

OUT OF POCKET:

THE HIGH COST OF INADEQUATE HIGH SCHOOLS AND HIGH SCHOOL STUDENT ACHIEVEMENT ON COLLEGE AFFORDABILITY

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EXECUTIVE SUMMARY

Hundreds of thousands of American families *across all income levels* are spending billions each year in extra college costs because our high schools are graduating too many students unprepared for college. That's a fact most may not realize, because current discussions around postsecondary remedial education – prerequisite courses that carry zero credit toward a college degree and represent content and skills students should have learned in high school already – are often segregated to low-income students and community colleges. But in truth, many middle-class and upper-income families bear the brunt of extra costs that come with required remedial classes in all college sectors for students from all income levels. In fact, at private nonprofit four-year colleges and universities, the children of upper-income families are taking *more* remedial classes than students from low-income families. Out-of-pocket tuition and additional living expense costs for these courses represent an expansive failure of our K-12 education system to prepare students to be ready academically for college on day one.

Our analysis of national datasets from the U.S. Department of Education, cross-checked against state higher education system data, shows that:

- **Contrary to common belief, remedial education is a widespread phenomenon not at all confined to low-income students or community colleges. It affects a broad swath of students, including those from middle-, upper-middle, and high-income families, as well as a broad swath of colleges.** In 2011, over half a million *rising* college freshmen – approximately one in four students entering college the fall after high school graduation – had to enroll in remedial coursework during their first year of enrollment in an institution of higher education.ⁱ Of those half million students, nearly half – 45 percent – came from middle, upper-middle, and high-income families (\$48,000 – \$113,000 and above). Likewise, nearly half – 43 percent – of remedial students were enrolled in public four-year colleges and private nonprofit and for-profit two- and four-year colleges. Only 57 percent were enrolled in public community colleges.
- **On average across all institutions, underprepared students report taking two remedial courses each during their first year.** There is a stark difference, however, *at private nonprofit four-year colleges*. There, remedial students from the top 20 percent of national family incomes report taking *one more* developmental class than students from the bottom 20 percent of national family incomes: 2.7 vs. 1.6 classes. In other words, the data and indicated gap challenge conventional ideas about whom remedial education serves and the extent of K-12 underperformance across income levels.
- **Underprepared students from families in the top income quintile (incomes above \$113,440) that attended private nonprofit four-year colleges spent on average over \$12,000 extra to study content they should have learned in high school.** Overall, across all income levels and institutions of higher education, more than a half million recent high school graduates and their families spent on average an extra \$3,000 and borrowed an extra \$750 for college to study content and skills they should

i. Caution: Past estimates of the percentage of students enrolled in postsecondary remedial courses have varied widely due to the sample of students studied – some have looked at students under the age of 25 regardless of high school graduation year, some have looked at all students regardless of age, while others have looked at first-year undergraduates based on the accumulated number of credit hours. Our estimate looks specifically at *rising college freshmen* that graduated from high school the summer

prior to enrolling in the fall and comes from our analysis of the U.S. Department of Education's National Postsecondary Student Aid Study (NPSAS: 2011-12). We believe this to be the most accurate estimate of rising college freshmen and one that is in line with previous estimates by the U.S. Department of Education for first-year undergraduates ages 15-23. See: https://nces.ed.gov/programs/digest/d12/tables/dt12_270.asp

have learned in high school. The aggregate additional, direct college expenses these half million students and families had to pay out of pocket for remedial coursework in the first year in 2011-12 was nearly \$1.5 billion. Heightened student loan burden associated with first-year remedial coursework was over \$380 million. That's to say nothing of additional taxpayer costs associated with those courses.

- **Private nonprofit and for-profit colleges are increasingly a bad bet for students underprepared for college-level work.** Because of much higher tuition and net prices, students who must initially take remedial coursework pay and borrow much more at private colleges than they would have had they attended a public four-year or two-year college: net tuition expenses at private colleges are three times higher than those at public four-year colleges and over 10 times higher than those at community colleges. Ultimately, while private colleges represent only 11 percent of the total first-time freshmen remedial population, they account for over three times as much remedial course-associated student and parent loan debt.
- **In addition to remedial course costs, students who were not adequately prepared in high school are also more likely to delay college completion – or drop out all together.** First-time full-time bachelor's degree-seeking students who take a developmental education course in the first year after high school graduation are *74 percent more likely to drop out* of college than first-time full-time non-remedial students. First-time full-time associate's degree-seeking students who take a remedial course in the first year after high school graduation are 12 percent more likely to drop out than first-time full-time non-remedial students. Even among those that do graduate, first-time full-time bachelor first-year remedial students take 11 months longer and first-time full-time associate first-year remedial students take 6 months longer to complete than non-remedial students. That represents time they are not working and earning as much as they otherwise could with a postsecondary degree.

The cost of the disconnect between perceptions of high school quality and the reality of preparation for college and career eventually are paid out of pocket by middle-class and upper-income families as well as those from low-income households. Ironically, the backlash against Common Core implementation and the associated testing opt-out movement – prevalent among middle- and upper-class public officials, teachers, and parents – hurts the pocketbooks of not just the less fortunate, but also the well-to-do, by masking the lack of rigor in the education middle-class children receive.

The High, Out-of-Pocket Family Cost of Common Core Opposition

The Common Core State Standards were borne out of recognition the uneven patchwork of academic standards and proficiency expectations that vary from state to state and are often disconnected from the needs of higher education and employers does not serve students well – what can pass as advanced in one state can be considered basic in another and both might still be inadequate. National assessments find academic progress of 17-year-old students largely stagnant over the past 40 years.¹ Achievement levels among U.S. 15-year-old students have fallen far behind international peers.² And students' overall readiness for college and careers, including military service, are considered unacceptably low by multiple standards.³ Indeed, a wide “honesty gap” exists between state-established academic proficiency benchmarks and those aligned to international standards, such as those established in accord with the National Assessment for Educational Progress (NAEP).⁴

These K-12 education shortcomings were tackled anew in 2009 when state education chiefs and governors in 48 states came together to develop a consistent set of content-specific, higher learning goals that states could adopt to better prepare students for college and career. The end result – a rigorous set of common learning objectives for math and English for every grade level from kindergarten to 12th grade – was adopted by 45 states and the District of Columbia.

Excitement began to build among education advocates that finally all students would graduate from high school prepared to take credit-bearing college courses or enter the workforce with the academic skills needed to succeed. The U.S. Department of Education provided financial incentives to states to adopt high-quality standards – such as the Common Core – in its Race to the Top competition and No Child Left Behind waiver program. It also provided \$360 million to two consortia of states seeking to develop a new generation of assessments aligned to the new standards.⁵

But the promise of Common Core standards and aligned assessments is still not fulfilled thanks to a series of foreseeable as well as unexpected implementation and communication challenges. Public support has dissipated due to a combination of Tea Party activism, teacher and teacher union resistance, and the opt-out actions of frustrated, anti-testing parents. A number of conservatives, for example, began to object to Common Core out of fear of federal overreach once the U.S. Department of Education began encouraging states to participate. Likewise, fear among rank-and-file teachers and the teacher unions led many to resist Common Core implementation: teachers feared a disconnect between existing curricula and the standards, while teacher unions feared what would happen if student test results associated with the new standards were used to evaluate teachers.

An unexpected challenge though has come from grassroots activists, supported by teacher unions, of frustrated anti-testing teachers and parents who believe Common Core standards prompt additional high-stakes testing upon what they perceive as already over-tested students and over-burdened teachers. Parents in states scattered across the country, including states like New York, Colorado, New Jersey, and Washington began to encourage students to opt-out of Common Core tests. This was particularly common in affluent school districts and high schools.⁶ For example, in 2015 more than 200,000 students in New York State – approximately 20 percent of eligible students and at least triple the number who opted out in 2014 – refused to take Common-Core aligned assessments. Over one-quarter of those students came from mostly white and affluent suburban school districts in Long Island.⁷ Likewise, in California, more than half of juniors at a single affluent high school in Los Angeles opted out of tests.⁸ Perhaps what's contributing to the opt-out parents' backlash is the often-cited belief that their own schools already are doing well.⁹ For some, that may be true. But for many others, it is simply wishful thinking.

In fact, little noticed is that the price of opposition – and perhaps willful ignorance by some – to Common Core implementation includes how much more students and families across *all* socioeconomic backgrounds must pay for college due to inadequate high school preparation. At least among those students going directly to college, we find that rising college freshmen and their families are paying extremely high out-of-pocket expenses for prerequisite, zero-credit, remedial coursework that covers content and skills that students should have already learned in high school. Specifically, we find that:

1. Remedial education is *not* a phenomenon at all confined to low-income students or community colleges. *Nearly half* of first-year remedial students come from middle, upper-middle, and high-income families. Nearly half of first-year remedial students are enrolled at public four-year colleges and private nonprofit and for-profit two- and four-year colleges.
2. One in four recent high school graduates – again from a broad cross-section of income ranges – on average must pay an extra \$3,000 and borrow nearly an extra \$1,000 for remedial coursework in their first year of postsecondary education that does not count toward a college degree. Students from families in the top income quintile that attend private nonprofit four-year institutions on average pay out of pocket an extra \$12,000 for remedial coursework.

Altogether, **over half a million students and their families had to pay a combined \$1.5 billion and borrow \$380 million to pay for educational content they should have learned in high school already.** Moreover, they confront additional opportunity costs – like foregone earnings – that come with a remedial student's *substantially* higher likelihood of dropping out of college, and for those who do complete, extended time in school to earn a degree rather than earning full-time in the workforce. Combined, this direct and indirect cost represents the hitherto unexamined high price of inadequate high schools to students and families, a surprising proportion of which are middle and upper-class families, who until now, likely thought they attended high-performing high schools. This is an out-of-pocket cost that will only continue to grow as college prices continue to grow and financial aid fails to keep pace. In other words, the college affordability issue – a “crisis” some call it – is linked to the fate of high school reform and student achievement. Upgrade standards and learning for all students now or pay more out of pocket for college later.

Data and Methodology

We analyze and produce national estimates of the actual out-of-pocket expenses for remedial postsecondary coursework paid by students and families using data from the National Postsecondary Student Aid Survey (NPSAS) sponsored by the U.S. Department of Education. The 2011-2012 dataset (NPSAS:12) provides the most recent national data available on first-year remedial course enrollment, net prices, and student and parent loan debt. The 2007-2008 dataset (NPSAS:08) provides the most recent data on the average number of remedial classes students take. The NPSAS:12 survey responses were collected from 95,000 undergraduate students, a nationally representative sample of the 26 million undergraduate students enrolled between July 2011 and June 2012.¹⁰ The NPSAS:08 survey responses were collected from 114,000 undergraduate students nationally, representing the 21 million undergraduate students enrolled between July 2007 and June 2008.¹¹

All price data produced in this report reflect 2011 dollars and have not been adjusted for inflation in college costs to remain consistent with 2011 data on remedial student enrollment. To come up with per-remedial course price estimates, we follow previous research precedent and assume that colleges charge an equivalent price for remedial courses as they do for non-remedial courses.¹² Therefore, we assume that each remedial course is equivalent to a three-credit non-remedial course or roughly 1/8th of a year's worth of coursework based on research by Complete College America that the average student takes 11.7 credits per semester or 8 courses per year.¹³

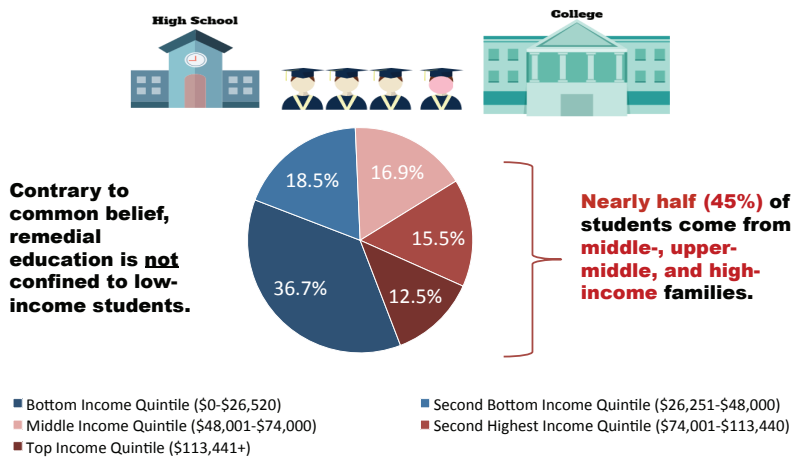
Estimates related to the indirect, opportunity costs that first-year remedial students absorb come from the 2003-04 Beginning Postsecondary Student Survey (BPS), which was also administered by the U.S. Department of Education. BPS tracks graduation outcomes over six years for 19,000 freshmen enrolled in college for the first time in 2003-04 and representing the 4 million undergraduates who are first-time postsecondary beginners.¹⁴ Our analysis of both surveys focused on a smaller subset of freshmen that entered college in the fall directly after high school graduation and enrolled in remedial coursework in their first year. In fact, the full one-year cost of remedial education is much higher when you factor in students starting after a gap from high school and adult learners, but we honed in only on students immediately entering college after their high school graduation to isolate inadequate high school academic preparation.

Main Findings

MAIN FINDING #1: Contrary to common belief, remedial education is *not* a phenomenon confined to low-income students or community colleges. It affects students from a broad range of incomes, including those from middle-class, upper-middle-class, and high-income families, and from a broad range of college sectors.

In 2011, over half a million rising college freshmen – approximately one in four students entering college the fall immediately after high school graduation – enrolled in remedial coursework during their first year of “higher” education.ⁱⁱ It’s true that of those half million students, low-income students are over-represented: 37 percent came from families in the bottom family income quintile (below \$27,000). But nearly half of first-year remedial students – 45 percent – still came from middle, upper-middle, and high-income families (\$48,000 – \$113,440 and above).

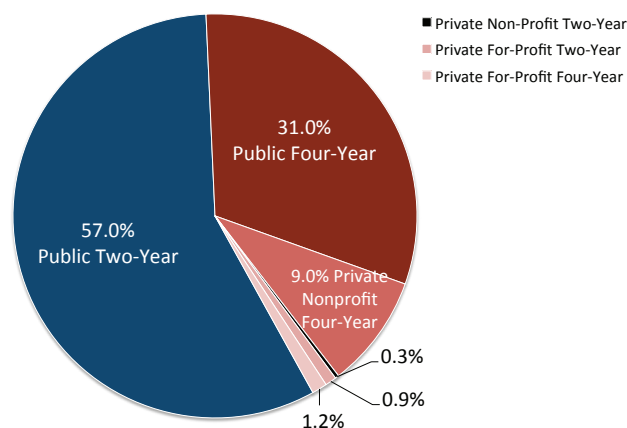
Over half a million rising college freshmen – 1 in 4 students – had to enroll in remedial coursework their first year in college.



Likewise, first-year remedial students are not all isolated within the community college sector. Again, it’s true that the vast majority of remedial students – 57 percent – are enrolled at community colleges. But that still leaves nearly half of students who are enrolled in public four-year colleges as well as private nonprofit and for-profit two- and four-year colleges.

Nearly half of first-year remedial students are enrolled in colleges beyond the community college sector.

Where First-Year Remedial Students Are Enrolled



ii. Note that this analysis provides only a one-year snapshot of the remedial student population in their first year of postsecondary study. In other words, these are conservative estimates of the full enrolled remedial student population – let alone the full student population that may *need* remediation – because some students may postpone their developmental course taking until later in their

academic careers (year two or beyond) if college-level math and/or English or Writing are not immediately necessary to pursue other college-level courses. We also focus on students enrolling in college the fall immediately after high school graduation, which would not capture students who are going back to school after having taken time off to work in between high school and college.

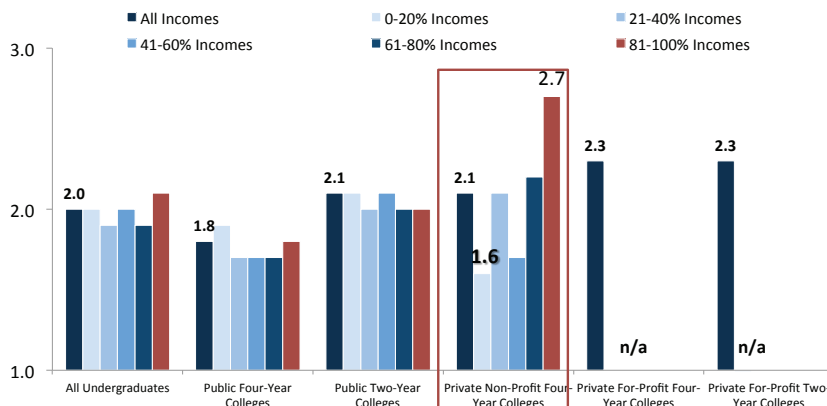
A notable pattern also appears when one examines the average number of remedial courses taken in each college sector. On average across all institutions, students report taking two remedial courses each during their first year. There is a stark difference, however, *at private nonprofit four-year colleges: there, remedial students from the top 20 percent of national family incomes report taking nearly three remedial courses, one more class than students from the bottom 20 percent of national family incomes: 2.7 vs. 1.6 classes.* In other words, in the most expensive colleges and universities, the wealthiest students need more remedial education than the poorest ones. The difference is statistically significant – meaning not likely due to random chance.

Whether or not this is due to the higher likelihood that wealthy families are more capable than low-income families to send their children to private colleges, this gap nevertheless challenges conventional wisdom about whom remedial education serves and the extent of K-12 underperformance across income levels. High school student underperformance as reflected by college costs is broader and deeper than most assume.

MAIN FINDING #2: College remediation is an expensive and unnecessary burden for students and families.

Ultimately, underprepared high school graduates face steep financial consequences. Among those who immediately enrolled in college the fall after high school graduation, students and families faced an average net price – that is the total cost of attendance *after* all grant and scholarship aid – of approximately \$1,500 per remedial course in 2011.ⁱⁱⁱ With an average of two remedial classes taken per student, the half million recent high school graduates and their families overall paid an extra \$3,000 for skills and content they should have learned in high school. Over \$750, or \$380 per course, was financed by federal and private student loan debt.

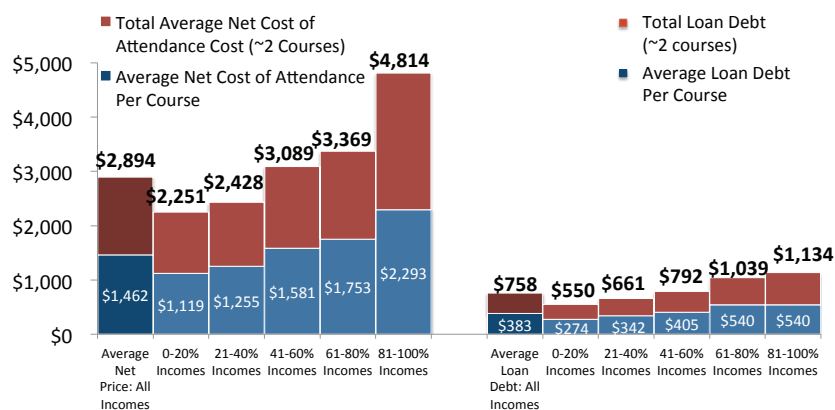
On average, students take **2** remedial classes their first year. But at **private non-profit four-year colleges**, high-income students take **3**, one more than low-income students.



Notes: Estimates for all undergraduates include students enrolled at all four-year, two-year, and less-than-two-year colleges. Estimates for private non-profit two-year colleges and income breakdowns within the private for-profit sector were not available because of small sample sizes.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2007-08.

Students and families paid an extra **\$3,000** for skills and content they should have learned in high school. Over **\$750** was financed by student and parent loans.



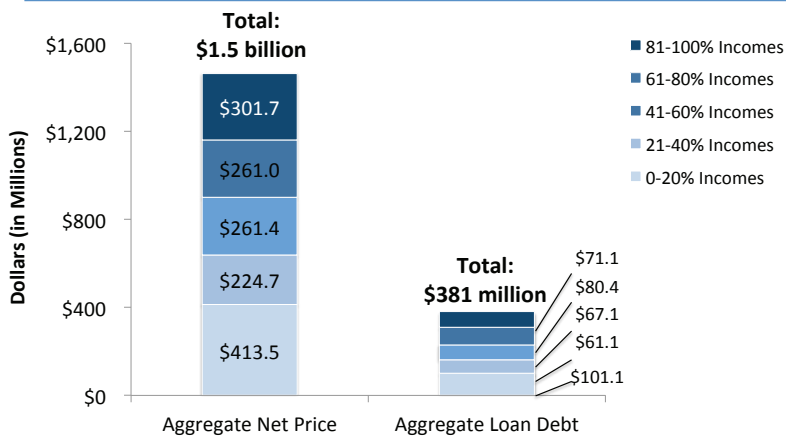
Notes: Net price reflects total cost of attendance, including room, board, and textbook costs, after all grant and scholarship aid. Loans include federal and private loans made to students, and Parent PLUS loans made to parents.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2011-12.

- iii. Generally speaking, we would consider the total net price, which includes room, board, textbooks, and other personal expenses, to best represent the full amount students must pay for remedial education. Traditional Title IV federal student aid has always been available to offset students' full cost of attendance. However, some leading political figures – such as Senate Education Committee Chairman Lamar Alexander (R-TN) – have suggested that federal financial aid should be limited to offsetting only tuition and fee costs. Further complicating matters, various higher education tax benefits first introduced during President Bill Clinton's tenure are only available to offset tuition and fee expenses. If we were to consider only average net tuition and fees as opposed to total cost of attendance, the price students and families must pay out-of-pocket per remedial course drops to about \$400. We believe, however, that this is a dramatic underrepresentation of cost because it fails to capture the full spectrum of expenses that college students must bear.

When we multiply per-student costs by the half a million rising first-year remedial student population, we find aggregate additional, direct college expenses that students and families had to pay for remedial coursework totaled nearly \$1.5 billion in 2011. Heightened student and parent loan burden associated with first-year remedial coursework was over \$380 million that year.

In aggregate, over half a million families had to pay \$1.5 billion and borrow over \$380 million for remedial coursework.



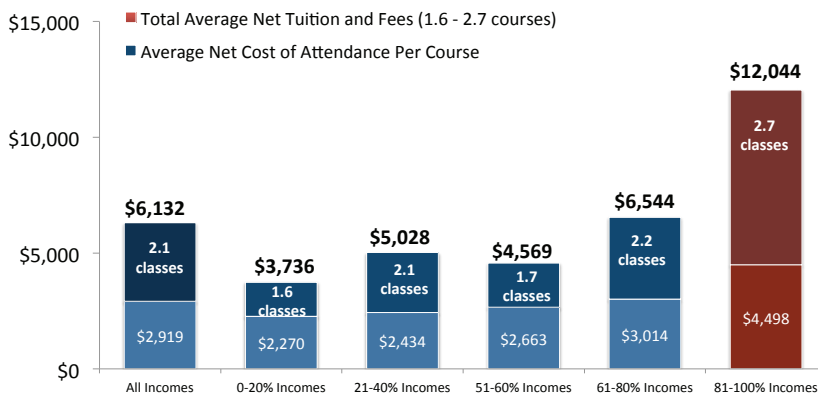
Notes: Net price reflects total cost of attendance, including room, board, and textbook costs, after all grant and scholarship aid. Loans include federal and private loans made to students, and Parent PLUS loans made to parents.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2011-12.

DIRECT COLLEGE EXPENSES THAT STUDENTS AND FAMILIES HAD TO PAY FOR REMEDIAL COURSEWORK TOTALED NEARLY

\$1.5 BILLION

High-income students at private nonprofit four-year colleges pay over \$12,000 in extra college costs for remedial classes.



Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2007-08 and 2011-12.

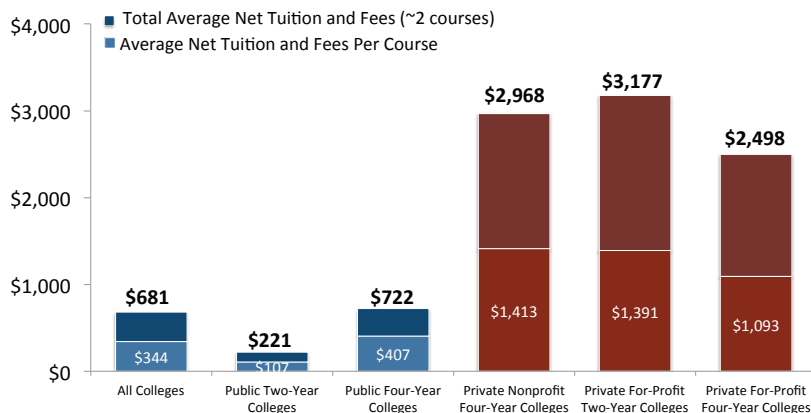
It may seem that \$1,500 per remedial course – or \$3,000 total for two courses – is not much on the grand scale of net college tuition and living expenses (i.e. cost after financial aid), which range from \$12,000 at community colleges to \$28,000 at private nonprofit four-year colleges.¹⁵ But these are averages across all income groups for all full-time undergraduate students. Underprepared high school graduates from the lowest income quintile must pay an extra \$2,300 for content they should have received in high school – a price tag that equals nearly one-fifth of their annual income.¹⁶ This comes on top of an annual net price that already accounts for over two-thirds of a low-income family's income. The same applies to students from the top income quintile of family incomes who face on average an additional \$5,000 price tag. **And at private nonprofit four-year colleges where high-income students take approximately three remedial courses, relevant students and families incur additional costs of over \$12,000 for content that should have been learned in high school.**

Given current anxiety levels about college costs, these high additional expenses – expenses that could have been entirely avoided – are cause for concern. But what's worse is how much higher these costs are in the private college sector. Because students at private colleges face extremely high tuition and net prices that go far beyond the prices charged by a community college or public four-year college, private nonprofit colleges and for-profit institutions are increasingly a bad bet for students who are underprepared for college. Yet the discussion around remedial education is typically focused within the public sector – primarily on community colleges and less so on public four-year colleges. But they're not the only ones to offer remedial instruction. Private colleges still enroll 11 percent of the rising first-year remedial student population. And again, these are students who come from a broad cross-section of incomes.

Consider, for example, that:

- Net tuition and fees at private nonprofit and for-profit four-year colleges are three times higher than at public four-year colleges and over ten times higher than at community colleges.
- Net total cost of attendance at private nonprofit and for-profit four-year colleges cost families two times as much as at public four-year colleges and three times as much as at public community colleges.
- Borrowing at private nonprofits and private for-profits was twice as high as borrowing at public four-year colleges.

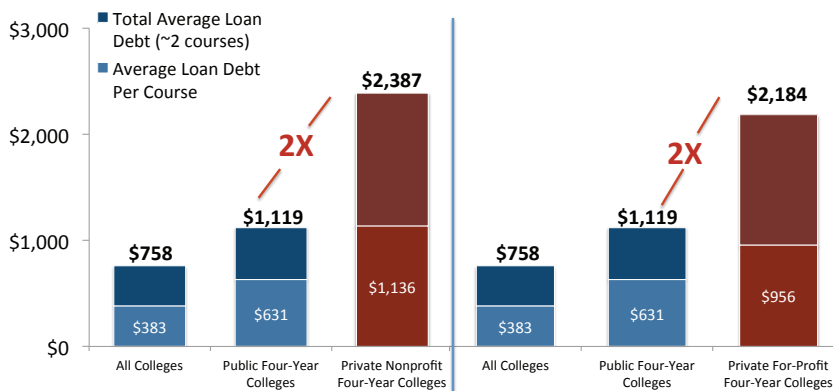
Net tuition and fees at private four-year colleges are over 3 times higher than tuition charged at public four-year colleges and over 10 times higher than community colleges.



Notes: Estimates for all colleges include students enrolled at all four-year, two-year, and less-than-two-year colleges. Estimates for private non-profit two-year colleges were not available because of small sample sizes.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2011-12.

Borrowing among students and parents at private four-year colleges are 2 times higher than borrowing levels at public four-year colleges.

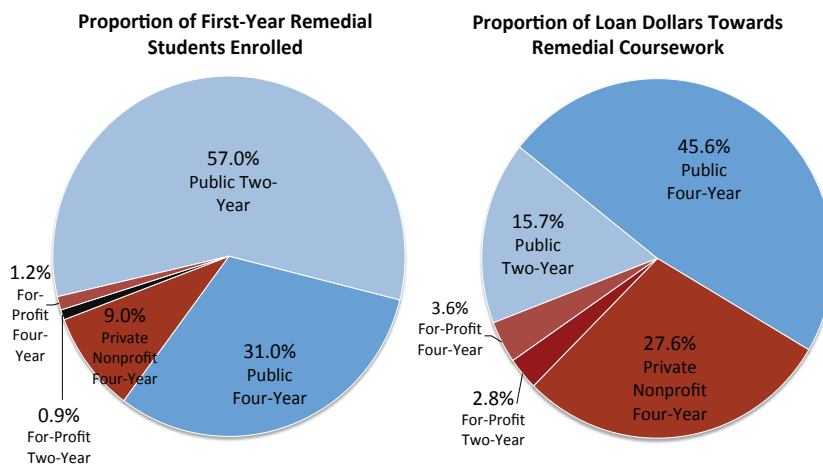


Notes: Estimates for all colleges include students enrolled at all four-year, two-year, and less-than-two-year colleges. Estimates for private non-profit two-year colleges were not available because of small sample sizes.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2011-12.

- Ultimately, private nonprofit and for-profit four-year colleges accounted for disproportionately more student loan dollars than the proportion of first-year remedial students enrolled. Collectively, private colleges enrolled only 11 percent of the total first-year student remedial population, yet accounted for *over three times as much* – 34 percent – of associated aggregate student loan debt.

Ultimately, private colleges enrolled only 11 percent of first-year remedial students, yet accounted for over one-third of associated student loan debt.



Notes: Totals will not equal exactly 100 percent because estimates for less-than-two-year colleges and private non-profit two-year colleges were not available because of small sample sizes.

Source: Education Reform Now Analysis of National Postsecondary Student Aid Survey (NPSAS) 2011-12.

MAIN FINDING #3: Students face high indirect opportunity costs in addition to direct tuition and living expenses associated with remedial coursework.

Direct out-of-pocket expenses aren't the only costs students face due to under-preparation in high school. They also absorb indirect opportunity costs. There is the loss of earnings first-year remedial students face due to their substantially higher likelihood of dropping out of college – and the smaller loss associated with an extended time to degree for those who do eventually graduate. Moreover, there are the additional back-end costs that college dropouts with debt confront: because they're less likely to receive the added earning power that comes with a college degree, borrowers who drop out are more than four times as likely as borrowers who graduate to default on their student loans.¹⁷

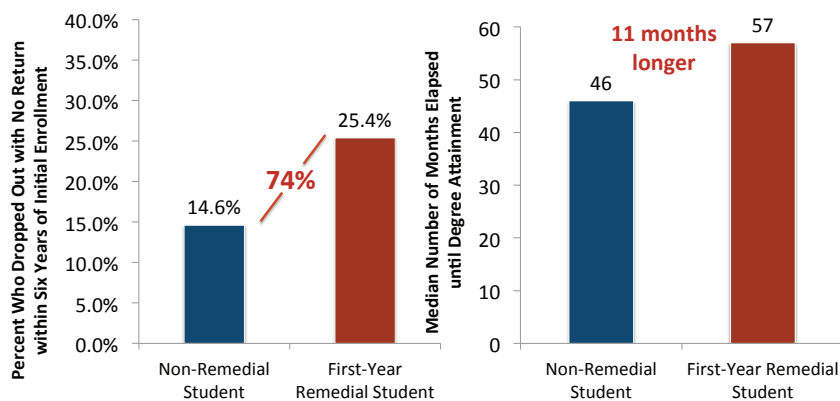
Our analysis indicates among rising first-time full-time bachelor's degree seeking students, over one-quarter of those who take a remedial or developmental education course in their first year of postsecondary education drop out of college and do not return within six years. This makes them *74 percent more likely to drop out* of college than first-time full-time students who do not need remedial education. For those that do cross the finish line, they still take 11 months longer to graduate.

Similar differences exist among first-time full-time associate's degree seeking students, albeit smaller. For full-time students seeking an associate's degree, those who take a remedial course the first year after high school graduation are 12 percent more likely to drop out than their peers who do not need developmental education. Likewise, students who do graduate from community college after taking remedial courses take 6 months longer to complete.

BACHELOR'S DEGREE SEEKING STUDENTS WHO TAKE A REMEDIAL COURSE THEIR FIRST YEAR IN COLLEGE ARE 74% MORE LIKELY TO DROP OUT THAN STUDENTS WHO DID NOT NEED REMEDIAL EDUCATION.

First-year remedial students seeking a bachelor's degree are 74 percent more likely to drop out. Those who do graduate take nearly a year longer.

Among first-time full-time bachelor-seeking students...



Source: Education Reform Now Analysis of Beginning Postsecondary Student (BPS) Survey 2003: 2009.

Conclusion

In many ways, this analysis finds the current discussion around remedial education has been severely downplayed because it incorrectly suggests the need for remediation is a phenomenon solely seen among students from low-income families and within community colleges. In fact, the problem is much more expansive: high school under-preparation and subsequent enrollment in costly remedial coursework also affects students from middle, upper-middle, and high-income families as well as students enrolled in public and private four-year colleges. This suggests a much broader failure of our K-12 education system to prepare students to be academically ready for college on day one. By shifting the expenses of a public K-12 education system into the more privatized higher education market, students and families are left to assume an unnecessary financial burden that can have damaging consequences – including long-term opportunity costs.

To some, the recent backlash against the Common Core State Standards and the testing opt-out movement illustrates a complacency among public officials, parents, and teachers – many of whom come from more middle-class and more affluent backgrounds – that is undermining much needed improvement and progress in *all students'* academic preparation for college success. Traditional indicators of college readiness – like GPAs or state high school exams – are not sufficient any longer. We recommend movement in the opposite direction toward the original promise of Common Core and aligned assessments, and following in the footsteps of states like California and Washington that use secondary school assessments – whether aligned with Common Core or not – to provide students with follow-up opportunities for advancement or interventions in their senior year of high school to boost college readiness.¹⁸ Students cannot afford to be taught to disparate expectations any longer. Their pocketbooks – and ultimately America's – have suffered enough.

Notes

1. According to the most recent NAEP Long-Term Trend Assessment results from 2012, from 1971 to 2012, 17-year-old students only made a 2-point gain in reading and in math, despite much larger gains over time for the nation's 9- and 13-year-old students. See: The National Center for Education Statistics, "The Nation's Report Card: Top Stories in NAEP Long-Term Trend Assessments 2012." Available at: http://www.nationsreportcard.gov/ltt_2012/.
2. Among the 34 OECD countries, the United States' 15-year-olds performed below average in math (approximate rank 27) and performed around average in reading and science (approximate rank 17 and 20, respectively). There has been no significant change in these performances over time, according to the 2012 international assessment of student skills. See: Organisation for Economic Co-Operation and Development, "Country Note: Programme for International Student Assessment (PISA) – Results from PISA 2012: United States." Available at: <http://www.oecd.org/pisa/keyfindings/PISA-2012-results-US.pdf>.
3. In 2015, 72 percent of high school graduates taking the ACT failed to meet college readiness benchmarks across English, Reading, Mathematics, and Science. The numbers are even dramatically lower among African American and American Indian high school graduates. See: ACT, "The Condition of College & Career Readiness 2015-National," July 2015. Available at: <http://www.act.org/content/dam/act/unsecured/documents/Condition-of-College-and-Career-Readiness-Report-2015-United-States.pdf>, pp. 4 and 6.

Likewise, nearly 60 percent of high school seniors who took the SAT did not meet the SAT College and Career Readiness Benchmark. See: College Board, "Annual Results Reveal Largest and Most Diverse Group of Students Take PSAT/NMSQT, SAT, and AP; Need to Improve Readiness Remains," September 2015. Available at: <https://www.collegeboard.org/releases/2015/annual-results-reveal-largest-most-diverse-group-students-take-psat-sat-ap>.

Among career readiness, in a survey of employers, virtually none were satisfied with the preparation level of high school graduates. Over 40 percent rated their high school graduates' workforce preparation levels as deficient. See: The Conference Board, Corporate Choices for Working Families, The Partnership for 21st Century Skills, and The Society for Human Resource Management, "Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce,"

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 9. In the 40 years of the Phi Delta Kappan and Gallup poll, a near majority of Americans have consistently graded the public schools in their community with an A or B, whereas the vast majority grade public schools nationally with a C, D, or “Fail.” See: Phi Delta Kappan/Gallup, “The 47th Annual PDK/Gallup Poll of the Public’s Attitudes Toward the Public Schools: Testing Doesn’t Measure Up for Americans,” Phi Delta Kappan, September 2015. Available at: http://pdkpoll2015.pdkintl.org/wp-content/uploads/2015/10/pdkpoll47_2015.pdf, pp. 21-22.
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 15. David Radwin, Christina Chang Wei, “What is the Price of College? Total, Net, and Out-of-Pocket Prices by Type of Institution in 2011-12,” RTI International and National Center for Education Statistics, March 2015. Available at: <http://nces.ed.gov/pubs2015/2015165.pdf>, Figure 1.
 16. Our analysis of NPSAS 2011-12 finds that students in the bottom income quintile have an average net price of \$8,952, which is over two-thirds of the midpoint income of the bottom income quintile (\$0 - \$26,520).
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 18. Both Washington State and California have adopted a statewide Smarter Balance preparation and placement policy, whereby students can spend their senior year to catch up, maintain, or boost their knowledge to levels consistent with placement in college-level credit bearing coursework. For example, students who score at a top level on the Smarter Balanced Common Core-aligned exam are encouraged to enroll in the next most rigorous advanced course offered by their high school or dual enroll in college classes. Students scoring at lower levels can enroll in intensive math or English classes and/or receive additional personalized support in high school to prepare for college. Assessments not aligned with Common Core can also achieve the same goals, such as California’s Early Assessment Program (EAP) that existed prior to Smarter Balanced. Under EAP, a series of questions were added as a voluntary supplement to the state’s mandatory junior-year assessments that told students whether or not they would be exempt from California State University remedial coursework. Students then had time to address academic gaps during their senior year of high school. Research finds that the testing and feedback strategy reduced remediation rates in college without discouraging those who were underprepared from applying.
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