



# Developmental Education and Student Debt: Remediation's Uncertain Impact on Financial and Academic Outcomes

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## EXECUTIVE SUMMARY

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Developmental education is integral to higher education in the United States. In academic year (AY) 2011–12, about one-third of all first-year undergraduates and 40 percent of first-year community college students were enrolled in at least one developmental course (NPSAS:12).<sup>1</sup> Generally, students who fail to achieve adequate scores on placement exams must first take more basic coursework (often in math, reading, or writing) before moving on to regular, credit-bearing coursework.

Developmental education is far more prevalent in the two-year public college sector, especially at community colleges. In AY 2011–12, community colleges enrolled about half of all first-year students and 65 percent of all first-year students who took developmental education coursework (NPSAS:12). Many four-year institutions (sometimes acting on their own initiative but often responding to changes in higher education policy at the state level) have either stopped admitting students who fail to demonstrate college-level proficiency or are channeling such students into developmental coursework at local community colleges (Jacobs, 2012). Also, given rising tuition prices at four-year institutions, more underprepared students may be turning voluntarily to less expensive community colleges for developmental education.

Along with many higher education organizations, the White House has made it a major initiative to promote college attainment and raise completion rates. One way to do this may be by encouraging more underprepared students to enroll in postsecondary education through a developmental path and/or by ensuring that more students who take developmental education coursework graduate with a degree. However, such an approach entails certain risks that must be assessed. What if students who take developmental courses end up incurring more student debt? Worse yet, what if these students tend to borrow more but leave school before earning a credential? Depending on the answers to questions like these, the developmental system and the push for more degree attainment could do more harm than good.

To explore these questions, this paper analyzed national survey data gathered by the Department of Education’s National Center for Education Statistics. Findings of this analysis, summarized below, largely belie the assumption that developmental education creates a significant academic and financial drag on students. These findings include:

- The population of students enrolled in developmental coursework at community colleges do not differ from students who are not required to take the courses;
- Students in developmental courses do not borrow more than their peers; and
- Many community college students who take a single developmental course achieve better academic outcomes relative to those who take none.

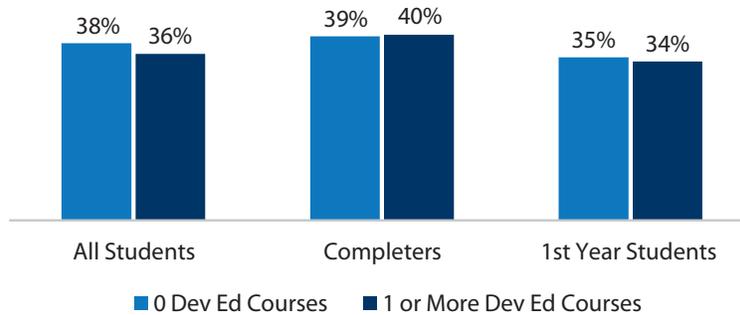
The remainder of this paper will explain and expand on these and other findings of research into NCES data, providing a short discussion at the end of implications for policy and future research.

<sup>1</sup> The authors prefer the term “developmental coursework,” which should be understood as synonymous with “remedial education,” “basic skills education,” “developmental education,” or any other name used to describe non-credit bearing coursework considered below college level that students take in an effort to progress to college-level courses.

## DEVELOPMENTAL EDUCATION STUDENTS BORROW AT SAME RATE AS OTHER STUDENTS

Many community college students do not take out any loans to finance their education and those who do tend to borrow less than their peers at four-year institutions (NCES, 2012, Tables 391 & 331.90). Among community college students, those who take developmental education courses borrow at similar rates compared to their peers. Furthermore, despite the added financial burden involved in developmental courses, students enrolled in developmental courses who borrow student loans have median cumulative borrowing amounts that are marginally lower than those of students not enrolled in developmental courses.

**Figure 1. Percent of AY 2011–12 Community College Students Who Borrowed**



Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Survey (NPSAS:12).

Only about 37 percent of all community college students in AY 2011–2012 had as yet borrowed from any source for higher education, and there was no significant difference in borrowing rates between students who had taken developmental education classes and those who had not. Students who completed a degree in 2011–12 were more likely to have borrowed than the population as a whole, perhaps due to their longer enrollment times; however, there was no significant difference in borrowing rates between students who had enrolled in developmental education and those who had not, with around 40 percent of both groups having borrowed. Similar results were found for first-year students, of whom about 35 percent borrowed from any source.<sup>2</sup>

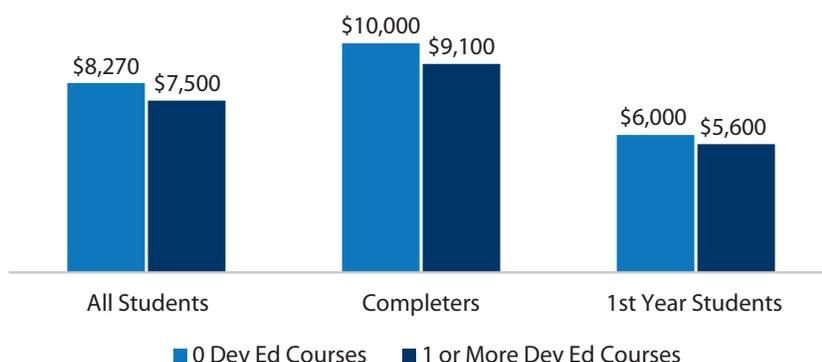
## DEVELOPMENTAL EDUCATION STUDENTS BORROW LOWER AMOUNTS THAN PEERS

Contrary to expectations, students taking developmental courses at community colleges borrowed as much or less than their peers who did not take developmental courses. This finding held across all three groups: all students attending community colleges in AY 2011–12, those students who earned a credential in 2011–12, and those who were first-year students. As expected, the amount borrowed varied between the three groups, but no statistically significant difference was found between students who had and had not taken developmental courses for any of the three.<sup>3</sup>

<sup>2</sup> Since this result is not intuitive, we performed similar analyses using both the population of all students enrolled in 2007–08 (NPSAS:08) and the population of students who began their postsecondary career at a community college in academic year 2003–2004 (BPS:04/09). While the overall borrowing rates tended to be higher in the earlier data sources, there was still no difference in borrowing between students who took developmental education courses and those who did not.

<sup>3</sup> We performed the same analysis using several other datasets and found similar results. The only evidence we could find of increased borrowing levels for students enrolled in developmental coursework was for a completely different population of students. Using the Baccalaureate and Beyond Longitudinal Study from 2008–2009, we found that of all borrowers who completed a bachelor’s degree in 2008, those who did not take developmental education classes borrowed a median amount of \$20,000, while those who took developmental education classes borrowed a median amount of \$22,483. While this is evidence that it is costing students enrolled in developmental courses more to complete a bachelor’s degree, this does not imply that students enrolled in developmental coursework at community colleges are borrowing more to finance their education.

**Figure 2. Median Borrowing for 2011–12 Community College Students Who Borrowed**

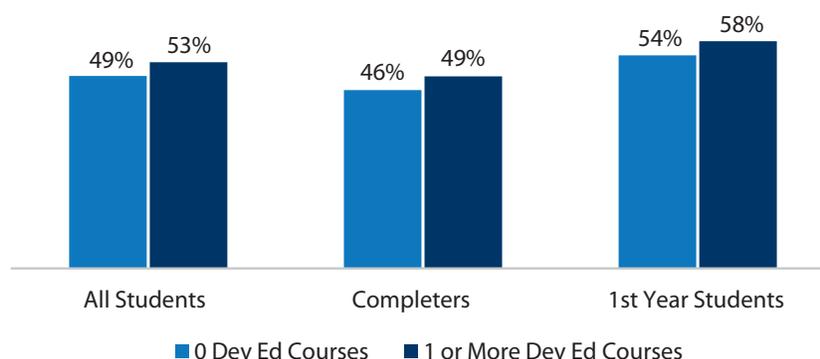


Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Survey (NPSAS:12).

## DEVELOPMENTAL EDUCATION STUDENTS ARE MORE LIKELY TO RECEIVE GRANT AID

About half of all community college students and well over half of first-year students received some grant aid during AY 2011–12. The majority of this grant aid came from federal sources like the Pell grant and other Title IV programs; as of AY 2007–08, the average federal grant aid was almost double the average nonfederal grants for community college students (NCES, 2012, Table 393).

**Figure 3. Percentage of AY 2011–12 Community College Students Receiving Any Grant Aid**



Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Survey (NPSAS:12).

Students who took one or more developmental education course were marginally more likely to receive grant aid than students who did not take developmental courses. Fifty-eight percent of first-year developmental education students received grant aid from at least one source, compared to 54 percent of first-year students who did not take developmental courses. Students completing their degree in AY 2011–12 were marginally less likely to receive grant aid than other students, which may partially explain why these students were more likely to have taken out student loans; however, in this group, aid was given out at slightly higher rates to students who had taken developmental courses.

## FEMALE AND MINORITY COMMUNITY COLLEGE STUDENTS ARE MORE LIKELY TO TAKE DEVELOPMENTAL EDUCATION COURSES THAN THEIR WHITE, MALE PEERS

The population of students enrolled in developmental education courses at community colleges differed significantly from the general community college population only by race and gender. Where female students made up 52 percent of all community college first-year students, they comprised 56 percent of first-year students enrolled in developmental education courses. Racial minority students were more disproportionately represented in developmental courses, comprising 52 percent of first-year students enrolled in developmental education courses but only 44 percent of non-developmental first years. This indicates that, at least at community colleges, female and minority students are more likely to enroll in developmental education courses than their white, male counterparts. Enrollment of racial minority students in developmental courses is particularly disproportionate, though by a margin of less than 10 percentage points.

In many other respects, students in developmental courses resemble their peers almost exactly. Whether or not they are taking developmental courses, more than half of first-year community college students are financially independent based on federal student aid guidelines; nearly half have personal or family incomes (in the case of dependent students) that are less than 150 percent of the federal poverty line; half are attending part time; and three-quarters of them expect to eventually earn a bachelor's degree. This broad similarity runs starkly counter to the significant disparity in racial composition and raises important questions regarding how students of different backgrounds come to be enrolled in developmental education. Given historical gaps in degree completion rates among minority and low-income students, as well as the risk to completion posed by part-time enrollment, both developmental students and the general population of first-year community college students are at substantial risk of leaving college before earning the bachelor's degrees so many of them seek.

**Table 1. Characteristics of AY 2011–12 First-Year Community College Students by Enrollment in Developmental Coursework**

Ever Taken Dev. Ed. Courses	Student Characteristic					
	Female	Non-white	Independent	Low-income <sup>^</sup>	Part-time	Bachelor's seeker
Yes	56%*	52%*	54%	50%	50%	76%
No	52%	44%	56%	48%	51%	76%

\*Difference is statistically significant at the 95% confidence level.  
<sup>^</sup>Defined as less than 150% of poverty level income

Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 National Postsecondary Student Aid Survey (NPSAS:12).

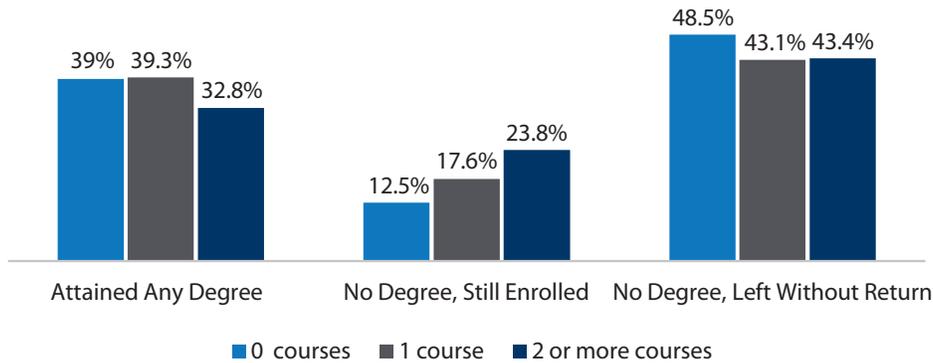
## STUDENTS WHO TAKE MULTIPLE DEVELOPMENTAL COURSES ARE LESS LIKELY TO COMPLETE A DEGREE IN SIX YEARS BUT ALSO LESS LIKELY TO DROP OUT

Based on the extra costs involved in developmental education, it could be assumed that high rates of developmental course enrollment would hurt graduation rates. However, this seems to be the case only for students who take more than one developmental course. Six years after enrolling in a community college, 39 percent of AY 2003–04 first-year students who did not take developmental coursework or who took only one developmental course had attained a bachelor's degree, associate degree, or other certificate. Only 33 percent of students starting in the same year who took two or more developmental education classes had attained a degree or certificate.

When students who had taken any developmental education failed to earn a credential within six years, they were more likely than non-developmental students to persist in higher education. Six years after initial enrollment, about 49 percent of students who never took developmental coursework had left postsecondary education without a degree, compared to 43 percent of students who took two or more developmental courses.

Interestingly, students who took only one developmental course appear to mimic some aspects of both groups. They attained credentials within six years at the same rate as non-developmental students, but when they failed to do so, they were more likely to persist. Of the three categories, students who took a single developmental course were least likely to have left postsecondary education with no degree six years after enrollment.

**Figure 4. Six-Year Degree Progress for AY 2003–04 Community College First-Year Students by Developmental Enrollment**

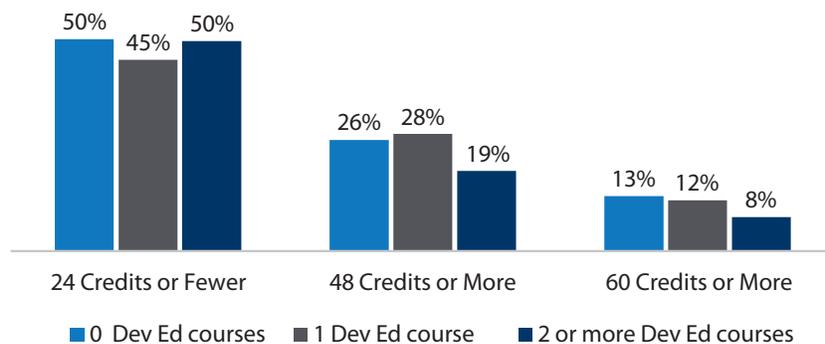


Source: U.S. Department of Education, National Center for Education Statistics, 2003–2004 Beginning Postsecondary Students Longitudinal Study, Second Follow-Up (BPS:04/09).

## DEVELOPMENTAL EDUCATION STUDENTS EARN CREDITS AT COMPARABLE RATE TO PEERS

Intuitively, it makes sense that students who take developmental education courses would earn degrees more slowly than students who do not. However, the data fail to confirm this hypothesis. About half of community college students had not completed more than 24 credit hours<sup>4</sup> by the end of their second year of enrollment, whether or not they took developmental education classes. Students who took only one developmental education class were slightly more successful, with only 45 percent having completed fewer than 25 credit hours. These students were also the most likely to earn credits at the minimum full-time rate; they were slightly more likely to earn at least 48 credits compared to non-developmental students and significantly more likely to do so compared to students who took multiple developmental courses.

**Figure 5. Credits Earned in First Two Years by Community College Students Who Entered in 2003–2004**



Source: U.S. Department of Education, National Center for Education Statistics, 2003–2004 Beginning Postsecondary Students Longitudinal Study, Second Follow-Up (BPS:04/09)

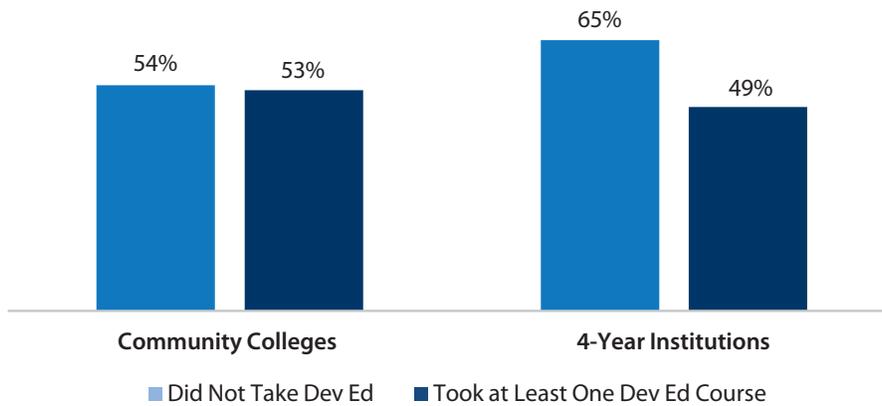
Taking two or more developmental courses seems to significantly affect students’ ability to earn credits at the minimum full-time rate. More than one-quarter of students who took no or only one developmental education class had earned 48 credits or more by the end of their second year of enrollment, compared to only 19 percent of students who took two or more developmental education classes. On-time completion is exceptionally rare for all students, regardless of development education: 13 percent of non-developmental students, 12 percent of students who took only one developmental course, and only 8 percent of those who took more than one developmental course earned 60 credits or more by the end of their second years enrolled.

<sup>4</sup> A student enrolled at the federally defined minimum full-time course load of 12 credits per semester would earn 24 credits in only one year (two semesters) and would earn 48 credits in two years (four semesters).

## MANY STUDENTS TAKE LONGER THAN SIX YEARS TO COMPLETE DEGREES, REGARDLESS OF DEVELOPMENTAL EDUCATION

While only about one in eight community college students earn a degree within the published program length, many more will eventually complete their programs. In fact, just over half of community college students who earned their first postsecondary credential during AY 2008–09 had started their postsecondary education within the past six years; the other 46 percent of community college graduates took longer than six years to complete their programs. This pattern did not differ significantly based on whether students had ever taken developmental education, with just over half of each group of completers finishing in six years or less. While 150 percent of the published program length is often pegged as a crucial threshold for assessing completion rates, almost half of all community college students who complete do so in over 300 percent of their published program lengths.

**Figure 6. Percentage of AY 2008–09 Degree Completers Who Completed in Six Years or Less**



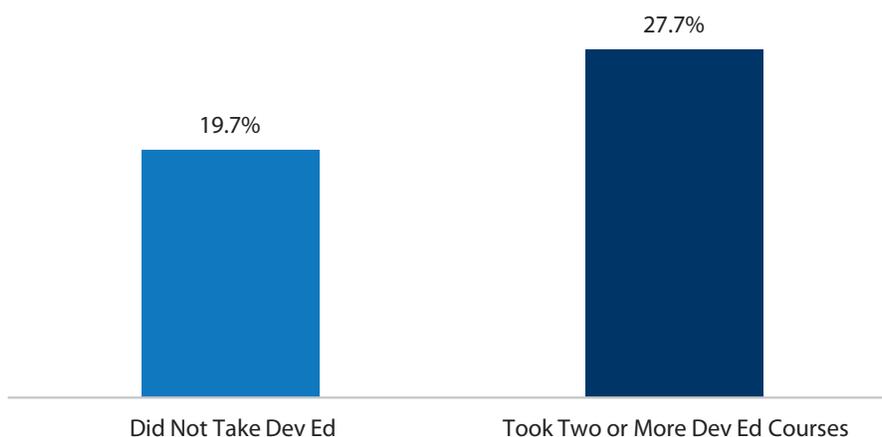
Source: U.S. Department of Education, National Center for Education Statistics, 2008–09 National Postsecondary Student Aid Study (NPSAS:09)

For students completing a bachelor’s degree, the story is marginally different. Sixty-five percent of bachelor’s degree completers who did not take developmental education were able to complete their degrees in six years, compared to only 49 percent of developmental education students. Taking developmental education courses may delay graduation more for students at four-year institutions, but by how much is unclear. More than a third of completers who did not take developmental classes also took longer than six years to graduate.

## MORE STUDENTS GETTING A BACHELOR’S DEGREE AND TAKING DEVELOPMENTAL EDUCATION STOPPED OUT BEFORE GRADUATING

The Baccalaureate and Beyond Longitudinal Study (NCES) collects data on students who successfully completed a bachelor’s degree. While the primary focus of this paper is on community college students, some important insights can be gained from looking at those students who successfully complete four-year degrees. As shown below, nearly 20 percent of students who did not take developmental education and 28 percent of students who did take developmental education stopped out of their education at least once before eventually completing their degree.

**Figure 7. Percentage of AY 2007–08 Bachelor’s Recipients Who Stopped Out before Completion**



Source: U.S. Department of Education, National Center for Education Statistics, Baccalaureate and Beyond Longitudinal Study (B&B:09)

Although these data represent bachelor’s degree recipients, they do suggest an important component of longer degree completion times for students in general. About one in every five non-developmental students who successfully earned bachelor’s degrees in AY 2007–08 had stopped out — that is, completely withdrawn from postsecondary education — at least once prior to completion. Stopping out was even more common among bachelor’s recipients who had taken two or more developmental courses, with over one in four withdrawing completely before going on to complete. Today’s students — many of them adult learners, full-time employees, or parents — often travel long and convoluted paths to degree completion, frequently enrolling part time, transferring, and taking breaks along the way. Understanding how students’ engagement with postsecondary education has changed in recent years has important implications for higher education policy and practice, including financial aid, curriculum design/credit acquisition, and the design of data collection and tracking programs.

## NATIONAL DATA DOES NOT CURRENTLY FOLLOW STUDENTS LONG ENOUGH TO DETERMINE THE IMPACT OF DEVELOPMENTAL COURSEWORK ON DEFAULT RATES

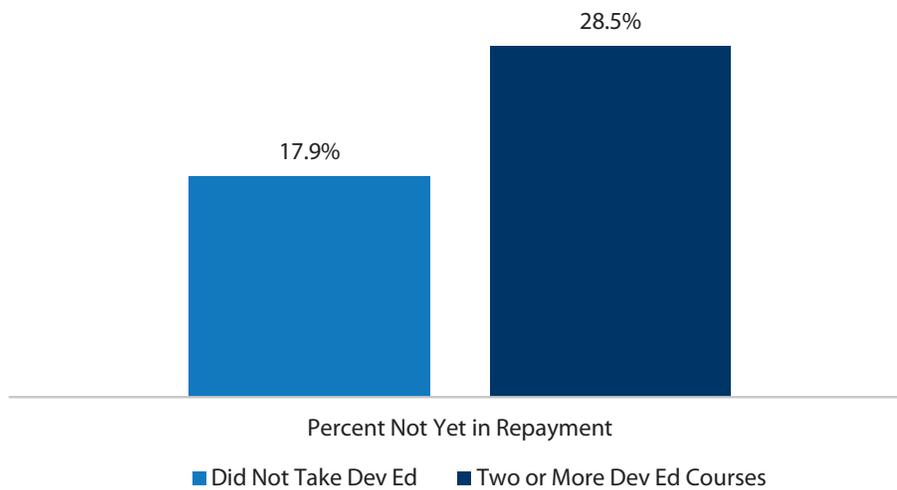
One relatively simple way in which to better monitor completion rates for all students would be to extend the tracking periods of national longitudinal surveys. While many students take a long time to finish their degrees, often stopping out along the way, students in developmental courses appear to take even longer, especially when completing a bachelor’s degree, and are more likely to stop out on their way to degree completion. Combined with the fact that student loan default does not become possible until, at minimum, a student-borrower loses the in-school deferment and enters repayment, these lengthy college-going patterns make it difficult to measure the ultimate impact of developmental education on default rates.

The recent shift to a 3-year period for cohort default rate monitoring shows that loan default often occurs at least two years after a borrower enters repayment. Since national data currently follows students for six years after first *entering* school, the only loan defaults captured by the data are for students who left school for good (not re-enrolling and resuming an in-school deferment) in less than 57 months (four years, nine months) and then defaulted in fairly short order, without a protracted period of troubled repayment that may include numerous deferments and forbearances. Many borrowers, especially those who have taken developmental courses, are still in school or have stopped out and re-started during the six-year data collection period, meaning that any eventual default these students might experience will not be captured by data collection programs. Moreover, the Department of Education has found that the average period of time between a loan entering repayment and the loan going into default is about four years, which suggests that a large percentage of all student loan defaults, perhaps even the majority, occur beyond the tracking period of the surveys we rely on to explore connections, patterns, and relationships in higher education (Lewin, 2012).

## DEVELOPMENTAL EDUCATION STUDENTS LESS LIKELY TO BE IN REPAYMENT SIX YEARS AFTER STARTING A DEGREE

The chart below shows that, six years after entering community college in AY 2003–04, students in developmental courses were significantly less likely to be in repayment on their loans. This delay may be connected to the finding that students who take developmental courses and fail to earn a degree are more likely to still be enrolled six years later. Only 39 percent of students who took at least two developmental courses were repaying their loans six years after initial enrollment, and 29 percent had not yet entered repayment. This leaves 32 percent of borrowers enrolled in developmental courses who had either paid their loans in full, had an ongoing deferment or forbearance, or were in default, as compared to 35 percent of non-developmental students. However, of the remaining 65 percent of non-developmental students, only 18 percent had not yet entered repayment on their loans and 47 percent were currently repaying their loans. While current national data can confirm that students in developmental courses stay in school longer, this data cannot shed any light on their ultimate ability to successfully repay student loans.

**Figure 8. Percentage of AY 2003–04 Community College First-Year Students Who Borrowed Not in Repayment Six Years Later**



Source: U.S. Department of Education, National Center for Education Statistics, 2003–2004 Beginning Postsecondary Students Longitudinal Study, Second Follow-Up (BPS:04/09)

## DISCUSSION AND IMPLICATIONS

Given the strong historical correlation between lower levels of academic attainment and lower socioeconomic status, students who took developmental courses were expected to have a substantially different profile from students who were better prepared for college-level coursework. Furthermore, it was expected that the additional investment of time and money necessary to progress from developmental coursework to credit-bearing classes would further inhibit the ability of students who had taken developmental courses to achieve positive outcomes. Though limited and inadequate for more detailed and comprehensive analysis, existing data did not support these hypotheses for community college students. While students in developmental courses are slightly more likely to be female and somewhat more likely to be students of color, they appear largely similar to other community college students in other demographics (including income), attendance patterns, and the desire to complete a bachelor’s degree. Furthermore, important metrics for financial and academic success, including the mix of grant and loan aid, persistence rates, credit acquisition, and completion rates, appear to be largely unaffected or even slightly improved for community college students who took one developmental course. Only community college students who took two or more developmental courses and those who took developmental courses at a four-year institution experienced noticeably worse outcomes compared to their non-developmental peers.

These unexpected findings raise important questions. Why do students who take a single developmental course, which is both an indicator of academic underpreparedness and a practical disadvantage in and of itself, tend to perform as well if not better than non-developmental students on key metrics? Do we conclude that, contrary to reason and intuition, having to take a developmental education course that costs time and money but earns students no credit does not put them at a measurable disadvantage?

**Potential effects of self-selection**

A self-selection bias may have a significant effect on outcomes seen in the data for developmental students relative to non-developmental students. Studies have shown that many students (about 40 percent) who are placed in or referred to developmental education classes do not enroll in development coursework (Bailey, Jeong, & Cho, 2010). Especially compared to students who enroll directly into credit-bearing courses at low-cost, open enrollment community colleges, those students who do enroll in developmental coursework may tend to be more motivated as a group. Their strong drive may outweigh both underpreparedness and additional burdens associated with developmental courses. These students have a goal and often appear to pursue that goal as successfully as peers who do not take developmental education classes, especially when they are able to progress to regular coursework after only one developmental course. Students who choose to enroll in development coursework based on a referral (not a mandatory placement) may also be more receptive to counseling and other forms of institutional support. On the other hand, students who were referred to developmental education but then enroll directly in regular coursework may underperform relative to both students who enroll in developmental courses and those who were actually referred to the regular curriculum.

There could also be an economic filter at work. Though data show that developmental students are about as likely as others to have incomes below 150 percent of the poverty line, enrolling despite the additional costs could indicate greater willingness and/or ability to devote limited financial resources to higher education. These students may even be marginally more likely to have other financial resources, like outside family support, from which to draw.

If a combination of strong motivation and financial resources outweighs the theoretical disadvantage of taking a *single* developmental course, it appears not to do so when the student takes two or more such courses. Or it may be that students who fall in this group are significantly less prepared, motivated, and/or financially secure. In all likelihood, the most motivated and financially secure of the students enrolled in developmental courses move on to credit-bearing coursework more quickly. Furthermore, the population of students who take more than one developmental course includes students who place into multiple developmental courses in their first semester and thus will tend to be the least academically prepared.

This double-filter theory also makes sense given other patterns in the data. For instance, it explains why taking a development course is associated with far lower six-year completion rates at four-year institutions (49 percent vs. 65 percent) but not at two-year institutions. Students enrolled in bachelor’s programs, which are more expensive and require more time, will already tend to be more invested; those who are averse to investing in higher education have already been filtered out by the time and monetary barriers, so enrollment in developmental courses does not constitute a significant filter for positive traits. It also explains why community college students who took only one developmental course tended to acquire credits at a faster rate and persist in postsecondary education more often than those who took none and those who took two or more. The self-selection principle might even explain the trends seen in financial aid, where students in developmental education tend to borrow somewhat less and are more likely to receive grant aid than their peers. These students’ greater willingness or ability to invest current resources in education might lead them to borrow less. Also, knowing that they will face additional out-of-pocket costs, they might be more proactive and informed participants in the student financial aid system, leading to more grant aid.

**Potential benefits of a developmental course**

There may be another explanation for the positive outcomes for students who took one developmental education course: It may be that beginning in a developmental education course actually provides an effective, beneficial transition into college coursework for underprepared students. If this is the case, then it might explain at least part of the apparent benefit of taking a single developmental course. Regardless of the extent of filtering, it may be that, for at least some subset of marginally prepared students, the benefits of taking a developmental course as an introduction to college-level work actually outweigh the negative effects of the additional costs. Unless the placement test or other evaluation method sorts students perfectly (and it does not), it follows that some of the students who would be better off in a developmental course nevertheless place into credit-bearing courses and do less well as a result (Scott-Clayton, 2012). Under the purely course-based theory, a developmental class functions as an academic orientation of sorts. In this case, students who substitute a regular class for an orientation might be better off on average, but students who need/use two or more classes on additional orientations will be worse off.

These two theories — self-selection bias and developmental education course as effective introduction to college work — could explain why students who take a single developmental course seem to achieve positive outcomes more frequently than either students who take no developmental courses or those who take two or more. Of course, these theories are not mutually exclusive; they could be operating in tandem. For instance, it makes sense that, even if a single developmental course benefits most students, the pool of students who must take additional developmental coursework will be more heavily weighted toward academic risk factors, such as underpreparedness.



### Implications for policy

If these theories do in fact explain observed disparities, they could be useful in shaping policy and practice for developmental students. On the one hand, they suggest that developmental education may be filtering out a large number of students who are less motivated or have fewer financial resources to pay for the extra coursework. This effect runs counter to open enrollment, a policy pillar of community colleges, which encourages all students to apply so long as they possess a high school diploma or equivalent. It is also troubling that students might be deterred from enrolling or persisting simply because they are unable to shoulder the additional financial burden imposed by the developmental system.

Furthermore, if all or most of the apparent benefit of a single developmental education course is due to self-selection, then even less is known about the academic and financial impact of actually taking such a course. Enrollment in a developmental course might impose substantial costs on students and deliver little if any benefit whatsoever, but a strong enough filter effect — one that deters students who are unwilling to persevere through developmental courses — would not only hide the costs but also create the appearance of benefit.

On the other hand, policymakers should be very interested in investigating the possibility that a single developmental course actually benefit students. Higher education in general and especially the two-year sector have long been struggling to improve retention, persistence, and completion rates, particularly in light of recent trends in costs and borrowing. Evidence that a developmental course provides a net benefit towards those goals might indicate that the program should be expanded to include more students. Enrollment in developmental courses might be either recommended or required of students who score below a higher threshold on the placement exam. Developmental coursework, perhaps hybridized with normal introductory material, could even be the default entry-level course that students must test out of, but only if they show a higher level of proficiency than currently required. More study could determine not only if but more specifically how a developmental course might benefit students, and, if so, how to provide that benefit to more students.

### Considerations

Designing such a study described above presents significant challenges. Existing data resources do not allow us to determine to what extent self-selection and the independent benefit effect — or perhaps some other factor — may be operating to bring about the findings described above. Furthermore, it would be exceedingly difficult to design a randomized experiment that would answer this question without doing serious harm to the programs and their students. However, new research efforts may yield more conclusive results.

Given a large enough sample, it may be beneficial to conduct a regression-discontinuity analysis (comparing the students who fell just above or just below the test score threshold for placement in developmental education). Such a study might yield some insight, but it would still face the bias introduced by the enrollment decisions of students who scored below the threshold. One (expensive) option might involve randomly selecting students who placed into developmental coursework and offering to fund the full cost of their developmental courses. This funding would lower the barriers for enrollment, attracting more students who are less motivated and/or invested in higher education. A robust mixed methods approach could track students as they entered community college, examining matriculation behaviors between those who did and did not place into developmental courses. The study would continue to track and interview students as they progress through either developmental coursework or the regular curriculum; however, extended tracking and repeated interview sessions can be costly.

Until more detailed and narrowly designed research is carried out, the impact of developmental coursework on postsecondary students will remain largely unclear. Worrysome under any circumstances, this lack of clarity is particularly troubling given the complicated array of current trends, goals, and strategies in higher education policy, which, if not methodically pursued and carefully tracked, can end up working at cross-purposes. Given workforce needs and the strong evidence of higher education's individual and communal benefits, policymakers often stress that every student, regardless of academic preparedness or financial support, should pursue some form of postsecondary learning. Policymakers have responded to these needs in part by establishing non-credit developmental courses and expanding the availability of loan funds, which may in turn increase the time and cost to complete a program. These two factors may harm program of study completion rates. By increasing the total number of credentials awarded, the strategy may accomplish a benefit, but new costs accompany it. More individuals will attempt higher education unsuccessfully, enrolling in developmental courses only to withdraw from school some time later with no credential, few if any credits, and perhaps a sizable debt to show for it. The policy may increase attainment but also increase the drop-out rate, borrowing rate, average loan debt, and even loan default, all of which run counter to other important policy goals. As policymakers seek to improve our system of higher education in numerous ways at once, it is critical that they have access to research exploring the possibility, extent, and sources of such trade-offs in order to maximize the net benefits of their efforts.

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