

Getting Prepared



2016

Recent high school graduates and developmental courses

Tuition Costs

Getting Prepared 2016

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About Minnesota SLEDS

Minnesota has developed the Minnesota Statewide Longitudinal Education Data System (SLEDS) matching student data from pre-kindergarten through completion of postsecondary education and into the workforce. SLEDS facilitates analysis to address a range of educational programmatic and delivery methods to gauge their effectiveness, and ease the design of targeted improvement strategies that help students.

SLEDS brings together data from education and workforce to:

- Identify the most viable pathways for individuals in achieving successful outcomes in education and work;
- Inform decisions to support and improve education and workforce policy and practice, and
- Assist in creating a more seamless education and workforce system for all Minnesotans.

The Minnesota P-20 Education Partnership governs the SLEDS system. The project is managed jointly by the Minnesota Office of Higher Education (OHE), Minnesota Departments of Education (MDE), and Employment and Economic Development (DEED).

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Executive Summary

Minnesota is a state highly regarded for the academic achievement of both K-12 and college students. Participation in developmental education is one measure of the academic readiness of high school graduates for college. Minnesota policymakers have expressed concerns about developmental education. Developmental education can be costly both in terms of programmatic expenditures, tuition charged and opportunity costs for students who must spend additional time finishing developmental education requirements before starting degree-specific courses. Developmental education should not be generalized as a negative experience for all students. Developmental courses serve a critical role in preparing lower-skilled individuals for college level coursework and future employment.

Estimates of national costs for developmental education range from \$1 billion to \$3 billion annually. Developmental education costs can be classified in multiple ways. Students incur direct costs of developmental education through tuition charged per credit. Institutions charge the same tuition rate for developmental courses as regular college courses. The average per credit rate charged at Minnesota public two-year colleges for 2015-2016 academic year was \$161¹. This rate is considerably lower than the per credit rate charged at State Universities (\$239) and the University of Minnesota (\$447).^{1,2} A portion of tuition costs for developmental courses may be offset with financial aid such as federal Pell Grants and Minnesota State Grants.

Background

Getting Prepared 2016 fulfills the legislative mandate on developmental education enrollment within two years of their high school graduation at Minnesota postsecondary institutions pursuant to *Minnesota Statute 13.32*, subdivisions 3 and 6. In 2015, the Minnesota Legislature requested additional information on tuition costs incurred by students enrolled in developmental courses.³ This report, *Getting Prepared 2016 Tuition Costs*, presents data on developmental course-taking and tuition costs associated with developmental education for graduates from a Minnesota public high school between 2007 and 2014.

In this report, “developmental education” refers to courses and programs offered by postsecondary institutions to prepare students for success in college-level work. Developmental coursework helps students develop the skills and knowledge that will be required in college level courses in mathematics, reading, writing, and English as a Second Language. In addition to course work, other academic support services may be provided to help students. According to OHE enrollment data, approximately 60 percent of the 119,000 developmental credits in fall 2014 were by adult learners and only 40 percent by recent high school graduates.

Data for the 2016 report was provided by the Minnesota Statewide Longitudinal Education Data System (SLEDS). Unless otherwise indicated college enrollment data refers to enrollment in both public and private colleges. Data on tuition costs associated with developmental education was provided by Minnesota State Colleges and Universities (MnSCU) and the University of Minnesota (UMN). Data was not requested from private colleges at this time, due to these institutions making up only two percent of total developmental education enrollments. Tuition costs include tuition charged for developmental

¹ Minnesota State Colleges and Universities (2015). *FY2016 Tuition and Fee Rates (updated November 2015)*. Retrieved from <http://www.finance.mnscu.edu/budget/tuitionandfees/>.

² University of Minnesota Board of Regents (2015). Finance Committee June 2015. Retrieved from http://regents.umn.edu/sites/regents.umn.edu/files/docket/JUN_2015_FIN_Docket.pdf.

³ Minnesota Laws 2015, 1st Special Session, Chapter 3, Section 68.

education credits taken by each student enrolling in developmental education courses within two years of high school graduation.

Findings

Getting Prepared 2016 tracks graduates enrolled in both Minnesota public and private postsecondary institutions. Data by individual public high school can be found in the separate report titled “Supplemental Data - Tuition Costs by School”.

Twenty-six percent of 2013 graduates enrolled in developmental courses at a Minnesota college within two years of graduation.

Approximately 60 percent of the 119,000 developmental credits in fall 2014 were by adult learners and only 40 percent by recent high school graduates. The cost estimates in this report only reflect the 40 percent of developmental credits taken by recent high school graduates who enrolled in developmental education courses within two years of high school graduation.

Direct Costs to Recent High School Graduates

- ✓ The class of 2013 paid \$11,806,000 in tuition developmental education as shown in Table 2. From 2007 to 2014, costs have ranged from \$10 million to \$13 million.
- ✓ The average cost per credit hour of developmental education varied by system⁴. The graduating class of 2013 paid:
 - \$159 at State Colleges
 - \$181 at State Universities
 - \$373 at University of Minnesota
- ✓ Developmental education direct costs decline as developmental enrollments decrease. Public high school graduates from 2013 enrolled in 18% fewer developmental credits than the class of 2009.

Implications for Underserved Students

- ✓ Developmental education costs fall heavily on students already underserved by higher education.

STUDENTS OF COLOR

- Among the 2013 high school graduates enrolled in college, only 19% were students of color. However, students of color represented 35% of students enrolled in developmental education and 42% of the total credits enrolled.
- Students of color graduating from high school in 2013 paid approximately \$5.0 million in tuition costs for developmental education out of \$11.8 million total.

LOWER-INCOME STUDENTS

- Among the 2013 high school graduates enrolled in college, only 30% were students who participated in free or reduced price lunch in high school. However, free or reduced price lunch participants represented 52% of students enrolled in developmental education and 57% of the total credits enrolled.
- Lower-income students graduating from high school in 2013 paid approximately \$6.7 million in tuition costs for developmental education out of \$11.8 million total.

⁴ Averages are weighted by number of developmental education credits at each institution and prorated if the students qualified for reduced tuition due to policies such as tuition banding.

Interaction with Student Financial Aid

- ✓ Approximately 40% of 2013 graduates enrolling in developmental education received a Pell Grant and/or a Minnesota State Grant.

Policy Options for States

Developmental education costs can be classified in multiple ways. Of primary interest is the direct cost to students in the form of tuition paid for developmental education courses. A second type of cost is the direct costs to the state in the form of state appropriations allocated to institutions to subsidize instruction, including developmental education.

Providing information about the costs associated with developmental education adds to policymakers' understanding of this complex issue. Measuring the costs and benefits of the varying developmental education interventions can assist states in determining future policy as developmental education has significant implications for access to, retention, and completion within higher education. Most states are seeking strategies for reducing the costs of developmental education and/or making it more effective.

Research has identified several options for states seeking to reduce the costs of developmental education.

- **Reinforce college ready standards in high school:** States have a role to play in reducing the need for developmental education by “setting and broadly communicating college-readiness standards, providing early assessment opportunities for high school students, and ensuring that high school and college-entrance standards and expectations are aligned” (Jobs For the Future & Achieving the Dream, 2009).
- **Encourage postsecondary institutions to innovate in order to reduce the costs of developmental education:** States can significantly influence postsecondary retention and completion rates as well as costs among developmental students by incentivizing innovation by institutions. Innovations can vary as institutions customize programs to meet student needs.
- **Invest in successful programs yielding long term benefits that may outweigh short-term costs:** Given the positive benefits associated with successful completion of developmental education and higher education, the best avenue for reducing overall costs is to invest in the most successful programs. Phipps (1998) notes that successful developmental programs can offset costs through the substantial revenues gained upon successful program completion.

Conclusion

Developmental education serves a critical role in preparing lower-skilled individuals for college level coursework and future employment. To students successful in developmental education, the direct cost of tuition paid is balanced by obtaining academic skills needed to be successful in educational attainment. Hodara and Xi (2008) found that successfully completing developmental reading and writing credits led to an increase in earnings and employability – successful outcomes for both students and the state. Policy issues related to developmental education encompass areas on both sides of the K-12 to higher education transition: college readiness, language barriers, student support, college affordability, institutional support, retention, completion and workforce development. Ensuring alignment among K-12 and higher education policies is central to ensuring successful outcomes for students.

Getting Prepared 2016 Tuition Costs calculates the direct costs of developmental education for recent high school graduates. This cost analysis omits developmental education enrollments by adult learners – approximately 60 percent of the 119,000 developmental credits taken in fall 2014 were by adult learners. Strategies to promote success in developmental education among recent high school graduates may differ from successful strategies for adult learners.

Introduction

Minnesota is a state highly regarded for the academic achievement of both our K-12 and college students. Nationally, Minnesota ranks high in high school graduation and college attainment, but there are significant disparities for students of color and lower-income students. For Minnesota to remain globally competitive, our education and workforce systems need to ensure every high school student is on track to pursue the education necessary for careers of the future. The transition from high school to college can be more difficult for some students than others.

Participation in developmental education is one measure of the academic readiness of high school graduates for college level coursework. Minnesota policymakers have expressed concerns about the prevalence of developmental education, what form it should take, high school versus college responsibilities and who should pay for the classes. Developmental education is costly both in terms of programmatic expenditures, tuition charged and opportunity costs for students who must spend additional time finishing developmental education requirements before starting degree-specific courses.

Examining Minnesota public high school graduates from the Classes of 2007-2014 enrolled in postsecondary education, this report provides insight into the costs associated with enrollment in developmental education by recent Minnesota public high school graduates.

Minnesota policymakers and families are concerned with the affordability of college given rising tuition costs, lagging financial aid and increasing reliance on debt. For students enrolling in developmental education, the additional credits add to the overall cost of college and delay their time to completion. Policymakers are thus faced with the complicated task of ensuring students obtain critical learning to facilitate college success without creating additional barriers.

The Costs of Developmental Education

For 2004-2005 it is estimated that \$1.13 billion was spent nationally on developmental education (Pretlow & Wathington, 2011). Strong American Schools (2009) estimate the national cost of remediation in public institutions to be \$2.31 to \$2.98 billion dollars for the academic year 2004-2005. The \$2.31 to \$2.98 billion cost is split between students (31%) in the form of tuition and institutional subsidies paid by states and the federal government (69%). Estimates of national costs for developmental education have been relatively stable over the most recent decade. The reason for the relative stability of costs may be the result of cost efficiencies achieved by institutions in offering these courses, the introduction of policies limiting access to developmental education courses and overall postsecondary education, or shifts in developmental education programs from credit bearing courses to non-course based interventions (Pretlow & Wathington, 2011).

Developmental education costs can be classified in multiple ways. Of primary interest is the direct cost to students in the form of tuition paid for developmental education courses. A second type of cost is the direct costs to the state in the form of state appropriations allocated to institutions to subsidize instruction, including developmental education. Direct costs to institutions may occur for assessment, advising, tutoring, supplemental instruction and lab fees (The Institute for Higher Education Policy, 1998). Finally, indirect costs may also be considered. Indirect costs accrue to the student in the form of opportunity costs and to the state in the form of foregone tax revenue.

Direct Costs to Students

Students incur direct costs of developmental education through tuition charged per credit. Institutions charge the same tuition rate for developmental courses as regular college courses. The average per credit rate charged at Minnesota public two-year colleges for 2015-2016 academic year was \$161⁵. This rate is considerably lower than the per credit rate charged at State Universities (\$239) and the University of Minnesota (\$447)^{1,6}.

A portion of tuition costs for developmental courses may be offset with financial aid such as Pell Grants and Minnesota State Grants. Thirty semester credits of developmental courses may be considered eligible for financial aid, including Pell Grants, if the student is admitted into an eligible postsecondary program and the developmental courses are taken within the course requirements of that program (U.S. Department of Education, 2015). However, the developmental course cannot be below the educational level needed for a student to successfully pursue the program after one year in that course. Minnesota State Grant utilizes similar requirements for eligibility of developmental courses for state financial aid but does not limit the number of courses to 30 semester credits (Office of Higher Education, 2015).

The majority of students at community and technical colleges rely heavily on federal and state financial aid, such as Pell Grants to fund their educations. Using financial aid for developmental courses counts toward the student's lifetime financial aid eligibility. Pell grants are limited to 12 full-time semesters (144 credits). Minnesota State Grants are limited to 120 semester credits. A student may exceed the lifetime financial aid limits prior to completing their program. The financial burdens of developmental education for students are commonly cited in the research literature (Bailey, Jeong, & Cho, 2008; Completion by Design, 2012).

Nationally, students do not indicate that added costs from developmental education changed their immediate decision to enroll in college but resistance to enrollment in developmental education and frustration is common (Completion by Design, 2012; Bailey, 2009). Developmental education credits generally do not satisfy program completion requirements. Therefore, "placement into developmental education can lengthen students' time and increase their cost to earn a credential" (Pretlow & Wathington, 2011).

At several public two-year colleges studied, Asmussen (2013) found that students enrolled in developmental math, reading and writing courses were more likely to leave college with debt and no credential. Additional developmental education requirements to a student's degree program can result in some students being "non-starters" – individuals who leave college with zero credits completed. Asmussen (2013) found 10 percent of students at the colleges studied were "non-starters." These students are likely to incur student loan debt prior to dropping out, which negatively impacts their chances of later enrollment and successful debt repayment.

Developmental education should not be generalized as a negative experience for all students. Developmental courses serve a critical role in preparing lower-skilled individuals for college level coursework and future employment. Hodara and Xi (2008) found that successfully completing developmental reading and writing credits led to an increase in earnings and employability – successful outcomes for both students and the state.

⁵ Minnesota State Colleges and Universities (2015). *FY2016 Tuition and Fee Rates (updated November 2015)*. Retrieved from <http://www.finance.mnscu.edu/budget/tuitionandfees/>.

⁶ University of Minnesota Board of Regents (2015). Finance Committee June 2015. Retrieved from http://regents.umn.edu/sites/regents.umn.edu/files/docket/JUN_2015_FIN_Docket.pdf.

Other Costs

Direct costs to students are the focus of this report. However, other costs of developmental education should be considered in developing policy.

Importantly, direct costs to the state occur in the form of state appropriations to institutions for instructional costs and other student services. For example, the University of Minnesota Twin Cities estimates that the state appropriation reduces the tuition charged students by \$4,277 per full-time student for the 2015-2016 academic year (\$165 per credit assuming 13 credits per semester).

Two types of indirect costs could be considered. First, students incur opportunity costs in pursuing a postsecondary education in lieu of working full-time. “Opportunity costs that may negatively influence students’ wages through both foregone earnings and the inhibiting of students’ ability to accumulate work experience.” (Hodara & Xiu, 2014). The opportunity cost may vary by the level of developmental education required. Traditional developmental education consists of sequential courses that a student must complete advancing them to college-level coursework. “The length and complexity of the developmental sequence increases the opportunity costs of schooling, in that students need to spend extra time and resources on developmental education instead of in the labor market gaining wages and working experience” (Hodara & Xiu, 2014).

The second type of indirect cost is the foregone tax revenue that would accrue to the state if the developmental education student successfully completed higher education. Given the negative relationship between developmental education and completion, it would be rational to include an estimate of these costs. However, the methodology for estimating the foregone tax revenue to this population of non-completers is beyond the scope of this report.

Defining Developmental Education

In this report, “developmental education” is a term used to refer to programs offered by postsecondary institutions to prepare students for success in college-level work. “Remedial instruction,” the term used in *Minnesota Statutes* 13.32, can imply courses that repeat material taught earlier that the student did not learn adequately the first time. For many educators, “developmental education” is a broader term that encompasses pre-college-level education and other academic support services the student may benefit from for any reason.

Developmental coursework helps students develop the skills and knowledge that will be required in college level courses in mathematics, reading, writing, and English as a Second Language. College level math generally requires skills in intermediate algebra. College level English requires the ability to make clear arguments. College level reading involves the ability to read and interpret text, identify main points, tone, purpose and inferences to discuss the author’s argument (Conley, 2007).

In addition to course work, other academic support services may be provided to help students and can include summer bridge programs, peer tutoring programs, cohort-based learning communities, or more personalized advising. Colleges typically assess the academic readiness of high school graduates for college level coursework. However, postsecondary technical programs may not require college level skills in reading, writing and/or math.

Developmental education allows a college with open door missions to accept promising students who may lack necessary preparatory coursework. Besides helping students improve their skills in specific areas, developmental education serves the broader function of helping to expand college access.

Getting Prepared

Getting Prepared fulfills the legislative mandate regarding developmental education data pursuant to *Minnesota Statute* 13.32, subdivisions 3 and 6. The report provides summary information about Minnesota public high school graduates who enrolled in developmental courses within two years of their high school graduation at Minnesota postsecondary institutions.

In 2015, the Minnesota Legislature requested additional information on developmental education costs.

Minnesota Laws 2015 1st Special Session

Chapter 3, Section 68.

DEVELOPMENTAL COURSE TAKING; REPORT.

The commissioner of education, in consultation with the commissioner of the Office of Higher Education, the chancellor of the Minnesota State Colleges and Universities, and the president of the University of Minnesota, shall collect and report the following information to the legislature by March 1, 2016:

- (1) the tuition costs incurred by students enrolled in noncredit-bearing college courses at the University of Minnesota and the Minnesota State Colleges and Universities for developmental or remedial purposes for the 2014-2015 and preceding four school years; and
- (2) for the same time period, the Minnesota high schools that graduated the students in clause (1), the aggregate number of students from each high school in clause (1), and the tuition cost under clause (1) for students from each high school.

Getting Prepared 2016 Tuition Costs, includes data on college enrollments, developmental course-taking and tuition costs associated with developmental education occurring within two years of high school graduation for students graduating from a Minnesota public high school between 2007 and 2014.

Enrollment Data

Data for the 2016 report was provided by the Minnesota Statewide Longitudinal Education Data System (SLEDS), managed jointly by the Office of Higher Education (OHE), Minnesota Departments of Education (MDE) and Employment and Economic Development (DEED).

High school enrollment and graduate data included 472,500 public high school graduates records from 2007 to 2014. Graduates are defined as a student with a status end code of “8” or “9” in the specified year. **College enrollment data** included 1.2 million fall term records from the Minnesota Office of Higher Education and 2.4 million enrollment records from the National Student Clearinghouse for all available years. College students are classified based on their first college of enrollment. Analysis was focused on the first two years after high school graduation. Unless otherwise indicated college enrollment data refers to enrollment in both public and private colleges.

Tuition Cost Data

Data on tuition costs associated with developmental education were provided by Minnesota State Colleges and Universities (MnSCU) and the University of Minnesota (UMN). Tuition costs include tuition charged for developmental education credits taken for each student enrolling in developmental education courses within two years of high school graduation. In instances where students received a reduced tuition rate based on tuition banding policies, the cost associated with developmental courses is reduced proportionally. No fees are included in the data shown. Fees generally apply to enrollment in any course above a given minimum level and therefore are not uniquely associated with developmental education courses on a per credit basis.

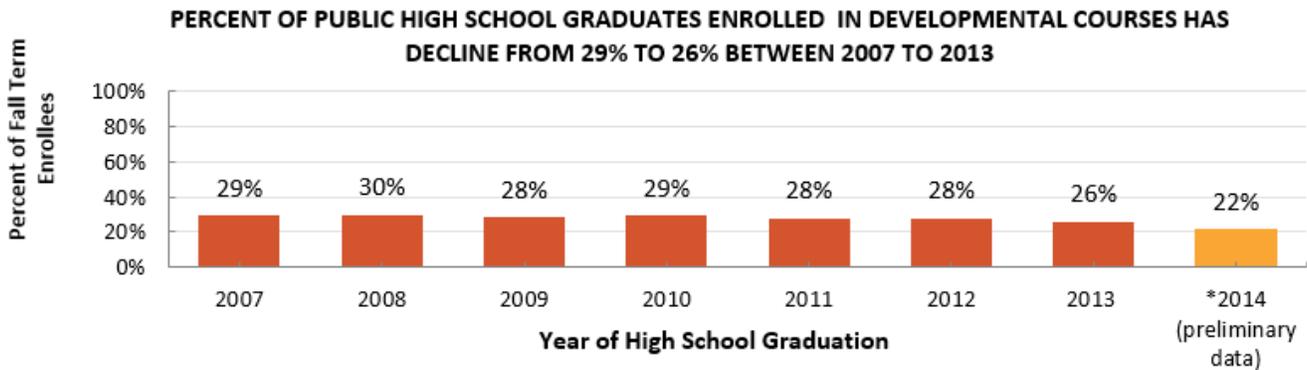
Findings

Getting Prepared 2016 tracks graduates enrolled in both Minnesota public and private postsecondary institutions.

Developmental Education Enrollments

- ✓ In Minnesota, the percent of public high school graduates enrolled in one or more developmental credits during fall term has decline from 29 to 26 percent between 2007 and 2013.

Hi



Approximately 60 percent of the 119,000 developmental credits in fall 2014 were by adult learners and only 40 percent by recent high school graduates.

Developmental Education Course-Taking Patterns

- ✓ **State rates mask differences in developmental education course-taking within college sectors.**
Among graduates enrolled in developmental education:
 - 85 percent enrolled at Minnesota public two-year colleges
 - 12 percent enrolled at Minnesota State Universities
 - 2 percent enrolled at private for-profit colleges in Minnesota
 - 1 percent enrolled at the University of Minnesota
 - 1 percent enrolled at private not-for-profit colleges in Minnesota
- ✓ **Public two-year colleges show the percent of high school graduates participating in developmental education courses within two years of graduating ranging from a low of 49 percent in 2013 to a high of 55 percent in 2010.**
 - Minnesota public two-year colleges have open admission policies and admit all students with a high school diploma in order to serve a larger population. This open admissions policy results in two-year colleges attracting students with a broad range of preparedness.
- ✓ **Public four-year colleges show a steady decrease in the percent of recent graduates participating in developmental education courses within two years of graduating.**
 - State universities show a decrease in the percent of students enrolled in developmental education between 2007 (26%) and 2013 (17%).
 - University of Minnesota enrollment in developmental education courses ranged from 3 percent of students in 2007 to 2 percent in 2013.

Table 1: Where do Students Take Their Developmental Courses? Number of Students Enrolling in Developmental Education by College Offering Courses

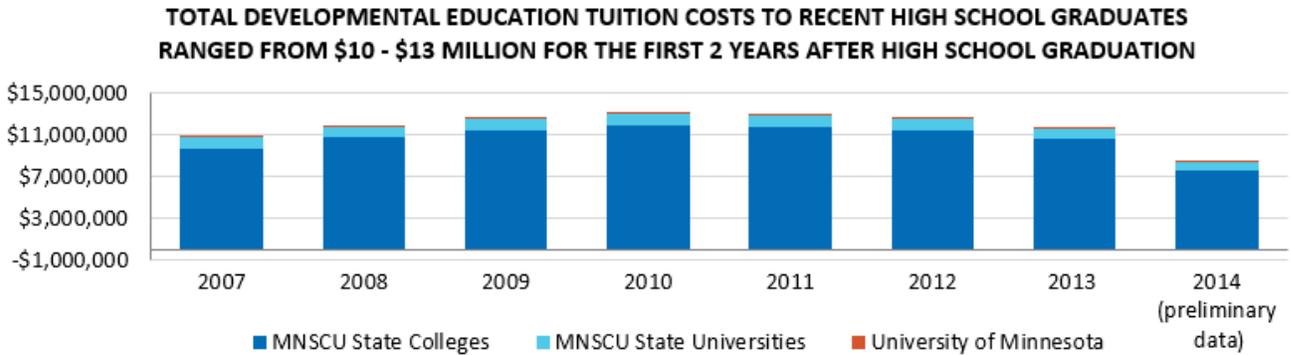
**Graduates Enrolled in Developmental Courses within 2 Years of High School Graduation
By Sector Offering Developmental Education Credits
(Includes students first enrolling outside Minnesota then transferring to a Minnesota institution)**

Sector Offering Courses	Total Minnesota	Minnesota Public Institutions		Public Two-Year Colleges		State Universities	
		Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education	Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education	Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education
Year of High School Graduation							
2007	10,161	9,749	96%	8,041	79%	1,584	16%
2008	10,526	10,046	95%	8,519	81%	1,416	13%
2009	9,884	9,503	96%	8,130	82%	1,281	13%
2010	10,051	9,760	97%	8,480	84%	1,179	12%
2011	9,431	9,196	98%	8,062	85%	1,059	11%
2012	9,066	8,904	98%	7,694	85%	1,089	12%
2013	8,452	8,266	98%	7,153	85%	997	12%
2014 (preliminary data)	6,222	6,130	99%	5,193	83%	877	14%

Sector Offering Courses	University of Minnesota		Private Not-for-Profit Institutions		Private For-Profit Institutions	
	Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education	Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education	Number of Students Enrolled in Developmental Education	Percent of Students Enrolled in Developmental Education
Year of High School Graduation						
2007	124	1%	150	1%	379	4%
2008	111	1%	170	2%	412	4%
2009	92	1%	106	1%	361	4%
2010	101	1%	97	1%	280	3%
2011	75	1%	100	1%	214	2%
2012	121	1%	55	1%	176	2%
2013	116	1%	72	1%	170	2%
2014 (preliminary data)	60	1%	38	1%	55	1%

Direct Costs to Recent High School Graduates

- ✓ The total tuition incurred by students enrolling in developmental education within two years of high school graduation at Minnesota’s public institutions was \$11,806,000 for the class of 2013 as shown in Table 2.



- ✓ The average cost per credit hour of developmental education varied by system⁷.

For the graduating class of 2013 paid:

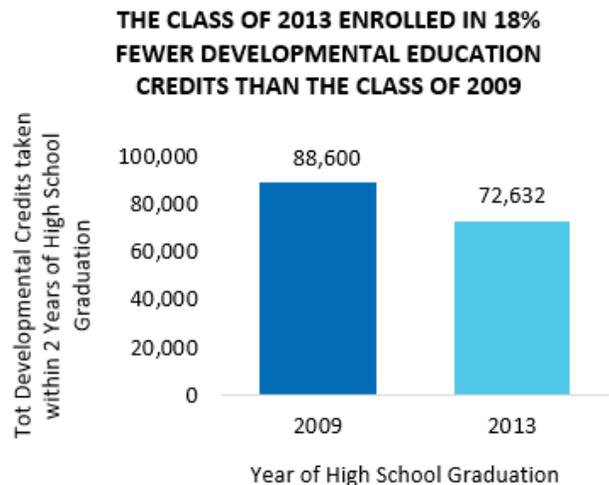
- \$159 at State Colleges
- \$181 at State Universities
- \$373 at University of Minnesota

Students pay the same tuition rate regardless if the credit is developmental or college level. As the legislature has emphasized freezing tuition or minimizing cost increases for students, the per credit rate paid by students enrolling in developmental courses has been frozen or only minimally increased. Tuition rates at MnSCU state colleges has remained unchanged over the most recent four years (FY2013-FY2016) and will decrease by one percent in fiscal year 2017.

- ✓ **Developmental education costs decline as developmental education enrollments decrease.**

- 2013 public high school graduates enrolled in 18% fewer developmental education credits than the class of 2009.

The decline in developmental course enrollments may be explained by a number of factors. First, the number of recent high school graduates enrolling in college during this period decreased by 8%. Declines in college enrollment have historically occurred following a recessionary period as some graduates choose to enter a rebounding job market in lieu of going to college.



⁷ Averages are weighted by number of developmental education credits at each institution and prorated if the students qualified for reduced tuition due to policies such as tuition banding.

Table 2: Number of Students Enrolling in Developmental Education by Institution Offering Courses Graduates Enrolled in Developmental Courses within 2 Years of High School Graduation

All Minnesota Public Institutions

Year of High School Graduation	Number of Students (Unduplicated Count)	Total Dev Ed Credits in Fall terms	Total Dev Ed Credits in Spring or Summer terms	Total Dev Ed Credits taken in First 2 Years after High School	Tuition Charged for Dev Ed Courses	Average Per Credit Tuition Rate*
2007	9,464	57,183	22,172	79,355	\$10,869,403	\$137
2008	9,770	60,650	24,710	85,360	\$11,905,404	\$139
2009	9,214	60,335	26,944	87,279	\$12,599,218	\$144
2010	9,503	60,353	25,782	86,135	\$13,092,819	\$152
2011	8,898	56,994	24,495	81,489	\$13,028,687	\$160
2012	8,660	54,439	22,480	76,919	\$12,681,389	\$165
2013	8,067	51,016	20,618	71,634	\$11,805,570	\$165
2014 (preliminary data)	6,131	38,674	13,120	51,794	\$8,544,082	\$165

MnSCU Two-Year Public Colleges

Year of High School Graduation	Number of Students	Total Dev Ed Credits in Fall terms	Total Dev Ed Credits in Spring or Summer terms	Total Dev Ed Credits taken in First 2 Years after High School	Tuition Charged for Dev Ed Courses	Average Per Credit Tuition Rate*
2007	8,183	51,648	21,182	72,830	\$9,656,928	\$133
2008	8,650	56,111	23,808	79,919	\$10,860,214	\$136
2009	8,277	55,816	25,845	81,661	\$11,489,641	\$141
2010	8,615	55,636	24,472	80,108	\$11,834,911	\$148
2011	8,198	52,662	23,451	76,113	\$11,829,569	\$155
2012	7,811	49,990	21,439	71,429	\$11,392,162	\$159
2013	7,248	46,962	19,712	66,674	\$10,638,252	\$160
2014 (preliminary data)	5,194	35,188	12,712	47,900	\$7,637,797	\$159

MnSCU State Universities

Year of High School Graduation	Number of Students	Total Dev Ed Credits in Fall terms	Total Dev Ed Credits in Spring or Summer terms	Total Dev Ed Credits taken in First 2 Years after High School	Tuition Charged for Dev Ed Courses	Average Per Credit Tuition Rate*
2007	1,538	5,036	949	7,523	\$1,074,223	\$143
2008	1,285	4,119	874	6,278	\$926,374	\$148
2009	1,284	4,169	1,099	6,552	\$1,015,143	\$155
2010	1,182	4,356	1,290	6,828	\$1,145,977	\$168
2011	1,064	4,055	1,027	6,146	\$1,094,663	\$178
2012	1,092	4,035	1,041	6,168	\$1,135,118	\$184
2013	998	3,660	893	5,551	\$1,019,567	\$184
2014 (preliminary data)	877	3,270	408	4,555	\$825,773	\$181

University of Minnesota

Year of High School Graduation	Number of Students	Total Dev Ed Credits in Fall terms	Total Dev Ed Credits in Spring or Summer terms	Total Dev Ed Credits taken in First 2 Years after High School	Tuition Charged for Dev Ed Courses	Average Per Credit Tuition Rate*
2007	124	499	41	540	\$138,252	\$256
2008	111	420	28	448	\$118,816	\$265
2009	92	350	0	350	\$94,433	\$270
2010	98	361	20	381	\$111,930	\$294
2011	74	277	17	294	\$104,455	\$355
2012	120	414	0	414	\$154,109	\$372
2013	116	394	13	407	\$147,751	\$363
2014 (preliminary data)	60	216	0	216	\$80,512	\$373

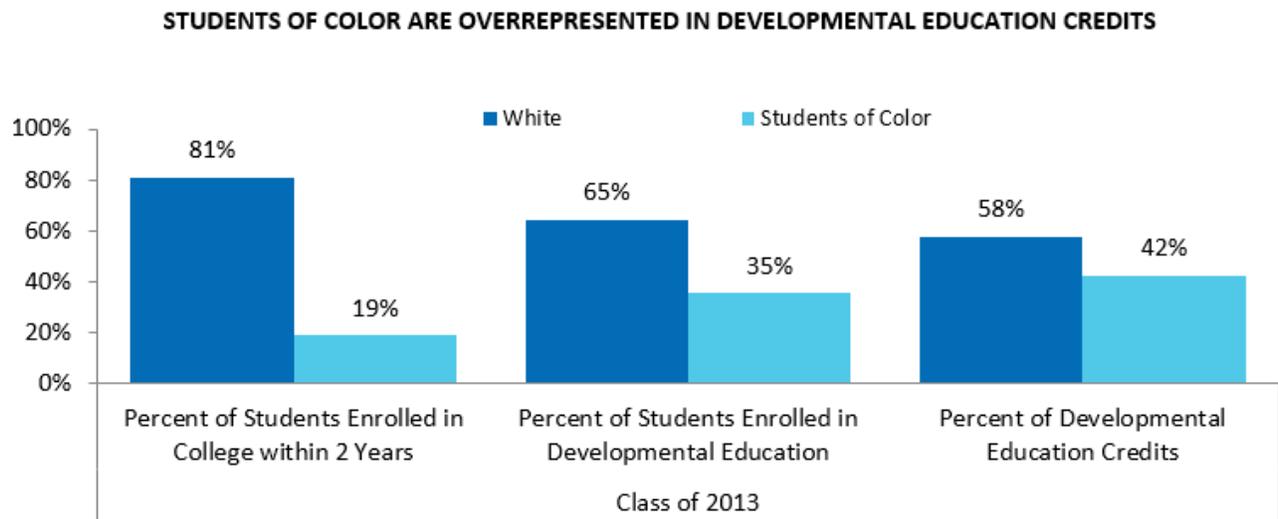
* Averages are weighted by number of developmental education credits at each institution and prorated if the students qualified for reduced tuition due to policies such as tuition banding.

Implications for Underserved Students

- ✓ **Developmental education costs fall heavily on students already underserved by higher education.**

STUDENTS OF COLOR

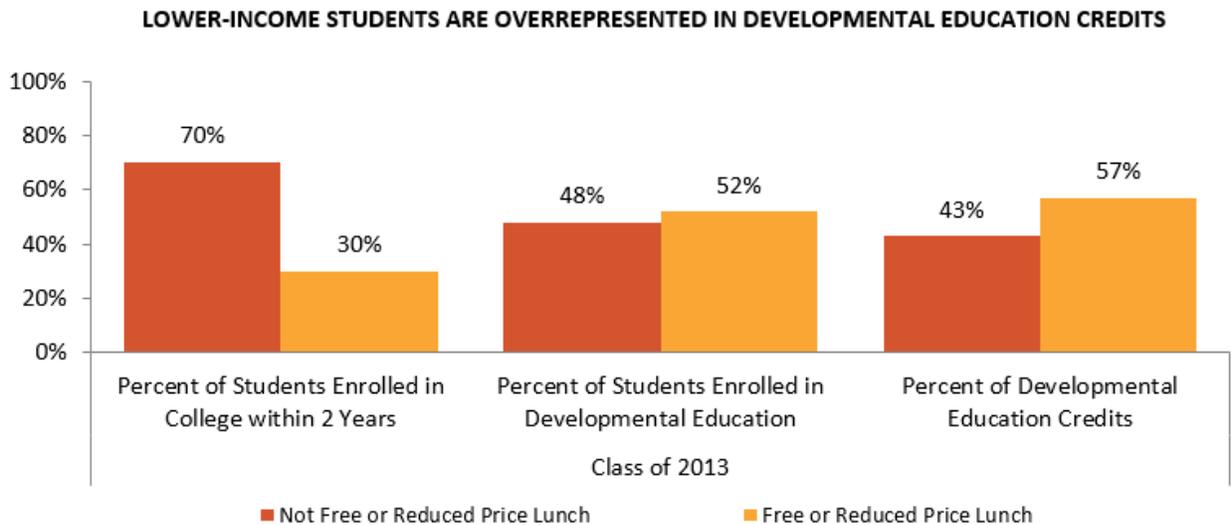
Forty-four percent of fall enrollees of color enrolled in developmental courses as compared to 21% of White fall enrollees.



- Among the 2013 high school graduates enrolled in college, only 19% were students of color. However, students of color represented 35% of students enrolled in developmental education and 42% of the total credits enrolled.
- The percentage of developmental education credits taken by students of color has increased from 25% among 2007 graduates to 42% among 2013 graduates.
- Students of color graduating from high school in 2013 paid approximately \$5.0 million in tuition costs for developmental education (\$6.8 million paid by white graduates).

LOWER-INCOME STUDENTS

Among the 2013 high school graduates enrolled in college, 40% of free or reduced price lunch participants enrolled in developmental courses as compared to 19% of non-free or reduced price lunch participants.



- Among the 2013 high school graduates enrolled in college, only 30% were students who participated in free or reduced price lunch in high school. However, free or reduced price lunch participants represented 52% of students enrolled in developmental education and 57% of the total credits enrolled.
- The percentage of developmental education credits taken by lower-income students has increased from 27% among 2007 graduates to 57% among 2013 graduates.
- Lower-income students graduating from high school in 2013 paid approximately \$6.7 million in tuition costs for developmental education (\$5.1 million paid by non-free or reduced price lunch participants).

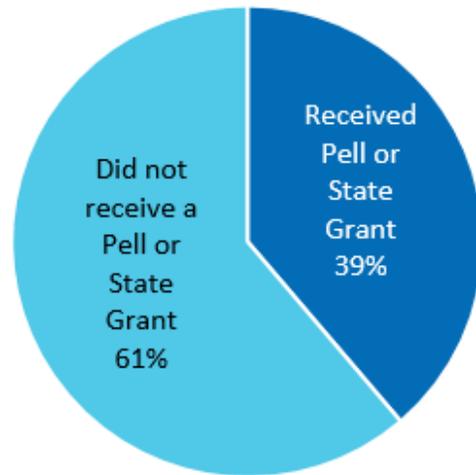
Interaction with Student Financial Aid

✓ Pell and State Grant Eligible.

- Approximately 40% of 2013 graduates enrolling in developmental education received a Pell Grant and/or a Minnesota State Grant.
- Pell Grants and Minnesota State Grants are awarded based on financial need, educational costs and enrollment level and requires that students and their parents complete the Free Application for Federal Student Aid (FAFSA) each year.

Using financial aid for developmental courses counts toward the student's lifetime financial aid eligibility. Pell grants are limited to 12 full-time semesters (144 credits). Minnesota State Grants are limited to 120 semester credits. A student may exceed the lifetime financial aid limits prior to completing their program.

APPROXIMATELY 39% OF 2013 GRADUATES IN DEVELOPMENTAL EDUCATION RECEIVED A PELL OR STATE GRANT



Additional Data

Data by individual public high school can be found in the separate report titled “Supplemental Data - Tuition Costs by School”.

Policy Options for States

Understanding the costs associated with developmental education adds to policymakers' understanding of this complex issue. Measuring the costs and benefits of the varying developmental education interventions can assist states in determining future policy as developmental education has significant implications for access to, retention, and completion within higher education. Most states are seeking strategies for reducing the costs of developmental education.

Research has identified several options for states seeking to reduce the costs of developmental education.

Reinforce college ready standards in high school

States have a role to play in reducing the need for developmental education by “setting and broadly communicating college-readiness standards, providing early assessment opportunities for high school students, and ensuring that high school and college-entrance standards and expectations are aligned” (Jobs For the Future & Achieving the Dream, 2009).

The most recent data from Getting Prepared presents several findings that highlight instructional issues involved in developmental education. First, students who are assessed as proficient on the Minnesota Comprehensive Assessments have significantly lower rates of enrollment in developmental education. Continuing to reinforce Minnesota's established high school graduation standards/assessments and ensuring their continued alignment with postsecondary admission standards will likely yield reductions in developmental education enrollments. Second, enrollment in developmental education is correlated with English language proficiency as demonstrated by enrollment rates of students whose home primary language is not English and students identified as English language learners. The need to have effective language acquisition strategies for English language learners is likely to grow as Minnesota's changing demographics reflect a more diverse population in the future.

Encourage postsecondary institutions to innovate in order to reduce the costs of developmental education

States can significantly influence postsecondary retention and completion rates as well as costs among developmental students by incentivizing innovation by institutions. These innovations can vary from institution to institution as customize programs to meet student needs.

Examples of some innovations adopted by postsecondary institutions include:

- **Mainstreaming** developmental education programs to allow developmental students to enroll in college-level courses immediately by utilizing supplemental supports. Supplemental support can come in the form of mandatory companion classes, lab sessions, integrated tutorial support, and additional class sessions. This model addresses time concerns and the stigma of students taking developmental courses. “Accelerated or compressed curriculum can facilitate progression through the developmental curriculum at a pace that allows between 40 and 65% of students to demonstrates success on college success measures such as retention, transfer, and graduation” (Bragg, Baker, & Puryear, 2010).
- **Pairing courses** involves coupling courses with similar requirements (e.g. literature course and a writing course). Students learn content in the college-level course, while developing basic skills in the developmental course (writing). This method of instruction allow students to receive college credit while still getting extra support from a non-credit course.
- **Co-curricular programming** is a model of acceleration that requires students to take fewer developmental courses overall. This can involve collapsing multiple developmental courses into

a one-semester course that has more content or hours than one of the courses that it replaced, or developing a single remediation course for a specific academic program.

Fashioning more cost effective methods of delivering developmental education provides benefits to both students and the state. Many of Minnesota's postsecondary institutions are currently innovating in developmental education.

Invest in successful programs yielding long term benefits that may outweigh short-term costs

Given the positive benefits associated with successful completion of developmental education and higher education, the best avenue for reducing overall costs is to invest in the most successful programs. Phipps (1998) notes that successful developmental programs can offset costs through the substantial revenues gained upon successful program completion. In setting policy, program success should be weighed equally with immediate costs.

Conclusion

Developmental education serves a critical role in preparing lower-skilled individuals for college level coursework and future employment. Hodara and Xi (2008) found that successfully completing developmental reading and writing credits led to an increase in earnings and employability – successful outcomes for both students and the state. Policy issues related to developmental education encompass areas on both sides of the K-12 to higher education transition: college readiness, language barriers, student support, college affordability, institutional support, retention, completion and workforce development. Ensuring alignment among K-12 and higher education policies is central to ensuring successful outcomes for students. This is not a problem that high schools or colleges can solve on their own.

Getting Prepared 2016 Tuition Costs calculates only the direct costs of developmental education for recent high school graduates. This cost analysis omits developmental education enrollments by adult learners, – approximately 60 percent of the 119,000 developmental credits taken in fall 2014. Adult learners, defined as students not enrolling in college within two years of high school graduation, are a distinct subpopulation whose experiences in college differ from those of recent high school graduates. Adult learners favor community colleges and not all adult learners have completed a traditional high school diploma, and may be transitioning from adult basic education into college (Kazis et al., 2007). Time constraints also present a challenge for these students. Adult learners are more likely to enroll part-time, to have children, and to be wage-earners for their families. These factors compound to create barriers to completion for adult learners, and highlight the need to minimize time-to-degree completion and cost barriers (Soares, 2013). Further research is needed to determine if different strategies are needed to promote success in developmental education among recent high school graduates and those who are adult learners.

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