ALLIANCE FOR EXCELLENT EDUCATION

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Paying Double: Inadequate High Schools and Community College Remediation

Americans are beginning to recognize that many of the nation's high schools are in crisis, as policymakers, business leaders, and celebrities call attention to the country's low graduation rates. But the dropout problem, although severe, is only one indicator of the trouble plaguing the country's secondary schools.

Because too many students are not learning the basic skills needed to succeed in college or work while they are in high school, the nation loses more than $3.7 billion a year. This figure includes $1.4 billion to provide remedial education to students who have recently completed high school. In addition, this figure factors in the almost $2.3 billion that the economy loses because remedial reading students are more likely to drop out of college without a degree, thereby reducing their earning potential.

Of those who enter high school, only about 70 percent will graduate—one of the lowest rates among industrialized nations (Greene & Winters, 2006). As important, however, is the fact that, of those who do receive a diploma, only half are academically prepared for postsecondary education (Greene & Winters, 2005). A recent study of high school juniors and seniors taking the ACT college entrance exam confirms this; half of the students were ready for college-level reading assignments in core subjects like math, history, science, and English (ACT, 2006).

Despite these daunting statistics, the vast majority of America's high school students are optimistic about their prospects for the future, which they anticipate includes both higher education and rewarding careers. In fact, according to a recent national survey, an overwhelming 81 percent of high school students expect to attend college (High School Survey of Student Engagement, 2005). This is a wise goal, since 80 percent of the fastest-growing jobs in the United States require at least some postsecondary education, according to the U.S. Department of Labor (Hecker, 2005).

Playing Catch-Up—Getting the Knowledge and Skills Needed for College

When the increased demand for postsecondary education is coupled with the poor preparation many students receive in high school, it is perhaps not surprising that colleges and universities are being forced to offer, and often require, remedial courses to large numbers of students. These classes have the sole objective of teaching pre-collegiate subject matter.

Across the nation, 42 percent of community college freshmen and 20 percent of freshmen in four-year institutions enroll in at least one remedial course (NCES 2004b). That is almost one-

third of all freshmen. Community colleges already bear the greatest share of the remediation burden, and trends indicate that their responsibilities in this arena are likely to grow. For instance, eleven states have passed laws preventing or discouraging public four-year institutions from offering remedial courses to their students, thus concentrating unprepared students in community colleges (Jenkins & Boswell, 2002).

Analyses of students' preparation for college-level work show the weakness of core skills, such as basic study habits and the ability to understand and manage complicated material. The lack of preparation is also apparent in multiple subject areas; of college freshmen taking remedial courses, 35 percent were enrolled in math, 23 percent in writing, and 20 percent in reading (NCES, 2004b).

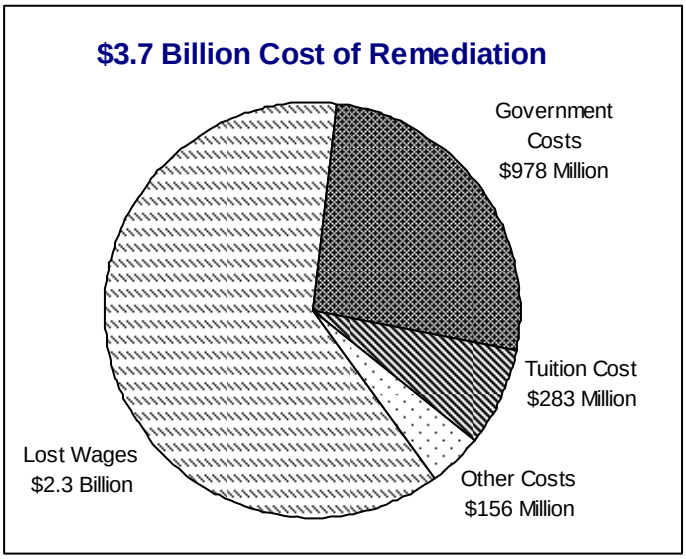
It is important to note that many students take remedial coursework for reasons having little to do with the failings of the nation's high schools. Community colleges have become a significant resource that offers opportunities to retrain laid-off workers, re-educate older students, and teach English to recent immigrants. Some of these enrollees are likely classified as "freshmen" and may be taking courses that are considered "remedial."

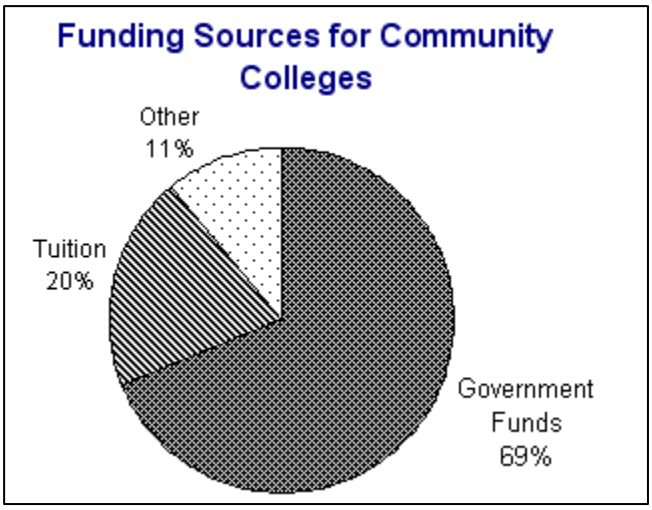
However, about half of all community college students are under the age of twenty-five (NCES, 2004c), and almost one-third of freshmen who take remedial courses are nineteen years old or younger (Phipps, 1998). Recent high school graduates are more likely to take remedial courses because higher percentages of them are pursuing Bachelor's degrees, which require specified levels of preparation, than are older students. Additionally, younger students are more likely to be enrolled full-time than older students, and many community colleges do not require part-time students to enroll in remedial courses (Jenkins & Boswell, 2002).

Thus, the vast majority of students who take remedial courses in college do so to gain the skills and knowledge they should have gotten in high school and which are necessary for them to succeed in "regular" college classes. Most view the time, effort, and resources dedicated to remedial classes to be an additional investment in their academic futures.

The Cost of Remediation

A number of components comprise the high price that colleges, students and their families, and taxpayers pay to get students "up to speed" for postsecondary education. Colleges must pay faculty to teach the remedial courses; provide the classroom space; and supply a variety of support services, including counseling, administrative support, parking, facilities maintenance, etc. Often, because of trade-offs required by limited space and resources, schools must reduce the numbers of non-remedial courses offered





to students, courses which would provide greater benefits to the community and its economy.

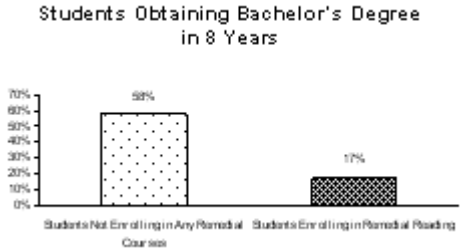
Through tuition, students and their families directly pay only about one-fifth of the overall cost of remediation. That relatively small portion totals approximately $283 million in community college tuition alone, but it is not the only cost. Another factor is students' time, which could be more productively spent taking college-level courses that would advance their goals and increase their earning potential. And because many colleges offer no credit for remedial courses, students are expending energy on study that, while necessary, delays the quest for a degree.

Taxpayers provide about a billion dollars a year to cover the direct and indirect instructional costs of remedial courses, through the subsidies which community colleges receive from state and local governments. These tax dollars are in addition to the taxes allocated to support communities' secondary schools. Thus, taxpayers are essentially paying twice for the coursework and skill development students are expected to receive in high school.

Economically, Remediation is Poor Substitution for Preparation

Individual states, and the nation as a whole, are not only paying to academically remediate thousands of young adults, but they are also facing future financial loss because students who need remediation are more likely to leave college without a degree, becoming more likely to earn less than if they had gotten a college diploma. Research shows that the *leading predictor* that a student will drop out of college is the need for remedial reading. While 58 percent of students who take no remedial education courses earn a Bachelor's degree within eight years, only 17 percent of students who enroll in a remedial reading course receive a BA or BS within the same time period (NCES, 2004a).

Students who enroll in a remedial reading course are 41 percent more likely to drop out of college. (NCES, 2004a)



The wages of individuals with some college average about $20,171 less each year than those of college graduates. Therefore, when students enter but do not complete college, not only do they lose future income, but governments take in less tax revenue, and state and national economies are deprived of the additional earnings that would make them stronger and more robust.

Losing Now and Losing Later

The nation would realize an additional $3.7 billion annually in combined reduced expenditures and increased earnings if:

- more students who graduate from high school were prepared for college, and thus did not require remediation; and
- the students who drop out of college because they were not prepared for college-level reading demands were to continue and earn a Bachelor's degree at the same rate as non-remedial students.

The chart on page 6 shows the breakdown of this national figure by state.

However, the real price of college remediation is likely much higher than this conservative estimate, which does not include the costs of remediation for students attending public or private four-year colleges, or for older community college students. Nor does it count other, non-community college-related remediation expenditures. There are additional costs, such as the cost for employers who either provide training programs to teach basic skills to employees or must purchase technology which substitutes for the lack of basic skills among employees, as well as the costs of programs offered and paid for by nonprofits and government agencies that include training in adult literacy, technology, and other academic and occupational skills.

Reducing the Need for Remediation by Improving High Schools

America's high schools are not preparing many of their students for the demands of both college and the modern workforce. Weak curricula, vague standards, and lack of alignment between high school content and the expectations of colleges and employers result in the need for remediation. In order to graduate students prepared for success, high schools must align the content of their coursework with the skills and knowledge students need in today's increasingly competitive and demanding world. If students are effectively taught what they need to know in high school, the need for remediation in college will drop dramatically.

A rigorous high school curriculum is a strong predictor of college readiness (Adelman, 2006). Students who take challenging coursework, such as four years of college-preparatory English and three years each of college-preparatory mathematics, science, and social studies, are less likely to need remedial courses than students who don't take such a rigorous curriculum (Abraham & Creech, 2002).

Statewide performance standards for college admission would enable educators to assess student progress toward readiness for college. Such standards would also convey clear expectations to students, parents, and high schools regarding student performance. States with these standards in place, such as West Virginia and Florida, have seen a long-term decline in the proportion of students who need remediation (although the number of students needing remediation initially rose due to the higher standard) (Abraham & Creech, 2002).

Reforming the nation's high schools will not be an easy process, and the kind of comprehensive school reform needed to assure that all students have the opportunity to succeed and graduate prepared for the future is not simple. But in an increasingly global economy, American secondary schools and their students must achieve at increasingly higher levels to allow the

country to maintain its competitive advantage. Ensuring that all secondary students are prepared to succeed in college and work is a giant step in the right direction for this country and will benefit individuals and society for decades to come.

For more information about the state of America's high schools and to find out what individuals and organizations can do to support effective reform at the local, state, and federal levels, visit the Alliance for Excellent Education's website at www.all4ed.org.

MetLife Foundation

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Annual Savings and Earnings Benefits from a Reduced Need for Community College Remediation[1]

State	Annual Remediation Savings	Additional Annual Earnings	Total Benefit to State Economy
Alabama	$23,985,384	$29,063,995	$53,049,379
Alaska	$182,126	$489,822	$671,948
Arizona	$32,949,507	$70,778,193	$103,727,700
Arkansas	$8,151,404	$14,897,902	$23,049,306
California	$135,307,841	$552,597,892	$687,905,733
Colorado	$21,208,099	$30,906,311	$52,114,410
Connecticut	$12,593,382	$16,401,363	$28,994,745
Delaware	$3,042,392	$4,637,957	$7,680,349
District of Columbia	$782,861	$806,772	$1,589,634
Florida	$70,920,812	$122,832,024	$193,752,835
Georgia	$27,716,795	$47,754,362	$75,471,157
Hawaii	$4,298,600	$9,355,236	$13,653,836
Idaho	$2,295,457	$4,195,290	$6,490,747
Illinois	$80,904,713	$129,292,923	$210,197,636
Indiana	$17,917,376	$22,366,592	$40,283,968
Iowa	$26,015,510	$27,063,035	$53,078,545
Kansas	$15,470,969	$27,368,260	$42,839,229
Kentucky	$24,728,740	$27,543,353	$52,272,093
Louisiana	$10,031,411	$17,465,447	$27,496,858
Maine	$3,991,127	$3,667,451	$7,658,579
Maryland	$37,973,289	$42,012,478	$79,985,767
Massachusetts	$26,026,101	$31,081,404	$57,107,505
Michigan	$50,519,097	$75,963,362	$126,482,459
Minnesota	$48,902,190	$40,241,442	$89,143,633
Mississippi	$12,452,546	$24,519,981	$36,972,527
Missouri	$21,579,586	$31,447,674	$53,027,260
Montana	$2,025,704	$2,702,063	$4,727,767
Nebraska	$8,947,788	$13,831,625	$22,779,413
Nevada	$8,564,638	$17,275,732	$25,840,371
New Hampshire	$7,971,978	$5,170,913	$13,142,891
New Jersey	$44,825,218	$50,782,121	$95,607,339
New Mexico	$9,788,171	$22,027,006	$31,815,177
New York	$98,614,826	$93,473,405	$192,088,230
North Carolina	$27,632,861	$69,779,176	$97,412,036
North Dakota	$2,917,150	$3,271,207	$6,188,358
Ohio	$69,286,395	$62,795,190	$132,081,585
Oklahoma	$16,039,658	$23,477,830	$39,517,488
Oregon	$30,209,541	$34,107,335	$64,316,875
Pennsylvania	$81,846,059	$43,113,116	$124,959,175
Rhode Island	$1,918,568	$5,822,669	$7,741,237
South Carolina	$26,383,966	$27,884,767	$54,268,732
South Dakota	$1,969,637	$1,992,552	$3,962,189
Tennessee	$19,648,932	$27,196,457	$46,845,389
Texas	$88,507,734	$193,898,993	$282,406,727
Utah	$6,807,382	$10,878,802	$17,686,184
Vermont	$2,747,050	$1,821,115	$4,568,165
Virginia	$36,615,053	$55,307,858	$91,922,911
Washington	$55,887,556	$69,503,194	$125,390,750
West Virginia	$1,363,464	$2,451,304	$3,814,768
Wisconsin	$43,227,424	$42,942,409	$86,169,833
Wyoming	$3,564,487	$6,550,822	$10,115,309
United States	**$1,417,258,558**	**$2,292,808,179**	**$3,710,066,738**

[1]Annual remediation savings were estimated by multiplying the cost of one course by the number of students under twenty-five years of age who take at least one remedial course. The College Board estimates that student tuition covers one-fifth of the cost of education. Therefore, to calculate the full cost of a community college course, annual tuition was multiplied by five. The resulting number was then divided by ten, which is the average number of courses a student takes over two semesters. To estimate the number of students under twenty-five years of age who enroll in at least one remedial course, the percent of students under twenty-five years of age (52 percent) was multiplied by the percent (42.5 percent) of public, two-year students who report enrolling in at least one remedial course (NCES, 2004c). District of Columbia data is based on the University of the District of Columbia, which has open enrollment.

To calculate additional annual earnings, the salary difference between students who attend "some college" and students who earn a Bachelor's degree was multiplied by the number of students who would have graduated if they didn't need remedial reading (potential new graduates). Using 2004 NCES data, the number of potential new college graduates was calculated by multiplying the remedial student count (above) by the percentage (20 percent) of community college freshmen enrolled in remedial reading and by 41 percent, the difference in Bachelor degree attainment between those who enroll in remedial reading (17 percent) and those who do not (58 percent). This new graduate count was then multiplied by the average earnings difference between "some college" and "Bachelor's degree," as listed in 2005 Census data

References

Abraham, A., & Creech, J. (2002). *Reducing remedial education: What progress are states making?* Atlanta, GA: Southern Regional Education Board.

Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college.* Washington, DC: U.S. Department of Education.

ACT. (2006). *Reading between the lines: What the ACT reveals about college readiness in reading.* Iowa City, IA: Author.

Greene, J., & Winters, M. (2005). *Public high school graduation and college-readiness rates: 1991-2002*. New York: Manhattan Institute.

Greene, J., & Winters, M. (2006). *Leaving boys behind: Public high school graduation rates*. New York: Manhattan Institute

Hecker, D. (2005). Occupational employment projections to 2014. *Monthly Labor Review*, *128*(11), 75.

High School Survey of Student Engagement [HSSSE]. (2005). *HSSSE 2004 overview.* Bloomington, IN: Indiana University, HSSSE.

Jenkins, D., & Boswell, K. (2002). *State policies on community college remedial education: Findings from a national survey.* Denver, CO: Education Commission of the States.

National Center for Education Statistics [NCES] (2004). *The condition of education 2004, indicator 18: Remediation and degree completion.* Washington, DC: U.S. Department of Education.

National Center for Education Statistics (2004). *The condition of education 2004, indicator 31: Remedial coursetaking.* Washington, DC: U.S. Department of Education.

National Center for Education Statistics (2004). *National postsecondary student aid study.* Data Analysis Systems (DAS-T) online computation, run on April 10, 2006. Analysis by the Alliance for Excellent Education.

Phillipe, K., & Sullivan, L. G. (2005). *National profile of community colleges: Trends and statistics.* Washington DC: American Association of Community Colleges.

Phipps, R. (1998). *College remediation: What it is, what it costs, what's at stake.* Washington, DC: Institute for Higher Education Policy.

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