004).

On the other hand, supporters of remedial education see it as a crucial component in expanding educational opportunity for underprepared students (Bahr, 2007; Shaw, 1997), many of whom are non-white and/or low-income students (Jenkins & Boswell, 2002). Remedial education also benefits students who may be strong in certain subject areas, but lack proficiency in critical areas such as math or English. In addition, non-traditional students who are returning to school after long absences benefit from remedial courses (Attewell et al., 2006). Proponents of remedial education note that successful completion of these courses may result in educational outcomes that are comparable to students not requiring remediation (Bahr, 2008).

The connection between educational attainment and economic prosperity as well as the demographic changes facing the United States compel institutions of higher education to implement innovative ways to educate increasing numbers of underprepared, largely low-income and minority students. In that much of the controversy surrounding remedial education deals with issues that are significantly larger than simply offering classes to compensate for shortcomings in academic skills, remedial education and what it represents has profound implications for access to educational opportunity for rising numbers of American students (Attewell et al., 2006; Shaw, 1997).

THE SCOPE OF REMEDIAL COURSE TAKING

Twenty-one states stipulate that students not meeting minimal requirements take remedial coursework (Jenkins & Boswell, 2002). Estimates of the number of students enrolling in remedial education vary according to the population measured; from 23% of all students (Shaw, 1997) and 30% of entering students (Breneman & Haarlow, 1998) to 40% of traditional undergraduates (Attewell et al., 2006). While many adult/non-traditional students are enrolled in remedial classes, traditional students, those age 21 or younger make up approximately 80% of remedial class enrollment (Breneman & Haarlow, 1998; Merisotis & Phipps, 2000) and thus are those most affected by policies regulating this activity.

In a U.S. Department of Education study of remedial course taking in 2000, 28% of entering freshmen were enrolled in remedial classes. A majority of these students were enrolled in math classes (22%), followed by writing (14%) and reading (11%). Forty-two percent of freshmen from public two-year institutions were enrolled in at least one of these courses with a majority (35%) enrolled in math classes. Twenty percent of freshmen from public four-year schools enrolled in remedial courses with most, again, in math classes (16%). In private, four-year institutions, only 12% of entering freshmen enrolled in a remedial courses with little variation across types of courses taken (Wirt et al., 2004).

Of those students beginning their postsecondary studies in 2003-2004, nearly 21% took a remedial course in their first year. The majority of these students were concentrated in public institutions with two-year institutions having a significantly greater rate of remedial coursework (29%) than public four-year institutions (19%). Minority students were somewhat more likely to be enrolled in remedial classes as were students with low scores on admissions tests. Remediation did not vary greatly by income (Berkner & Choy, 2008).

Attewell et al. (2006) point out that the commonly held belief that only low-income students with poor academic skills take remedial courses is not reflected in the data. Many academically underprepared students eschew remedial coursework while significant numbers of their better prepared peers take these classes. Also contradicting stereotypes, a substantial number of students taking remedial classes are from suburban and rural schools with many coming from affluent homes. Although remediation appears to be fairly extensive among students, it does not appear to be a pervasive part of their class work. Most students took only one or two remedial courses, and most of these were completed successfully, often in their freshman year (Attewell et al., 2006).

Is Remedial Education Effective?

Due to a dearth of available data as well as a variety of methodological issues, little concrete information is known about the overall effectiveness of remedial education (Levin & Calcagno, 2008). Existing studies offer mixed results (Bailey, 2009) and additional research is needed to more fully understand the effects of remedial programs in light of their diverse applications (Long, 2005).

Mixed results notwithstanding, available research suggests that students in remedial courses have better educational outcomes than students with similar backgrounds and academic preparation that were not required to take remedial class work. Overall, remedial math and English courses decrease the probability of dropping out of school and increase the probability of completing a degree while remedial work in English seems to lower the probability of transferring to a less selective or lower level institution (Bettinger & Long, 2005).

At community colleges, math remediation was found to be extremely effective for those who successfully complete the coursework. For these students, long-term academic attainment is comparable to that of students not needing remediation. Some students, however, do not remediate successfully and these outcomes are less favorable (Bahr, 2008). Attwell et al. (2006) found that most of the difference in graduation rates between community college students taking remedial classes and those not taking remedial classes reflect skill deficits from high school and not the remedial courses they took. These authors found that, for students at two-year institutions, taking remedial classes was not associated with a higher likelihood of academic failure, even in those students taking three or more of these classes.

At four-year colleges and universities, students who have successfully completed remedial courses take longer to complete their degrees and are somewhat more likely to transfer to lower-level colleges but they are less likely to drop out of college altogether (Bettinger & Long, 2004). Students who successfully completed remedial courses at two-year colleges had better outcomes than did similar students not taking remediation. However, this same study found no evidence that taking and passing remedial courses at four-year institutions yielded similar positive effects (Attewell et al., 2006).

Policy Issues

One aspect of the debate on remedial education centers on the tensions between access to educational opportunity for underprepared students and higher education's on-going quest for more stringent standards, especially in four-year institutions (Shaw, 1997). In this country, only 32% of public school students graduate from high school prepared to matriculate at a four-year college or university. For African American, Hispanic, and Native American students, those percentages are substantially lower (See Table 1). In some states, as few as

12% of students graduate with college-ready transcripts (Greene & Forster, 2003). Once enrolled in college, considerable numbers of students then find themselves limited by their lack of sufficient reading, writing, or math skills. Without these skills or the courses necessary to obtain them, degree attainment is often difficult if not impossible.

Table 1
High School Graduation and College Readiness Rates by Race / Ethnicity (2001)

	Graduate from High School	College Ready
All	70%	32%
African American	51%	20%
Hispanic	52%	16%
Native American	54%	14%
White	72%	37%
Asian	79%	38%

Note. Data from Greene, J.P & Forster, G. (2003) *Public High School Graduation and College Readiness Rates in the United States.* New York: Manhattan Institute for Policy Research.

Costs are a crucial issue in this debate and one on which critics of remedial education tend to focus. Students invest time and tuition in classes that, while essential for progressing toward a degree, seldom provide academic credit. Extra classes extend the amount of time needed to graduate as well as the total cost of education (Jenkins & Boswell, 2002). Remedial classes are also seen as imparting a certain stigma to those enrolled (Boylan & Bonham, cited in Kozeracki, 2002) which may discourage students from taking these classes and contribute to poor outcomes.

While precise estimates of the financial costs for remedial education are hard to pin down, estimates range between $1 and $2 billion per year, or about 1% - 2% of higher education expenditures (Breneman & Haarlow, 1998; Merisotis & Phipps, 2000). Institutions must also factor in other, less tangible costs associated with remedial students such as lower GPAs, lower test scores, and the effects of these measures on a school's reputation for "excellence" (Merisotis & Phipps, 2000). In addition, some authors have associated remediation with lowering academic standards and diminishing the value of a college degree (Bahr, 2008).

IMPLICATIONS

Without the option for remediation, underprepared students entering or re-entering college are less likely to persist and to graduate (Bettinger & Long, 2005). Low educational attainment helps to perpetuate a cycle of low achievement, low wages, and poor life outcomes. Considering the number of students who are graduating from high school unprepared to do college level work, policies governing remedial education stand to have significant impact on educational opportunity for substantial numbers of individuals as well as on the overall future of the workforce.

According to the Bureau of Labor Statistics, of the 30 fastest growing occupations, 22 require some sort of postsecondary education and one half require a bachelor's degree or above (US Department of Labor, 2007). States, especially those with significant minority and low-income populations, face increasing shortages of highly educated workers with the resulting economic and social impacts. Effective remedial education will be necessary to help alleviate these shortages until more students graduate from high school prepared for college-level work.

While critics decry the added expense of paying for classes both at the high school level and again at the postsecondary level (Lavin, 2000), proponents contend that the financial costs for remediation form a very small portion of the higher education budget thus making it a relatively cost effective measure when compared to the social and economic costs of unemployment and welfare (Breneman & Haarlow, 1998; Phipps, 1998).

RECOMMENDATIONS

- Increase research into the efficacy and efficiency of remedial education. There is much that is not known about developing and delivering remedial classes in the most efficient and cost-effective manner.
- Generate and disseminate empirically supported "best practices" that can be utilized by higher education institutions to increase positive outcomes such as higher retention and completion rates. All programs are not alike but they can benefit from the knowledge and experience of others.
- Evaluate remedial programs with regard to their "place" in the educational pipeline and develop policies accordingly.
- Improve K-12 education for all students to reduce the demand for remedial courses.
- Develop policies that will allow for the efficient and effective utilization of remedial programs to increase access to postsecondary education for underserved groups.

Remedial education can work (Attewell et al., 2006; Bettinger & Long, 2005) but its effectiveness varies across institutions, by subject area, and by other unknown factors. The challenge for policy makers and educators is to construct viable and effective ways to deliver remedial education that confirms the promise of opportunity inherent in American society.

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