



January 15, 2022

Academic and Student Affairs

Degree and Certificate Completion Report to the Legislature

Minnesota State

CONTENTS

Contents	1
List of Tables	2
EXECUTIVE SUMMARY	3
Completion Goals and Plan	3
Developmental Education	4
Opportunity Gap and Equity.....	4
Minnesota State Completion Measures	5
BACKGROUND	10
MINNESOTA STATE DEGREE COMPLETION AND DEVELOPMENTAL EDUCATION.....	11
Completion Goals	11
Challenges Related to Degree and Certificate Completion.....	12
Ongoing Completion Efforts and Completion Plan	13
Developmental Education	13
Challenges of College Readiness and Developmental Education	14
Ongoing Innovations and Developmental Education Plan.....	15
Opportunity Gaps and Equity	17
Equity 2030.....	17
MINNESOTA STATE COMPLETION MEASURES	19
Students, Measures, Disaggregations and Data Suppression	19
Students Reported	19
Measures.....	19
Disaggregations	21
Data Mart Updates.....	22
Data Suppression.....	22
Completion Measures	23
Developmental Education Enrollment Rate.....	23
Developmental Education Completion Rate	25
College Level Course Completion Rate	27
Credit Completion Rate.....	29
Student Persistence and Completion Rate	31
Completion Rate.....	32
Credits Earned at Graduation.....	33
Institution Level Data	35
CONCLUSIONS	36
Completion Measures	36
Equity 2030.....	38
REFERENCES	40
APPENDIX A: RELATED LEGISLATION	42
2015 Minnesota Session Law Chapter 69, Senate File 5, Article 3, Section 23	42
2017 Minnesota Session Law Chapter 89, Article 2, Section 25	43
APPENDIX B: Completion Measure Report by college and university	44

LIST OF TABLES

Table 1: Fall Entering Undergraduate Degree, Diploma and Certificate-Seeking Students.	19
Table 2: Measures and Definitions	20
Table 3: Fall Entering Students Who took Developmental Courses.....	23
Table 4: Developmental Education Enrollment Rate by Subject.....	24
Table 5: Developmental Education Enrollment Rate by Student Group.....	25
Table 6: Developmental Education Completion Rate by Subject.....	25
Table 7: Developmental Education Completion Rate by Student Group and Subject	26
Table 8: College Level Course Completion Rate by Subject	27
Table 9: College Level Course Completion Rate by Student Group and Subject	28
Table 10: Twenty and Thirty Credit Completion Rates	29
Table 11: Twenty and Thirty Credit Completion Rates by Student Group.....	30
Table 12: Second Fall Persistence and Completion Rate by Student Group.....	31
Table 13: Completion Rate by Sector and Student Group	33
Table 14: Average Credits Earned at Graduation by Award and Student Group.....	34

EXECUTIVE SUMMARY

The Minnesota legislature has passed three pieces of legislation related to credential completion and developmental education since 2015:

- **Completion Plan:** The 2015 Minnesota legislature passed legislation related to degree completion. The Minnesota State Colleges and Universities (Minnesota State) submitted a report in January 2016 detailing the system's plan to encourage and assist students to complete credentials.
- **Completion Measures:** The 2015 Higher Education Appropriations Act (2015 Minnesota Session Law, Chapter 3, Article 3, Section 16) requires the Minnesota State Board of Trustees, beginning in January of 2018, to submit a report on its activities and achievements related to improving timely completion, including reporting on seven specific completion measures.
- **Developmental Education Plan:** The 2017 Minnesota legislature passed legislation that required the Minnesota State Board of Trustees to prepare a plan that reforms developmental education offerings. The Developmental Education Plan report was submitted to the legislature in February 2018.

This Degree and Certificate Completion report fulfills the second reporting requirement listed above and provides an update to the report submitted to the Legislature in January 2021. The report includes updated data on the progress made on the seven completion measures outlined in the legislation and also serves as a supplement to the 2016 College Completion Plan report and the 2018 Developmental Education Plan. The specific measures reported are: Developmental Education Enrollment, Developmental Education Completion, College Level Course Completion, Credit Completion, Student Persistence and Completion, Completion Rates and Credits Earned at Graduation.

Completion Goals and Plan

A core commitment of the 37 colleges and universities of Minnesota State is to provide access to higher education for all Minnesotans. The system has been very successful in providing this access, while acknowledging that there is still work to be done. Many students leave our colleges and universities without earning a credential. Degree and certificate completion is important not only for the individual student and their family, but also for the state to meet its talent needs. Minnesota State has implemented a number of efforts to improve completion rates.

While Minnesota State is committed to improving degree and certificate completion rates, we recognize that there are several opportunities and challenges as we seek to assist more students in reaching their educational goals in a timely manner. The challenges include Minnesota State's open door mission, college affordability and the uncertainty of the effects of the COVID19 pandemic on many factors impacting the state's population. The system's open access mission means that it serves diverse student learning and support needs with a

substantial number of students facing financial and academic challenges that are associated with lower rates of college completion.

These challenges are balanced by the opportunities that exist for Minnesota State to better serve the learning and support needs of its students. Minnesota State has been actively working to improve completion rates through a variety of initiatives that have demonstrated promising outcomes. The initiatives include systemwide and local partnerships with K-12 school district associations, adult basic education, business and industries, and non-profit organizations, as well as a variety of campus-based initiatives. The system's completion plan capitalizes on the initiatives that are demonstrating success and promotes practices as well as policies that have been shown to have a positive impact on completion.

Developmental Education

Since many of our students come to college with varying support needs, many benefit from additional academic preparation to be successful in college. The colleges and universities of Minnesota State offer developmental education, including precollege-level courses in reading, writing, and mathematics, and courses for English Language Learners (ELL), as well as academic support services and interventions designed to develop students' skills and prepare them for college-level coursework. Throughout this report, the term *developmental education*, rather than *remedial education*, is used because it is a broader term that encompasses both coursework and support services.

Minnesota State is the primary provider of developmental education in the state. While the system is committed to meeting students where they are in terms of their level of academic preparation and helping them to achieve their educational goals, challenges associated with open admissions policies, assessment testing and course placement, traditional developmental education curriculum, and the need for holistic student support impact our developmental education programs in complex ways.

Minnesota State institutions are currently implementing innovations in developmental education to increase student retention, persistence, and completion rates. The Minnesota State Colleges and Universities created a Developmental Education Strategic Roadmap (DESR) to guide the systemwide work on developmental education redesign with clearly identified strategic goals, key action steps, targeted timelines for implementation, and measurable outcomes.

The details of the developmental education plan are outlined in the 2018 Developmental Education Plan report. Each college and university has a corresponding local plan in place and is making progress on the goals outlined in the DESR.

Opportunity Gap and Equity

National, state, and Minnesota State data show the opportunity and outcome gaps that exist between underrepresented and majority students in higher education. Minnesota State is

foundationally committed to addressing the gaps evident in our colleges and universities. Our data show that gaps are evident and persistent by race and ethnicity and by income. There are gaps between students of color and American Indian students in comparison to white and nonresident students and between students who are Pell eligible in comparison to students who are not Pell eligible.

Minnesota State is committed to eliminating, together with our partners, educational equity gaps at every Minnesota State college and university by the year 2030. This is both a moral imperative and Minnesota's economic imperative. Our approach to eliminating the educational equity gaps includes addressing:

- **Enhanced Access** to a higher education by strengthening partnerships and collaboration with K-12, business and industry, community-based organizations, and philanthropic partners to expand and grow current programming and identify new ways to support students.
- **Student Academic Success** by establishing guided learning pathways that focus on academic preparation, progression, and accomplishment within an area of study and career.
- **Student Engagement and Support** within the institution, both academic and non-academic, including supporting basic needs.
- **Data-Guided Decision Making** by building a technology infrastructure and expanding capacity for deeper data analytics.
- **Financial Resources and Support** for students and growing the financial resource base for campuses.
- **Workforce Diversity/Strategic Talent Management** by incorporating the local and national context with the changing student and employee demographics and needs - focusing on cultural competence development, inclusive hiring practices, and improved campus climate.

More information about Minnesota State Equity 2030 is available at:

<https://www.minnstate.edu/Equity2030/index.html>

Minnesota State Completion Measures

The completion measures presented in this report were generated from a longitudinal analysis of fall entering undergraduate students who were pursuing a degree, diploma or certificate.

The measures included in the January 2022 Degree and Certificate Completion report have been updated with the most recent information from the system's student record system and developmental education data mart, and an additional cohort of students is now included in the analysis. Although recent updates and improvements to the data mart have resulted in some data points changing slightly from the data reported last year, the general trends and patterns observed in the earlier report remain unchanged.

As the data on the following pages illustrate, the Minnesota State colleges and universities have made steady progress on improving completion measures. As noted above, however, more work is needed to address gaps across student groups and the system is committed to eliminating gaps by the year 2030.

Summaries of key points on each of the measures are presented below. For each measure, differences between students of color and American Indian students are contextualized compared to white students and nonresident students. The nonresident category consists primarily of international students and students who are not permanent residents of the United States. Federal, state and Minnesota State systemwide reporting standards specify that these students should not be included in a racial-ethnic group, but rather reported as nonresident students. Data on differences between Pell grant eligible students and students who are not eligible for Pell grants are also included.

Developmental Education Enrollment Rate:

- The number of fall entering undergraduate degree, diploma and certificate seeking students who took developmental courses during their first two years **decreased by 47.3 percent** between Fall 2011 and Fall 2019. The decline is over 50 percent at the colleges.
- The **percent of entering students enrolled in developmental courses in their first two years also decreased**, from 41.3 percent to 28.0 percent between Fall 2011 and Fall 2019, with the **greatest decrease occurring for developmental math** courses.
- The **percent of students of color and American Indian students who took developmental courses decreased** by 16.7 percentage points and the **percent of Pell grant eligible students who took developmental courses also decreased** by 14.0 points since Fall 2011, but both groups continued to have higher developmental course taking rates relative to their comparison groups of white and nonresident students and students who are not eligible for Pell grants.

Much of the enrollment decline in developmental education can be attributed to the curricular and support innovations that have been implemented across our campuses. It is anticipated that with the continued implementation of the DESR, Minnesota State will see continued enrollment declines in developmental education courses.

Developmental Education Completion Rate:

- The percentage of students completing their developmental education requirements in their first year **increased in reading and writing and most dramatically in math** between Fall 2011 and Fall 2019.
- The percentage of **students of color and American Indian students** who completed all their developmental courses by the end of the first year has **increased in all three subjects since Fall 2011**. Gaps between students of color and American Indian students relative to white and nonresident students in developmental course completion have narrowed somewhat but remain significant. Gaps in math completion remained essentially the same since Fall 2011.

- The percentage of **Pell grant eligible students** who completed their developmental courses in the first year **increased in all three subjects** between Fall 2011 and Fall 2019. Gaps relative to students who were not eligible for Pell grants remain but decreased in all three subjects, falling to half to two-thirds the original gap in reading and writing completion over the decade.

Across Minnesota State, faculty members, departments, and academic and student affairs divisions have been innovating both within and beyond the classroom to better support students enrolled in developmental education, including supplemental instruction and accelerated, one-year developmental education pathways. As campuses improve, scale, and/or add new innovative practices and programs across campuses, it is anticipated that there will be additional increases in student completion of developmental education courses by the end of their first year.

College Level Course Completion Rate:

- The percent of students completing college-level mathematics in their first year was 26.1 percent for those entering in Fall 2020 as compared to 20.6 percent for those entering in Fall 2011. The rate for math, which remained stable the last three years, is **5.5 percentage points higher** than for those entering in Fall 2011.
- Of Fall 2020 entrants, 38.6 percent completed college level writing in the first year, compared to the 38.7 percent rate observed for Fall 2011 entering students. This is a **slight decrease of 0.1 percentage points** than for those entering in Fall 2011.
- The percent of **students of color and American Indian students and of Pell grant eligible students** who completed a college level course by the end of their first year **has increased in both math and writing since Fall 2011**, but both groups had lower college level course completion rates relative to their comparison groups. Both comparison groups of white and nonresident students and non-Pell eligible students showed a decline of at least two points in completing a writing course in the first year.
- The **gap** between students of color and American Indian students as compared to white and nonresident students in completion of college level writing **tightened dramatically** between Fall 2011 and Fall 2020 (from a gap of 12.4 percentage points to 3.5 points). Similarly, the **gap** in completion of college writing for Pell grant eligible students as compared to students who were not eligible **decreased** from 11.0 percentage points for Fall 2011 to 5.0 points for Fall 2020.
- Gap closure for completion of a college level math course was sizable but less dramatic; the **gap in comparison based on race/ethnicity fell** from 11.5 percentage points in Fall 2011 to 8.1 in Fall 2020, and the **gap based on Pell eligibility** with regard to completion of a college level math course **fell** from 13.4 percentage points in Fall 2011 to 10.5 points among the Fall 2020 entrants.

Completion rates for college level writing have varied somewhat by sector and institution. System office research will work with campus staff to explore the data related to the recent decreases observed in some student populations to more clearly understand the changes and

identify possible explanations for the changes (e.g., issues with coding college writing coursework and changes in enrollment patterns or changes in program requirements).

Credit Completion Rate:

- The percentage of fall full-time entering students who completed 30 semester credits during their first year **increased between Fall 2011 and Fall 2020**, but the percentage of fall entrants who completed 20 semester credits **decreased slightly between Fall 2011 and Fall 2020**.
- The percentage of students of color and American Indian students who earned 20 credits and 30 credits within their first year increased but remains below the rates for white and nonresident students and gaps in this metric have been sizable and slow to change.
- Each of the disaggregated groups examined had a lower rate of credit completion among Fall 2020 entering students than the Fall 2019 group, with the exception of students of color and American Indian students completing 30 semester hours during their first year.
- The change in the percent of students completing 30 credits disaggregated by race/ethnicity showed that the growth rate for students of color and American Indian students was roughly equivalent to that for white and nonresident students. Regarding credit completion by Pell eligibility status, the rate for Pell eligible students is growing at less than half the rate of their non-Pell eligible peers.

Student Persistence and Completion Rate:

- The second fall persistence and completion rate for Fall 2019 entering full-time undergraduate students, who would have been returning in Fall 2020 at the height of the COVID-19 pandemic, was **0.6 percentage points higher** than for those entering in Fall 2011. The rate fell a whole point between Fall 2018 and Fall 2019 entrants.
- The **increase in second fall persistence** and completion was **three times greater for students of color and American Indian students**, and the the gap as compared to white and nonresident students narrowed to fewer than ten percentage points.
- The rate for Pell eligible students has fluctuated, but the rate for Fall 2019 entering students was **0.9 percentage points higher** than that for Fall 2011 entrants.

Although institutions have focused efforts on the opportunity gaps and increasing students of color and American Indian and Pell eligible students' persistence rates, it is evident that there is still much work to do. In addition to expanding evidence-based programs, practices, and initiatives, campuses are focusing on increasing student engagement and sense of belonging and creating positive campus climates.

Completion Rate:

- The 3-year completion rate for the full-time entering state college students decreased during the recession and has increased in the years since then. The rate for full-time students entering in Fall 2017 was **3.3 points higher** than for Fall 2010 (54.4 percent as compared to 51.1 percent).
- The state college completion rate for students of color and American Indian students has increased but remains lower than the rate for white and nonresident students and gaps

remain around fourteen percentage points. The rate at which the state college completion rate is improving for Pell eligible students is almost half that of their non-Pell eligible peers, meaning that the gap between their completion rates is widening slightly.

- The 6-year completion rate for the state universities **increased by 2.3 percentage points** from 53.4 percent for Fall 2010 entering full-time students to 55.7 percent for those entering in Fall 2014.
- Even with modest improvements in the 6-year state university completion rates for students of color and American Indian students and Pell eligible students, the gaps between both populations and their comparison groups persist and are still substantial.

Increasing credential completion rates continue to be an imperative and a primary commitment of Minnesota State. Despite more recent increases in completion rates, gaps have not decreased and in fact are greater than for those entering in Fall 2010. Eliminating the opportunity gaps between students of color and American Indian student completion rates and white and nonresident student completion rates, as well as the gaps between Pell eligible students and students who are not Pell eligible, is one of the most important priorities of Minnesota State.

Credits Earned at Graduation

- The average **cumulative credits at graduation decreased** for certificate, and associate and bachelor's degree graduates, with the exception of white and nonresident students completing a certificate, and non-Pell eligible students completing an associate degree.
- All disaggregated groups saw a **slight increase** in the average cumulative credits at graduation between the most recent cohort group and the one from the year before, with the exception of students of color and American Indian students seeking a certificate, and Pell eligible students completing an associate degree.
- **Students of color and American Indian students** who earn Minnesota State certificates or associate degrees at system colleges **complete with fewer credits** than their comparison group of white and nonresident students. This pattern also holds true for Pell eligible students as compared to students who are not eligible for Pell grants.
- At the bachelor's degree level overall, and at the associate degree level for the race/ethnicity comparison, there were virtually no differences among the student groups in total credits earned at graduation.

The declining number of credits at graduation reflects, at least in part, credit caps Minnesota State implemented for the vast majority of its programs during the last decade. The Minnesota Legislature enacted language in 2007 that required the Minnesota State system to implement credit caps of 60 for associate degrees and 120 for bachelor's degrees. Institutions across Minnesota State also are working to expand and strengthen their academic advising and career guidance services to support students' academic and career planning. There are many other factors that may also impact cumulative credits at graduation, including students taking additional courses due to personal interest, changing their major and having to meet new major or degree program requirements.

BACKGROUND

The Minnesota legislature has passed three pieces of legislation related to postsecondary completion and developmental education since 2015:

- (1) In 2015 legislation was passed to address completion rates for all of Minnesota's public colleges and universities (see Appendix A). Minnesota State submitted a report on January 15, 2016 detailing the system's comprehensive plan to encourage students to complete degrees, diplomas, or certificates in their chosen field of study. The report is available at <https://www.leg.state.mn.us/docs/2016/mandated/160011.pdf>.
- (2) The 2015 Higher Education Appropriations Act (2015 Minnesota Session Law, Chapter 69, Article 3, Section 16) includes the following requirement:

Beginning in 2018, the Board (of Trustees), report to the chairs and ranking minority members of the legislature with primary jurisdiction over higher education on its activities and achievements related to the goal of improving timely completion of degrees and certificates. The report must, at a minimum, include for the previous academic year:

- (1) the percent of students placed in remedial education;*
 - (2) the percent of students who complete remediation within one academic year;*
 - (3) the percent of students that complete college-level gateway courses in one academic year;*
 - (4) the percent of students who complete 30 semester credits per academic year;*
 - (5) the student retention rate;*
 - (6) time to complete a degree or certificate; and*
 - (7) credits earned by those completing a degree or certificate or other program.*
- The report must disaggregate data for each college and university by race and ethnicity, Pell Grant eligibility, and age and provide aggregate data.*

- (3) The 2017 Minnesota legislature passed legislation requiring that the Board of Trustees of Minnesota State prepare a plan that reforms developmental education offerings at system campuses aimed at reducing the number of students placed into developmental education (see Appendix A). The January 2020 Developmental Education Plan report is available at <http://www.minnstate.edu/system/asa/index.html>.

This Degree and Certificate Completion report meets the second legislative requirement and includes comprehensive reporting and discussion of the specified seven completion measures. The report updates the data included in the third annual report submitted in January 2020. Appendix B of this report presents data on the seven measures for each college and university. The data are disaggregated by race, ethnicity, Pell Grant eligibility, and age. Trends for up to five years are reported for the measures. The report also serves as a supplement to the College Completion Plan and the Developmental Education Plan, but does not provide the detailed context included in those reports.

MINNESOTA STATE DEGREE COMPLETION AND DEVELOPMENTAL EDUCATION

Completion Goals

One of the core commitments of the 37 colleges and universities of Minnesota State is providing access to higher education for all Minnesotans. As stated in the 2016 College Completion Plan, Minnesota State has been very successful in providing this access, with acknowledgement that there is still work to be done. In fiscal year 2021, approximately 223,000 students enrolled in credit courses at Minnesota State College and University campuses. Minnesota State institutions continue to be the first choice in higher education for the majority of Minnesotans and especially students of color, low-income students, adult learners, and those pursuing technical careers. Minnesota State educates more college graduates than any other provider of higher education in the state, and its graduates include the majority of the state's K-12 school teachers, law enforcement professionals, and healthcare professionals.

Data on students enrolled in FY2020-2021 indicate that among the Minnesota State student population:

- Twenty-eight percent of undergraduates are Pell grant eligible;
- Fifty-four percent of students are enrolled on a part-time basis;
- The average age of our students is 24, and 31 percent of our students are age 25 or older;
- Forty-nine percent of our students are first-generation by the federal definition that the student's parents have not earned a bachelor's degree;
- Twenty-nine percent of our students are students of color or Indigenous;
- Over 9,500 students seek educational accommodations related to a physical or cognitive disability.

Although Minnesota State continues to provide widespread access to higher education, there is also recognition that many students leave the colleges and universities without earning a credential. The lack of a credential has significant negative consequences for the student, the college or university where the student enrolled, and our economy (Bill and Melinda Gates Foundation, 2015).

Degree and certificate attainment increases average earnings over the course of a lifetime, decreases likelihood of unemployment, and increases contributions to communities and our society (Trostel, 2015; U.S. Department of Education, 2015). Degree and certificate completion has important economic and career implications for individual students and their family as well as for the state's ability to meet its workforce and talent needs. With a commitment to providing access and degree attainment, Minnesota State has implemented efforts to improve completion rates, at every level of award from certificates and diplomas to associate, bachelors and graduate degrees.

Challenges Related to Degree and Certificate Completion

While Minnesota State is committed to improving degree and certificate completion rates, we recognize that there are several challenges as we seek to assist more students in reaching their educational goals in a timely manner. National trends and the existing literature indicate that these challenges are not unique to Minnesota but are significant factors across all institutions that must be addressed for a comprehensive completion plan to be successful.

A detailed discussion of these challenges can be found in the 2016 Degree Completion Plan and are summarized briefly here:

- **Open Door Mission:** Minnesota State's mission as the public-serving post-secondary education system for the state of Minnesota plays a critical role in this context. Minnesota State colleges have open admission policies and admit all students with a high school diploma, regardless of academic preparation levels, which results in attracting students with a broad range of preparedness, as well as learning and career needs. Consequently, Minnesota State institutions enroll many students who require more intentional and expansive levels of academic support. Whereas thirty-two percent of Minnesota high school graduates who took the ACT in 2020-2021 had a college ready score in all areas (ACT, 2021), the number of high school students taking the test was reduced by a third. A clear gap in academic preparation for college-level coursework persists.
- **Affordability:** The cost of obtaining a college credential continues to be a barrier for many students. Thirty-one percent of Minnesota State undergraduates were Pell grant eligible in fiscal year 2020 and 65 percent received some form of financial aid (not counting awards given as part of the federal CARES Act). In addition, just under half of Minnesota State graduates complete their credentials with some modest debt, and there is a worrisome decline in the number of entering students having completed the FAFSA.
- **Changing Face of Unemployment:** Minnesota's economy responded to the COVID-19 pandemic much like other state economies did. Periods of spikes in unemployment were followed by a significant worker shortage as businesses and public employers tried to return to pre-pandemic function intercut with waves of increases in the pandemic case rate. Whereas unemployment increases have historically led students to go back to school for retraining, the unique nature of this crisis has led to counter-cyclical enrollment declines, coupled with heretofore unprecedented wage increases and job placement bonuses for accepting full-time work. Given that many Minnesota State students are working adults, many with families, the ability to find gainful employment can mean that they will opt to take fewer credit hours or stop-out entirely because they have found a job with a family sustaining wage. Because more than half of our population takes fewer than twelve credit hours per semester and part-time work is at an unprecedented low, students are more challenged than ever to remain in school on any basis while working full-time.

The access and inclusiveness that Minnesota State provides to Minnesota residents means that we enroll a substantial population of students who face financial and academic challenges that can lead to lower rates of college completion. Data on students enrolled in FY2020-2021 indicate that among the Minnesota State student population:

- Twenty-eight percent of undergraduates are Pell grant eligible;
- Fifty-four percent of students are enrolled on a part-time basis;

Ongoing Completion Efforts and Completion Plan

Minnesota State has been actively working to improve completion rates through a variety of initiatives that demonstrate promising outcomes. Initiatives include a variety of campus-based activities and both systemwide and local partnerships with K-12 school district associations, Minnesota Adult Basic Education, business and industries, and non-profit organizations. A summary list of ongoing completion efforts is provided in the 2016 Degree Completion Plan. Examples include, learning communities, emergency grant programs, early alerts systems, advising programs, first-year-experience courses, cohort models, grants to parenting students, and intrusive support services. The Minnesota State comprehensive completion plan capitalizes on the initiatives that are already demonstrating success while also promoting practices and policies that have been shown on a national level to have a positive impact on completion rates.

Developmental Education

Since many students arrive at college in need of more academic support and preparation to be successful in their college-level gateway courses and academic programs, the colleges and universities of Minnesota State offer developmental education to support the success of these students by delivering pre-collegiate courses and providing a variety of optional and/or mandatory student support services. Given that academic preparation is a significant predictor of persistence and completion, we must effectively provide our students with the support and resources to bridge the gap between their varied academic background and the skills needed for college and their future career success. Developmental education serves as one component of this critical bridge.

Developmental education consists of precollege-level courses in reading, writing, mathematics, and courses for English Language Learners (ELL), as well as academic support services and interventions, offered by postsecondary institutions designed to develop students' skills and prepare them for college-level coursework. Throughout this report, the term *developmental education*, rather than *remedial education*, is used because it is a broader term that encompasses precollege-level coursework and other academic support services that prepare students for success in college. *Remedial education* or *remediation*, the term used in 2015 Minnesota Session Law, Chapter 3, Article 3, Section 16, can imply courses that repeat material taught earlier that the student did not learn adequately the first time.

Although developmental education courses are offered for credit, the credits do not count toward the requirements of degrees, diplomas or certificates. Students who are eligible for need-based financial aid can use that aid for developmental and ELL courses and for up to thirty credits of developmental reading, writing, and mathematics coursework.

It also is important to note that while postsecondary institutions typically assess the readiness of new entering students for college level academic coursework, students can enroll in a variety of technical programs that do not require college-level skills in reading, writing and/or math. Many students can graduate with postsecondary occupational certificates or diplomas and obtain a living wage job without taking developmental courses.

Across all Minnesota postsecondary institutions, the percent of recent high school graduates who enrolled in developmental education within two years of graduating has decreased from 30 to 17 percent between 2008 and 2019, nearly cutting the rate in half. However, as a result of our colleges' open-door mission, Minnesota State Colleges and Universities enroll 97 percent of the public high school graduates who take developmental education courses within two years of graduating high school. (OHE, 2020).

Challenges of College Readiness and Developmental Education

Minnesota State is committed to meeting students at their level of academic preparation and helping them to achieve their educational goals in a timely manner, but there is also an acknowledgement that challenges persist. These challenges are consistent with national trends and the existing literature, and many of them are currently being addressed by the system and campuses. Some of the challenges are significant and must be addressed systemically.

A detailed discussion of these challenges can be found in the 2018 Developmental Education report. These challenges along with ways we are responding to critical needs are summarized briefly here:

- **Open Admissions:** The open admissions policies of Minnesota State mean that many of the students admitted to our colleges and universities have developmental learning needs and may benefit from additional instruction and support. The type and availability of offerings of developmental education often reflect an institution's student demographics and selectivity. Minnesota State is working to build its capacity and expand its resources to meet the learning and basic needs of students.
- **Assessment Testing and Course Placement:** Course placement practices have traditionally utilized single, high-stake tests to identify students' knowledge and skills in reading, writing and mathematics and to place them into college-level or developmental-level courses based on those levels of college readiness. There is concern that the use of a single placement test results in some students being placed into courses that are not well matched to their needs or academic abilities. Minnesota State is working to increase the accuracy and effectiveness of the course placement process by implementing a comprehensive multiple measures program that includes the use of more than one measure for placement.
- **Developmental Education Curriculum:** Traditional developmental-level curricula are offered in a sequential fashion in which students may be assigned to two or three semesters of coursework before being able to take a college-level course in the corresponding subject area. Studies have illustrated that the more courses students are required to take before beginning their college-level coursework, the less likely they are to persist and complete.

Minnesota State is working to implement accelerated models that address students' needs and reduce the time to completion of developmental coursework.

- **Holistic Student Support:** When considering how to best support students, postsecondary institutions must address students holistically. In addition to academic knowledge and skills, factors that more often impact the college readiness of recent high school graduates are prior college-knowledge and college-going high school environments. In addition, factors that more often impact student persistence are outside of curricular factors, such as financial and college affordability, work and family obligations, and other factors such as mental and physical health and poverty. Current system office and institutional efforts are focusing on supporting students through Guided Learning Pathways, a comprehensive and integrated academic and student support model.

Ongoing Innovations and Developmental Education Plan

Most Minnesota State colleges and universities have implemented innovations in developmental education to increase student retention and completion rates. These innovations vary from institution to institution as programs are customized to meet the needs of students within their local context. Developmental education innovations have been implemented in the areas of reading, English, and mathematics.

Reading: The majority of campuses offering reading curriculum have one or more innovations in place including:

- Integrated reading and writing curriculum that provides students with a more comprehensive learning of reading and writing.
- Reading courses offered as paired courses or in learning communities, where a cohort of students co-enroll in two or more courses which allow them to learn within a community, experience an integrated learning environment, and apply knowledge and learning across disciplines.

English: Most campuses have implemented one or more innovations in their English curriculum. In addition to integrated reading and writing curriculum and learning communities or paired courses, campuses are offering:

- Accelerated models designed to increase students' progress through developmental education over a shorter period of time and include:
 - Enrolling students immediately into college-level courses while providing supplemental supports and co-requisite models such as the Accelerated Learning Program (ALP).
 - Combining content from multiple developmental education levels into a single course that students can complete within one semester.
 - Compressing the course content over a shorter period of time, allowing students to complete two fast-track or compressed courses within one semester.

Mathematics: Likewise, most campuses have one or more mathematics innovations in place, including:

- Accelerated models similar to those described for reading and English.
- Multiple pathways in math provide different developmental course sequences for students pursuing different degree pathways. While one pathway may lead to college-level courses in algebra, others focus on preparing students for statistics and/or quantitative reasoning.
- Technical program mathematics requirements are tailored to needs of the program and may not require college-level mathematics.

Wrap-Around Strategies: Campuses have implemented wrap-around academic and student support strategies that are critical to increasing the success of students in developmental education courses, including:

- Early alert systems,
- Academic advising,
- Academic support centers,
- Tutors embedded into courses (supplemental academic instruction),
- Targeted support options addressing students’ basic needs, and/or
- Peer and professional tutoring.

Developmental Education Roadmap: The Minnesota State Colleges and Universities created a Developmental Education Strategic Roadmap (DESR) to guide our systemwide work on developmental education redesign. The DESR includes clearly identified strategic goals, key action steps, targeted timelines for implementation, and measurable outcomes. The Developmental Education Workgroup, comprised of Minnesota State faculty, staff, students, administrators, and system office leadership, led the creation of the DESR. The Workgroup reviewed and promoted national, systemwide, and campus efforts to redesign developmental education. In 2016-2017, to advance the collective work of Minnesota State on developmental education redesign, the Workgroup developed a draft strategic roadmap. Campus stakeholders had opportunities to provide input on the draft DESR during 2017. The Minnesota State DESR was finalized in January 2018 and provides our redesign “roadmap” for the next four years. The details of the developmental education plan are outlined in the 2018 Developmental Education Plan report.

The DESR includes the seven strategic goals:

- **Strategic Goal 1:** Improve student completion of developmental education and entry into college-level courses by redesigning developmental education curricula to include an acceleration option.
- **Strategic Goal 2:** Improve the accuracy of course placement by implementing a multiple measures placement program at all colleges and universities.
- **Strategic Goal 3:** Improve student success in developmental education by developing a comprehensive student support system for students in developmental education programs.
- **Strategic Goal 4:** Increase college readiness of high school graduates attending Minnesota State campuses by partnering with secondary partners.
- **Strategic Goal 5:** Increase college affordability for students by implementing student-cost-saving approaches.

- **Strategic Goal 6:** Improve student success in developmental education by expanding and strengthening professional development for faculty, staff, and administrators.
- **Strategic Goal 7:** Improve student success in developmental education by strengthening evaluation and continuous improvement efforts.

Minnesota State has led the systemwide DESR planning, implementation and evaluation work. Currently, each college and university has a local action plan in place is nearing completion of implementing the goals outlined in the DESR.

Opportunity Gaps and Equity

National, state, and Minnesota State data show the opportunity gaps that exist between underrepresented and majority students in higher education, and Minnesota State is deeply committed to addressing the gaps evident in our colleges and universities. Our data show that gaps are evident and persistent by race and ethnicity and by income, between students of color and American Indian students in comparison to white and nonresident students and between students who are Pell eligible in comparison to students who are not Pell eligible. These gaps are illustrated in financial resources, as measured by median income of students and Pell-Eligibility, and in academic preparation, as measured by student enrollment in developmental education courses and assessment test scores. The gaps also are evident in second fall persistence and completion rates and subsequent completion rates. It is important to note that systemic and structural inequities are contributing factors as well, which Minnesota State is working to address through its systemwide Equity 2030 initiative.

Students of color and American Indian students are compared throughout this report to white students and nonresident students. The nonresident category consists of international students and students who are not permanent residents of the United States. Federal, state and system reporting standards specify that these students should not be included in a racial-ethnic group, but rather reported as nonresident students.

Since addressing the opportunity gaps is a key priority for Minnesota State, the system has been collecting and reporting data with disaggregation by student demographics. Minnesota State colleges and universities and the system office have been engaging in collective discussions, strategic planning, and the implementation of evidence-based policies, programs and practices toward eliminating the gaps. These discussions, strategic plans, and implementations have also occurred in our developmental education work and redesign.

Equity 2030

Minnesota State is committed to eliminating, together with our partners, educational equity gaps at every Minnesota State college and university by the year 2030. This is both a moral imperative and Minnesota's economic imperative. The approach to eliminate the educational equity gaps will include addressing:

- **Enhanced Access** to a higher education by strengthening partnerships and collaboration with K-12, business and industry, community-based organizations, and philanthropic partners to expand and grow current programming and identify new ways to support students.
- **Student Academic Success** by establishing guided learning pathways that focus on academic preparation, progression, and accomplishment within an area of study and career.
- **Student Engagement and Support** within the institution, both academic and non-academic, including supporting basic needs.
- **Data-Guided Decision Making** by building a technology infrastructure and expanding capacity for deeper data analytics.
- **Financial Resources and Support** for students and growing the financial resource base for campuses.
- **Workforce Diversity/Strategic Talent Management** by incorporating the local and national context with the changing student and employee demographics and needs - focusing on cultural competence development, inclusive hiring practices, and improved campus climate.

More information about Minnesota State Equity 2030 is available at:

<https://www.minnstate.edu/Equity2030/index.html>

MINNESOTA STATE COMPLETION MEASURES

The 2015 Higher Education Appropriations Act requires Minnesota State to report data on seven completion measures for each college and university with disaggregation by race-ethnicity, Pell grant eligibility and age. Trends are presented for each measure in order to illustrate any changes during the last several years. The detailed reports on the measures for each college and university, with the disaggregation, are presented in Appendix B.

Students, Measures, Disaggregation and Data Suppression

This section describes the student population for whom the measures are reported, defines the measures, describes the disaggregation, and outlines the data suppression used in the detailed reports to address data privacy issues when measures included small numbers of students.

Students Reported

Since the measures focus on completion of credentials, only undergraduate students who were pursuing a degree, certificate or diploma when they entered the college or university are included in the cohorts. Students who were not pursuing a degree, were taking courses while in high school or who had previously earned a degree are excluded. The number of fall entering undergraduate credential seeking students decreased by 30 percent between Fall 2011 and Fall 2020, as shown in Table 1. This decrease in enrollment follows national enrollment trends over the same time period.

**Table 1: Fall Entering Undergraduate Degree, Diploma and Certificate-Seeking Students
Minnesota State Colleges and Universities**

Sector	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Change
System	52,101	51,567	48,624	46,380	44,790	44,161	42,552	41,922	40,477	36,411	-30.1%
Colleges	36,961	36,916	34,465	32,709	30,984	30,251	29,563	29,294	28,506	25,181	-31.9%
Universities	15,140	14,651	14,159	13,671	13,806	13,910	12,989	12,628	11,971	11,230	-25.8%

Measures

The 2015 legislation requires Minnesota State to report on seven completion measures. The legislative measures, the measure names and definitions and, where appropriate, the subject disaggregation are shown in Table 2. The developmental education enrollment rates and completion rates are reported separately for Mathematics, Reading and Writing or English. A few colleges and universities do not offer developmental reading and/or developmental writing and consequently will not have the developmental enrollment or completion rates reported. Although a few Minnesota State colleges and universities offer developmental courses in English as a Second Language (now described as English Language Learning or ELL) and in other disciplines, the numbers of students taking these courses is relatively small, and consequently, measures are not reported separately for these disciplines, but the students are included in the overall rates.

**Table 2: Measures and Definitions
Minnesota State Colleges and Universities**

Legislative Measure	Measure Name	Definition
Percent of Students Placed in Remedial Education	Developmental Education Enrollment Rate	Percent of entering students who took any Developmental Education course (Math, Reading, Writing, ESL, Other) in the first two years
	Developmental Education Enrollment Rate: Math	Percent of entering students who took Developmental Math courses in the first two years
	Developmental Education Enrollment Rate: Reading	Percent of entering students who took Developmental Reading courses in the first two years
	Developmental Education Enrollment Rate: Writing	Percent of entering students who took Developmental Writing courses in the first two years
Percent of Students Completing Remediation in One Year	One-Year Developmental Completion Rate: Math	Percent of students who took Developmental Math in their first two years who completed all required Developmental Math courses by the end of the first year
	One-Year Developmental Completion Rate: Reading	Percent of students who took Developmental Reading in their first two years who completed all required Developmental Reading courses by the end of the first year
	One-Year Developmental Completion Rate: Writing	Percent of students who took Developmental Writing in their first two years who completed all required Developmental Writing courses by the end of the first year
Percent of Students that Complete College-Level Gateway Courses in One Year	One-Year College Level Course Completion Rate: Math	Percent of entering students who completed a College-Level Math course by the end of the first year
	One-Year College Level Course Completion Rate: Writing	Percent of entering students who completed a College-Level Writing course by the end of the first year
Percent of Students Who Complete 30 Credits per Year	Thirty Credit Completion Rate in First Year	Percent of full-time entering students who completed 30 credit hours in the first year
	Twenty Credit Completion Rate in First Year	Percent of full-time entering students who completed 20 credit hours in the first year

**Table 2: Measures and Definitions - Continued
Minnesota State Colleges and Universities**

Legislative Measure	Measure Name	Definition
Student Retention Rate	Student Persistence and Completion Rate	Percent of full-time entering students that were either Retained, Transferred, or Graduated as of the beginning of the second fall term one year after entry
Time to Completion of a Degree or Certificate	Completion Rate	<u>Colleges</u> : The percent of full-time entering State College students that Transferred or Graduated by the end of the third spring term after entry <u>Universities</u> : The percent of the full-time entering State University students that Graduated by the end of the sixth spring term after entry
Credits Earned by Those Completing a Degree or Certificate	Average Credits Earned by Graduation	Average number of credits students had earned at graduation with their first award for a Certificate or an Associate degree at the colleges and a Bachelor's degree at the universities (reported by entering cohort).

Disaggregation

The legislation specifies that the measures should be disaggregated on several dimensions:

- **Institution:** The measures are reported for each of the 37 Minnesota State Colleges and Universities, as well as for all colleges, all universities and the system.
- **Age:** The measures are reported for the following three student age groups
 - 24 and Under
 - 25 and Over
 - Unknown age
- **Race-Ethnicity:** The measures are reported for the following nine race and ethnicity groups
 - American Indian
 - Asian and Pacific Islander
 - Black or African American
 - Hispanic of any race
 - Two or more races
 - All Students of Color and American Indian Students: Includes the five categories above
 - White
 - Nonresident: A student who is not a permanent resident of the U. S. and, consequently, is not reported within a racial or ethnic group.
 - Unknown race and ethnicity
- **Pell Eligibility:** Eligibility for a federal Pell grant is used as a measurement proxy for low income status and includes three reporting categories
 - Pell Eligible: A student who applied for a Pell Grant and was determined to be eligible.
 - Not Pell Eligible: A student who applied for a Pell Grant and was determined not to be eligible.
 - Unknown Pell Eligibility: A student who did not apply for a Pell Grant.

Data Mart Updates

The measures included in the January 2022 Degree and Certificate Completion report have been updated with the most recent information from the Minnesota State student record system and the system's developmental education and completion data mart. The data mart was created to allow reporting of the legislatively required measures and to allow colleges and universities to more easily analyze data on their students to support efforts to increase student success.

Updates to the developmental education data mart during the last year included the addition of a new cohort of entering students and modifications to increase the accuracy and the completeness of the data reported on developmental and college level course completion including, for a few campuses, updating the classification of the highest developmental education course in a sequence. Although the improvements to the data mart have resulted in some specific data points changing as compared to the data reported last year, the general trends and patterns observed in the earlier report remain unchanged.

Data Suppression

The student records and data elements that were used to prepare the completion measures presented in this report are classified as private educational data under both the U. S. Family Education Rights and Privacy Act (FERPA) and the Minnesota Government Data Practices Act (MGDPA) and consequently, may not be disclosed. The prohibition on disclosure extends to summary data prepared from the student records when the number of students reported is small and it therefore may be possible to identify individual students from the summary data.

Data suppression is a method used to minimize the risk of disclosing data about individual students. Suppression takes the form of removing data from cells rather than reporting the actual number of students. The goals of suppression are to ensure that reporting does not reveal, directly or indirectly, personally identifiable private data about an individual student and to ensure that cells are of sufficient size to yield statistically reliable information.

The data suppression method used for the completion measures in this report is based on a technical brief published by the U. S. Department of Education in 2012 (NCES). The approach includes the following three components:

- **First-Order Suppression:** Suppress any numerator, denominator and rate where the denominator is less than 10 students.
- **Second-Order Suppression:** Suppress very high and low rates when the denominator is small enough or the rates are high or low enough to reveal something about all of the students in the cell.
- **Complementary Suppression:** Suppress a second cell in the same column at the same institution and at another institution to prevent the calculation of the first suppressed cell.

Completion Measures

This section of the report presents data on each of the seven legislative completion measures. Each section describes the measure, presents system level trends in the measure, and describes any differences between students of color and American Indian students compared to white and nonresident students and differences between Pell grant eligible students and students who are not eligible for Pell grants.

Developmental Education Enrollment Rate

The developmental education enrollment rate was measured by student enrollment in one or more courses that are identified as developmental-level during the first two years after entry. Because student participation is measured in their first two years after entry, the most recent data for this population is a year less recent than for the other measures. The developmental education enrollment rate is reported for full and part-time fall entering undergraduate degree, diploma and certificate seeking students.

The number of fall entering students taking developmental courses during their first two years decreased by 47.3 percent from 21,534 students in Fall 2011 to 11,341 in Fall 2019, as shown in Table 3. The decrease was 50.1 percent at the colleges and 29.0 percent at the universities during this period.

Table 3: Fall Entering Students Who took Developmental Courses Undergraduate Degree, Diploma and Certificate Seeking Students Minnesota State Colleges and Universities

Sector	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
System	21,534	21,271	19,011	16,376	14,825	14,223	13,138	12,552	11,341	-47.3%
Colleges	18,732	18,466	16,501	13,943	12,362	11,792	11,156	10,482	9,351	-50.1%
Universities	2,802	2,805	2,510	2,433	2,463	2,431	1,982	2,070	1,990	-29.0%

The percentage of the system's fall entering undergraduate students enrolled in developmental education courses in their first two years decreased in all subjects between Fall 2011 and Fall 2019. The system percent of students who took any developmental courses decreased from 41.3 percent to 28.0 percent, as shown in Table 4. The largest decrease occurred among students taking developmental math courses, dropping 12.9 points from 32.3 percent for Fall 2011 to 19.4 percent for Fall 2019.

**Table 4: Developmental Education (DE) Enrollment Rate by Subject
Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Subject	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
Any DE	41.3%	41.2%	39.1%	35.3%	33.1%	32.2%	30.9%	29.9%	28.0%	-13.3
DE Math	32.3%	31.5%	30.2%	24.9%	23.3%	22.6%	22.2%	21.4%	19.4%	-12.9
DE Reading	14.5%	14.9%	14.1%	12.5%	10.5%	9.8%	9.2%	7.4%	6.8%	-7.7
DE Writing	17.4%	17.4%	16.0%	14.0%	13.0%	13.0%	11.5%	11.1%	10.5%	-6.9

We attribute much of this decline in enrollment in developmental education to the curricular and support innovations that have been implemented across our campuses, as outlined in the previous section. In addition, as Minnesota State continues to enhance the course placement process, more and more students are being placed into the appropriate course that addresses their academic needs, with more students being placed into college-level courses and provided the academic and student support curriculum to support their success. It is anticipated that with the full implementation of the DESR by 2022, Minnesota State will see continued enrollment declines in developmental education.

We cannot address academic preparation alone, so our system is working closely with our external partners to increase the career and college readiness of students arriving at our colleges and universities. Minnesota State colleges and universities are collaborating with their K-12 partners to improve practice and curriculum alignment so that we can ensure that more high school students graduate career- and college-ready. In addition, campuses continue to partner with their local adult basic education partners, workforce centers, businesses and industries to build seamless transitions into Minnesota State institutions. The system also continues to collaborate with the Minnesota Department of Education Adult Basic Education, the Department of Employment and Economic Development, other state agencies, and community-based organizations to improve students' college transitions.

The percentage of students of color and American Indian students and of Pell grant eligible students who took developmental courses has decreased substantially since Fall 2011 but both groups continue to have higher developmental course taking rates relative to their comparison groups. Forty-two percent of Fall 2019 entering students of color and American Indian students took developmental courses compared to 20.8 percent of white and nonresident students, as shown in Table 5. For Fall 2019 entering students, 36.1 percent of Pell grant eligible students took developmental education courses, compared to 21.7 percent of students that were not eligible for a Pell grant.

**Table 5: Developmental Education (DE) Enrollment Rate by Student Group
Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Student Group	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
Any DE-White/NR	35.6%	34.8%	32.4%	28.7%	26.3%	25.7%	23.8%	22.8%	20.8%	-14.8
Any DE-SOC & AI	58.6%	59.0%	56.6%	51.3%	48.6%	47.2%	46.1%	44.1%	41.9%	-16.7
Any DE-No Pell	33.6%	33.0%	30.8%	27.9%	26.5%	25.8%	24.5%	23.2%	21.7%	-11.9
Any DE-Pell	50.1%	50.1%	48.1%	43.2%	41.3%	40.6%	39.2%	38.6%	36.1%	-14.0

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

Addressing the gaps between students of color and American Indian students as compared to white and nonresident students is a key strategy in terms of our partnerships with our K-12 partners, adult basic education, workforce centers, businesses and industries. The partnerships with our local high schools and the Minnesota Department of Education are taking a broad account of identifying career and college readiness early on and providing early interventions for students who are not on track to graduate.

Developmental Education Completion Rate

Student completion of developmental education courses was measured by passing the last course in a sequence (e.g., Intermediate Algebra), passing their last developmental mathematics or English course and taking a college-level mathematics or English course, or earning a credential within the first academic year after entry. The developmental education completion rate is reported for full and part-time fall entering undergraduate credential seeking students who had enrolled in developmental education courses.

**Table 6: Developmental Education (DE) Completion Rate in First Year by Subject
Minnesota State Colleges and Universities**

Subject	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
DE Math	31.0%	31.3%	33.5%	40.5%	42.5%	43.6%	43.2%	44.3%	47.7%	+16.7
DE Writing	59.7%	60.1%	59.7%	61.1%	62.9%	64.1%	63.7%	64.6%	66.1%	+6.4
DE Reading	56.1%	55.8%	55.5%	60.3%	60.6%	61.5%	61.3%	59.9%	59.6%	+3.5

The percentage of fall entering students completing their developmental education requirements by the end of their first year has fluctuated somewhat in recent years but remains higher for Fall 2019 entering students as compared to Fall 2011. The greatest increase over this period of time has been in the percent of students completing developmental

mathematics in the first year, although that rate continues to trail those for developmental writing and reading.

Across Minnesota State, faculty members, departments, and academic and student affairs divisions have been innovating both within and beyond the classroom to better support students enrolled in developmental education, including supplemental instruction and accelerated, one-year developmental education pathways.

As campuses and the system office work collaboratively to improve, scale, and add new innovative practices and programs, it is anticipated that the percentage of students completing developmental education courses in their first year will continue to increase.

Many campuses have also instituted campus-level policies that require or highly encourage students to enroll in developmental education courses their first semester or first year. These policies help ensure that students receive the academic and student support they need to be successful in completing their degree or certificate.

**Table 7: Developmental Education (DE) Completion Rate in First Year
by Student Group and Subject
Minnesota State Colleges and Universities**

Subject & Student Group	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
DE Math-White/NR	35.3%	35.4%	37.8%	43.4%	46.5%	48.1%	47.7%	50.1%	53.6%	+18.3
DE Math-SOC & AI	22.3%	23.6%	25.9%	35.1%	35.6%	36.7%	36.9%	36.7%	40.6%	+18.3
DE Writing-White/NR	64.9%	66.6%	66.9%	66.0%	69.3%	68.7%	69.5%	69.5%	73.7%	+8.8
DE Writing-SOC & AI	53.8%	53.4%	53.0%	57.0%	57.5%	60.3%	59.8%	61.4%	61.4%	+7.6
DE Reading-White/NR	61.6%	63.4%	62.4%	67.1%	67.6%	66.9%	66.7%	66.5%	69.0%	+7.4
DE Reading-SOC & AI	50.9%	49.4%	50.1%	55.7%	56.6%	58.3%	58.8%	57.1%	56.4%	+5.5
DE Math-No Pell	39.3%	39.3%	39.6%	46.5%	48.0%	49.2%	49.8%	51.2%	55.9%	+16.6
DE Math-Pell	26.0%	26.2%	29.0%	36.7%	38.3%	39.3%	38.7%	39.8%	43.2%	+17.2
DE Writing-No Pell	68.8%	69.2%	68.8%	68.1%	69.3%	68.4%	69.0%	68.9%	70.7%	+1.9
DE Writing-Pell	55.7%	56.2%	56.0%	57.9%	59.0%	61.4%	61.1%	62.9%	63.8%	+8.1
DE Reading-No Pell	64.5%	65.5%	64.7%	67.1%	67.6%	65.5%	66.9%	63.7%	65.5%	+1.0
DE Reading-Pell	52.2%	52.3%	51.7%	57.7%	58.1%	60.2%	59.6%	58.8%	57.4%	+5.2

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

As shown in Table 7, the percentage of students of color and American Indian students who completed their developmental courses by the end of their first year has increased in all subjects since Fall 2011. Although the gaps relative to white and nonresident students have remained consistent, the completion rates for students of color and American Indian students remain lower. Similar gaps remain for students who are eligible for Pell grants and those who are not eligible. For both comparisons by student race and Pell eligibility, gaps in completion of writing and reading developmental courses have tightened to within ten percentage points during the ten-year period.

Innovations implemented at Minnesota State campuses have positively impacted students of color and American Indian students and white and nonresident students in that the completion rates for both groups have increased over the last seven years. Nonetheless, work needs to continue to address the gaps between the two groups of students to ensure that all students can be successful in developmental education courses. Campuses will continue to examine how programs, practices, and initiatives impact students traditionally underrepresented in higher education and scale the programs that have resulted in narrowing or eliminating the gaps in academic achievement.

We cannot do the important work of supporting student learning needs alone. The Minnesota State system is working closely with our external partners to increase the career and college readiness of students arriving at our colleges and universities. Our colleges and universities are collaborating with their K-12 partners to improve practice and curriculum alignment so that we can ensure that more high school students graduate career- and college-ready.

In addition, campuses continue to partner with their local adult basic education partners, workforce centers, businesses and industries to build seamless transitions into Minnesota State institutions. The system also continues to collaborate with the Minnesota Department of Education Adult Basic Education, the Department of Employment and Economic Development, other state agencies, and community-based organizations to improve students' college transitions.

College Level Course Completion Rate

Student completion of college level gateway courses was measured by the rate of students passing a college level mathematics or English course during the first year. College level mathematics and English courses were identified by their Classification of Instructional Programs code. The college level course completion rate is reported for full and part-time fall entering undergraduate degree, diploma and certificate seeking students.

**Table 8: First Year College Level (CL) Course Completion Rate by Subject
Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Subject	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Change
CL Math	20.6%	20.8%	21.2%	22.8%	23.5%	24.4%	24.5%	24.5%	25.5%	26.1%	+5.5
CL Writing	38.7%	38.0%	38.8%	39.1%	40.1%	39.9%	39.4%	39.0%	40.0%	38.6%	-0.1

The percentage of students completing a college level math course in their first year increased between Fall 2011 and Fall 2020. The percentage of students completing a college level writing course remained relatively stable. As shown in Table 8, the percent of students completing college-level mathematics in their first year was 26.1 percent for those entering in Fall 2020 as compared to 20.6 percent for those entering in Fall 2011. This rate, which has grown by at least

half a point in each of last two years, is 5.5 percentage points higher than for those entering in Fall 2011.

Thirty-nine percent of students completed a college level writing course in their first year in Fall 2020, which constitutes a slight decrease of 0.1 percent from the 38.7 percent rate observed for Fall 2011 entering students. In particular, the rate of entering students completing a college level writing course in the first year declined by a point and a half between Fall 2019 and Fall 2020.

The lower completion rates for college level mathematics compared to college level writing courses likely is due to several factors. Some students are still enrolled in and are completing their developmental mathematics courses in their first year. Other students opt not to take college level mathematics courses in the first year of college. It is important to note that students at the state colleges may be enrolled in career or technical programs that do not require a college level mathematics course for certificate, diploma, or degree completion.

**Table 9: First Year College Level (CL) Course Completion Rate by Student Group and Subject
Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Subject and Student Group	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Change
CL Math-White/NR	23.5%	23.7%	24.2%	26.1%	26.8%	27.8%	28.2%	28.2%	29.2%	28.9%	+5.4
CL Math-SOC & AI	12.0%	12.7%	13.5%	14.8%	15.8%	16.9%	16.8%	17.3%	18.6%	20.8%	+8.8
CL Writing-White/NR	41.9%	41.1%	41.5%	41.7%	42.3%	41.8%	41.1%	40.6%	41.2%	39.8%	-2.1
CL Writing-SOC & AI	29.5%	29.8%	32.1%	33.1%	35.1%	35.7%	36.0%	36.2%	37.7%	36.3%	+6.8
CL Math-No Pell	28.4%	28.7%	28.1%	29.9%	30.2%	30.3%	31.2%	30.8%	32.0%	32.1%	+3.7
CL Math-Pell	15.0%	15.4%	16.1%	17.6%	18.1%	19.2%	19.6%	19.8%	20.6%	21.6%	+6.6
CL Writing-No Pell	45.7%	45.2%	44.9%	44.9%	45.4%	44.0%	43.3%	42.1%	43.8%	42.7%	-3.0
CL Writing-Pell	34.7%	34.0%	35.0%	35.9%	37.0%	37.2%	37.7%	38.1%	38.9%	37.7%	+3.0

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

The percentage of students of color and American Indian students and the percentage of Pell grant eligible students who completed a college level course in their first year has increased in both math and writing since Fall 2011. Both groups, however, had lower college level course completion rates relative to the comparison groups of white and nonresident students and students who are not eligible for Pell grants. The gaps between the completion rate between these groups have tightened considerably in the decade measured, by half or more of the gap with regard to writing course completion. Additionally, in Fall 2020, the percent of white and nonresident students completing a college level math and writing course declined from the year before, as well as the percent of non-Pell eligible students completing a college level writing course.

For students entering in Fall 2020, 20.8 percent of students of color and American Indian students completed a college level math course in the first year compared to 28.9 percent of white and nonresident students, as shown in Table 9. Pell eligible students completed a college level math course at a rate of 21.6 percent compared to 32.1 percent for students who were not eligible for a Pell grant. The gaps observed for college level math completion have fallen to less than ten percentage points for students of color and Indigenous students, and to 10.5 percentage points for Pell eligible students versus those not eligible for Pell grants.

The college level completion rates for writing courses increased between Fall 2011 and Fall 2020 for students of color and American Indian students while for Pell eligible students and gaps narrowed, roughly by half. The reduction in gaps for completion of college level writing has been due both to gains made by students of color and American Indian students (a gain of almost seven percentage points over the decade in completion of college level writing) and to declines by their reference group (a loss of two percentage points by white and nonresident students in the same period).

Completion rates for college level writing have varied somewhat by sector and institution. System office research will work with campus staff to explore the data related to the recent decreases observed in some student populations to more clearly understand the changes and to identify the extent to which the observed decreases may reflect issues with coding college writing coursework, changes in enrollment patterns or changes in program requirements.

Credit Completion Rate

Student completion of semester credits was measured by the total number of credits completed during the first year. Credit completion means that the student received a passing grade and earned the credits for the course. The first year credit completion rate is reported for full-time fall entering undergraduate degree, diploma and certificate seeking students. Part-time students are not included in this measure, since by virtue of their credit load, few of them could complete 30 credits in their first year.

**Table 10: Twenty and Thirty Credit Completion Rates
Full-Time Fall Entering Undergraduate Degree, Diploma and Certificate-Seeking Students
Minnesota State Colleges and Universities**

Credit Category	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Change
20 credits	65.1%	65.0%	65.6%	66.4%	66.6%	66.4%	65.9%	66.4%	67.4%	64.8%	-0.3
30 credits	28.6%	29.1%	28.8%	29.1%	30.2%	30.7%	31.6%	31.9%	34.2%	33.7%	+5.1

The percentage of students who completed 30 semester credits during their first year increased between Fall 2011 and Fall 2020, but the percentage of students who completed 20 credits fell slightly. Among Fall 2020 entrants, 64.8 percent completed 20 credits in their first year, down slightly from 65.1 percent for Fall 2011 entering students, as shown in Table 10. Almost thirty-

four percent of Fall 2020 entering students completed 30 credits in the first year, up from 28.6 percent for Fall 2011 students.

Some researchers and practitioners have suggested that one of the ways to increase student success and degree completion is to encourage more students to take a full load of courses. A full load of courses at 30 credits each year enables students to complete an associate degree within two years or a baccalaureate degree within four years. Students across our 2-year and 4-year institutions, however, have financial constraints or have external commitments, such as work and family, which impact their ability to take a full load of courses each semester.

The percentage of students of color and American Indian students that earned twenty and thirty credits in their first year increased between Fall 2011 and Fall 2020, as shown in Table 11. The percent of Pell eligible students who earned thirty credits in their first year continued this trend, but the percent of Pell eligible and non-Pell eligible students who managed to earn twenty credits declined in this period. Both groups had lower percentages for credit completion than their comparison groups of white and nonresident students and students who were not eligible for a Pell grant.

**Table 11: Twenty and Thirty Credit Completion Rates by Student Group
Full-Time Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Student Group	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Change
20 Credits-White/NR	68.8%	68.9%	69.5%	70.4%	70.8%	70.4%	70.4%	71.4%	72.4%	69.6%	+0.8
20 Credits-SOC & AI	51.8%	52.0%	53.1%	54.4%	54.4%	55.3%	54.8%	54.9%	56.1%	53.7%	+1.9
20 Credits-No Pell	72.3%	72.3%	72.4%	72.8%	73.5%	72.6%	72.5%	73.0%	73.4%	71.5%	-0.8
20 Credits-Pell	58.7%	58.2%	58.7%	60.0%	59.6%	59.7%	59.2%	59.8%	61.0%	57.2%	-1.5
30 Credits-White/NR	31.8%	32.7%	32.4%	32.9%	34.6%	35.1%	36.2%	36.8%	39.4%	38.1%	+6.3
30 Credits-SOC & AI	17.1%	16.8%	17.3%	17.9%	17.6%	18.7%	20.2%	20.4%	22.2%	23.2%	+6.1
30 Credits-No Pell	33.3%	34.9%	33.6%	33.6%	35.6%	36.5%	36.5%	37.2%	40.0%	39.3%	+6.0
30 Credits-Pell	24.2%	23.7%	23.8%	24.0%	24.1%	24.4%	26.4%	26.5%	28.1%	26.7%	+2.5

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

Almost fifty-four percent of Fall 2020 entering students of color and American Indian students earned 20 credits in their first year, up from 51.8 percent for Fall 2011 entering students. Note however that this constituted a loss from the entering class of Fall 2019 of two and a half percentage points. Every group, including white and nonresident students, and non-Pell eligible students, showed a decline in the percent of full-time students earning twenty credits in their first year in Fall 2020, and in each case constituted a drop from Fall 2019, further indication that this semester was unusually challenging.

The percentage of students of color and American Indian students who earned 30 credits in their first year grew at about the same rate as their white and nonresident peers from Fall 2011 to Fall 2020. Between Fall 2019 and Fall 2020, the percent of white and nonresident students earning thirty credits declined, but the rate grew for students of color and American Indian students. The percent of Pell eligible students who earned 30 credits in their first year grew by two and a half percentage points between Fall 2011 and Fall 2020, but this gain was less than that from the non-Pell eligible group. All of these groups saw declines in the rate of completion of thirty credits from Fall 2019 to Fall 2020, with the exception of students of color and American Indian students.

Although overall credit completion rates have increased, outcome gaps have remained stubbornly similar, and in one case (completion of 30 credits based on Pell status) the gap is widening.

Student Persistence and Completion Rate

The student persistence and completion rate (persistence rate) was reported for Fall entering full-time undergraduate degree, diploma and certificate seeking students and includes students who were retained, transferred or graduated. The rate is measured one year after entry (at the student’s second Fall semester). National, state and system standards call for reporting persistence and completion rates for full-time entering students.

**Table 12: Second Fall Persistence and Completion Rate by Student Group
Full-Time Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Student Group	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Change
Total	75.2%	75.0%	75.4%	77.1%	76.9%	76.9%	76.3%	76.8%	75.8%	+0.6
White/NR	77.8%	77.4%	78.0%	79.7%	79.8%	79.4%	79.0%	79.9%	78.7%	+0.9
SOC & AI	66.1%	66.8%	67.4%	69.4%	68.6%	70.3%	69.4%	69.6%	69.1%	+3.0
No Pell	81.6%	81.1%	81.4%	82.7%	82.6%	81.9%	81.4%	82.1%	81.1%	-0.5
Pell	69.4%	69.2%	69.4%	71.5%	70.7%	71.3%	70.6%	71.3%	70.3%	+0.9

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

The second fall persistence and completion rate for Fall 2019 entering students was 0.6 percentage points higher than for those entering in Fall 2011; bear in mind that this rate measures students who started in Fall 2019 and returned in Fall 2020, so this spans the first year of the COVID-19 pandemic. The increase was much greater for students of color and American Indian students, more than triple the increase for white and nonresident students, and the gap among these groups in the Fall 2019 cohort has fallen below ten percentage points.

Pell eligible students in the entering class of Fall 2019 returned at a rate 0.9 points higher than those in Fall 2011, but the persistence rate for non-Pell eligible students in Fall 2019 was half a point lower than that in Fall 2011. The gap between Pell eligible and non-Pell eligible students with regard to second-Fall persistence is still greater than ten percent. All disaggregated groups saw a decline in the persistence rate for the Fall 2019 entering class as compared to the rate for the year before.

Although efforts have been aimed to address the opportunity gaps and increase students of color and American Indian and Pell eligible students' persistence rates and gaps in these rates have improved, it is evident that there is still much work to do. In addition to expanding evidence-based programs, practices, and initiatives, campuses are focusing on increasing student engagement and sense of belonging and creating positive campus climates as well as high-touch student support services.

Student success (i.e., retention, transfer and graduation) is the primary focus of all Minnesota State colleges and universities. As highlighted in the previous section on ongoing completion efforts, student success efforts have been implemented throughout Minnesota State campuses to ensure that students are making effective progress and meeting their educational goals. Minnesota State campuses have been actively working to improve persistence and completion rates through a variety of initiatives that have demonstrated promising outcomes. More work remains, including increased efforts to eliminate gaps in persistence and completion.

Completion Rate

Time to complete a degree or certificate was measured as a completion rate, which is the percentage of Fall entering full-time undergraduate degree, diploma or certificate seeking students that complete within 150 percent of "normal" time. National, state and system standards call for reporting persistence and completion rates for full-time entering students. Completion is measured at the state colleges three years after entry and includes students who graduate or transfer. Completion is measured at the state universities six years after entry and includes students who graduate. The rates are reported separately for colleges and universities because of the difference in timeframe.

The 3-year completion rate for the state colleges decreased during the previous recession and has increased in the years since then. The rate for full-time students entering in Fall 2017 was 3.3 points higher than for Fall 2010 (54.4 percent as compared to 51.1 percent) as shown in Table 13.

The state college (3-year) completion rate for students of color and American Indian students has increased since the results of the Fall 2010 cohort, but remains lower than the rate for white and nonresident students and gaps remain above ten percent. The completion rate for students who were not eligible for Pell grants increased by four percentage points between the Fall 2010 and Fall 2017 entering cohorts; the rate for Pell eligible students increased by 2.3 percentage points during the same period and substantial gaps remain.

**Table 13: Completion Rate by Sector and Student Group
Full-Time Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students
Minnesota State Colleges and Universities**

Sector and Student Group	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Change
Colleges: Completion Rate	51.1%	50.9%	51.1%	52.6%	53.9%	54.1%	54.2%	54.4%	+3.3
Colleges: Completion-White/NR	54.8%	54.9%	55.0%	56.8%	58.2%	58.3%	58.3%	59.4%	+4.6
Colleges: Completion-SOC & AI	39.1%	39.6%	40.7%	41.9%	43.4%	44.4%	45.3%	44.6%	+5.5
Colleges: Completion-No Pell	57.5%	59.5%	58.9%	60.9%	61.3%	61.3%	60.3%	61.5%	+4.0
Colleges: Completion-Pell	46.0%	44.7%	45.0%	45.8%	47.7%	47.7%	48.7%	48.3%	+2.3
Universities: Completion Rate	53.4%	53.7%	54.8%	55.1%	55.7%				+2.3
Universities: Completion-White/NR	55.2%	55.7%	56.9%	57.2%	58.1%				+2.9
Universities: Completion-SOC & AI	42.5%	41.6%	43.7%	44.2%	44.5%				+2.0
Universities: Completion-No Pell	56.3%	57.6%	58.7%	58.2%	58.5%				+2.2
Universities: Completion-Pell	48.1%	46.6%	48.1%	48.5%	50.0%				+1.9

*SOC & AI: Students of color and American Indian students
White/NR: White and nonresident students
Pell: Pell eligible students
No Pell: Not Pell eligible*

The 6-year completion rate for the state universities increased from 53.4 percent for Fall 2010 entering students to 55.7 percent for those entering in Fall 2014, as shown in Table 13. Even with modest improvements in the 6-year state university completion rates for students of color and American Indian students and Pell eligible students, the gaps between both populations and their comparison groups remain substantial, and their reference group gains over the years remain larger.

Credential completion continues to be an imperative and a primary commitment of Minnesota State. Despite more recent increases in completion rates, gaps have remained stable. Eliminating the gaps between students of color and American Indian completion rates and white and nonresident student completion rates, as well as the gaps between Pell eligible students and students who are not Pell eligible, is one of the most important priorities of Minnesota State. The strategies and approaches listed previously will need to be applied strategically, systemically, and comprehensively to ensure that students' completion rates increase and Minnesota State addresses these critical gaps.

Credits Earned at Graduation

Credits earned at graduation was measured by averaging graduates' total number of credits earned and transfer credits accepted at the time a degree or certificate was awarded. The measure is reported for graduates that earn certificates and associate degrees at the state colleges and for graduates that earn bachelor's degrees at the state universities.

The average cumulative credits at graduation are shown by the student’s entering cohort. As additional students graduate over time, the average credits earned may change. Data are not shown for more recent cohorts as that data would only include students who completed in a shorter time frame and likely with fewer credits; this would understate the total credits earned and overstate changes over time.

The average cumulative credits at graduation has decreased overall for students earning certificates, associate and bachelor’s degrees. As shown for other metrics, there was a shift in the trend from the Fall 2017 entering group to the Fall 2018 entrants, with average credits at graduation going up, specifically for reference groups of white and nonresident students, and non-Pell eligible students.

**Table 14: Average Credits Earned at Graduation by Award and Student Group
By Fall Entering Cohort
Minnesota State Colleges and Universities**

Sector and Student Group	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Change
Colleges: Certificate	42.7	43.0	42.0	42.7	43.4	41.8	41.7	39.8	42.1	-0.6
Colleges: Certificate-White/NR	42.8	43.7	42.6	43.7	44.0	43.1	43.2	39.8	43.9	+1.1
Colleges: Certificate-SOC & AI	42.8	41.6	41.1	40.6	42.1	39.7	39.1	40.2	38.7	-4.1
Colleges: Certificate-No Pell	50.6	48.7	49.8	51.0	48.9	47.3	47.1	44.0	47.8	-2.8
Colleges: Certificate-Pell	41.7	41.7	40.3	40.3	41.5	40.4	40.0	38.9	39.7	-2.0
Colleges: Associate	79.9	79.6	79.6	80.5	80.5	80.0	79.8	78.6	79.4	-0.5
Colleges: Associate-White/NR	79.7	79.3	79.5	80.7	80.7	80.5	80.3	79.0	79.7	0
Colleges: Associate-SOC & AI	81.0	80.9	80.1	79.5	79.9	78.3	78.3	77.4	78.4	-2.6
Colleges: Associate-No Pell	80.1	79.4	80.1	81.2	82.0	81.5	81.5	79.6	81.2	+1.1
Colleges: Associate-Pell	79.2	79.5	78.7	79.1	78.7	78.0	77.3	76.8	76.5	-2.7
Universities: Bachelor's	139.8	139.7	139.0	138.2	138.6					-1.2
Universities: Bachelor's- White/NR	139.8	139.7	139.1	138.5	138.9					-0.9
Universities: Bachelor's- SOC & AI	140.2	139.5	139.3	136.5	137.2					-3.0
Universities: Bachelor's-No Pell	139.7	139.0	138.5	137.7	138.4					-1.3
Universities: Bachelor's-Pell	139.3	139.8	138.8	137.1	137.3					-2.0

SOC & AI: Students of color and American Indian students

White/NR: White and nonresident students

Pell: Pell eligible students

No Pell: Not Pell eligible

The average cumulative credits for state college certificate graduates decreased from 42.7 credits for Fall 2010 entering students to 42.1 credits for Fall 2018 entering students, as shown in Table 14, but this figure had fallen below forty among the Fall 2017 cohort. Average cumulative credits for state college associate degree graduates decreased from 79.9 credits for Fall 2010 entering students to 79.4 credits for Fall 2018 entering students. Average cumulative

credits for state university bachelor's degree graduates decreased from 139.8 credits for Fall 2010 entering students to 138.6 credits for Fall 2014 entering students.

Students of color and American Indian students who earn Minnesota State certificates, associate or bachelor's degrees complete them with fewer credits than their comparison group of white and nonresident students. This pattern also holds true for Pell eligible students at state colleges and universities as compared to students who are not eligible for Pell grants. At the bachelor's degree level, these patterns held true but to a smaller degree relative to the number of credits needed at graduation.

The declining number of credits at graduation reflects, at least in part, credit caps Minnesota State implemented for the vast majority of its programs during the last decade. The Minnesota Legislature enacted language in 2007 that required the Minnesota State system to implement credit caps of 60 for associate degrees and 120 for bachelor's degrees. The legislation granted the Board of Trustees the authority to grant waivers to the caps for specific programs. The vast majority of the college and university associate and bachelor's degree programs comply with the credit caps. There are many other factors that may also impact cumulative credits at graduation, including students taking additional courses due to personal interest and changing their major, and having to meet new major or degree program requirements.

Institution Level Data

Data on the seven measures for each college and university are presented in Appendix B. The data are disaggregated by race, ethnicity, Pell Grant eligibility, and age. Trends for up to five years are reported for the measures.

CONCLUSIONS

The 2015 Higher Education Appropriations Act (2015 Minnesota Session Law, Chapter 3, Article 3, Section 16) requires the Minnesota State Board of Trustees, beginning in January of 2018, to submit a report on its activities and achievements related to improving timely completion, including reporting on seven specific completion measures. This report provides an update to annual reports submitted to the legislature in January 2018, January 2019 and January 2020.

Completion Measures

The Minnesota State Colleges and Universities have made progress on the completion measures presented in this report, but more work remains, particularly to address gaps in educational outcomes across student groups.

Students of color and American Indian students are compared throughout the report to white and nonresident students. Students who are eligible for federal Pell grants are compared to students who are not eligible for the grants. Data on the seven measures for each college and university are presented in Appendix B. The data are disaggregated by race, ethnicity, Pell Grant eligibility, and age. Trends for up to five years are reported for the measures.

We attribute much of this developmental education enrollment decline to curricular and support innovations that have been implemented across our campuses. As institutions continue to implement, evaluate and refine their DESR strategic plans, it is anticipated that Minnesota State will see continued enrollment declines in developmental education courses.

The percentage of students of color and American Indian students and of Pell grant eligible students who took developmental courses has decreased substantially since Fall 2011, but both groups continue to have higher developmental course taking rates relative to their comparison groups.

Developmental Completion Rate: The percentage of students completing their developmental education requirements in their first year increased in math, reading and writing between Fall 2011 and Fall 2019. Across Minnesota State, faculty members, departments, and academic and student affairs divisions have been innovating both within and beyond the classroom to better support students enrolled in developmental education. As campuses improve, scale, and/or add new innovative practices and programs across campuses, it is anticipated that there will be additional increases in student completion of developmental education courses by the end of their first year.

Gaps between students of color and American Indian students relative to white and nonresident students in developmental course completion have narrowed in reading and writing but to a lesser degree in math since Fall 2011, and significant gaps remain.

College Level Course Completion Rate: The percent of students completing college-level mathematics in their first year was 26.1 percent for those entering in Fall 2020 as compared to 20.6 percent for those entering in Fall 2011. The rate, which has remained stable the last three years, is 5.5 percentage points higher than for those entering in Fall 2011; this rate also increased between Fall 2019 and Fall 2020 entrants despite a trend of retrenchment among other metrics over the course of the pandemic.

Less so for college level writing in the first year; 38.6 percent of Fall 2020 entrants completed a college level writing course in their first year compared to the 38.7 percent rate observed for Fall 2011 entering students. The college-level completion rates for writing increased between Fall 2011 and Fall 2020 for students of color and American Indian students and for Pell eligible students and the observed gaps have narrowed, some by more than half. Indeed the strong rate of gain in completion of college level writing in the first year by students of color and American Indian students, and by Pell eligible students, coupled with sizable decreases in this metric by their reference groups, are on track to close the gaps.

Completion rates for college level writing have varied somewhat by sector and institution. System office research will work with campus staff to explore the data related to the recent decreases observed in some student populations in order to more clearly understand the changes and to identify the extent to which the observed decreases may be reflecting issues with coding college writing coursework, changes in enrollment patterns or changes in program requirements.

Credit Completion Rate: The percentage of fall full-time entering students who completed 30 semester credits during their first year increased between Fall 2011 and Fall 2020, but decreased slightly for the greater set of students who completed 20 credits. The disaggregated groups showing the decreases in completion of 20 credits were both the Pell eligible and non-Pell eligible students. Although the overall credit completion rates have increased for student groups examined in this report and the gap between Native American and students of color completing 20 credit hours narrowed slightly, educational outcome gaps remain a significant issue.

Student Persistence and Completion Rate: The second fall persistence and completion rate for Fall 2019 entering full-time undergraduate students was 0.6 percentage points higher than for those entering in Fall 2011. All disaggregated groups showed a turndown in this rate from the previous year's cohort group, underscoring a likely disruption from the effects of the COVID-19 pandemic on student behavior. The increase was far greater for students of color and American Indian students than for white and nonresident students, bringing that gap to fewer than ten percentage points for the first time since the metric was examined. Pell eligible students continued their positive trend in second fall persistence and completion coupled with a larger decrease in their non-Pell eligible peers.

Minnesota State campuses have been actively working to improve persistence and completion rates through a variety of initiatives that have demonstrated promising outcomes. More work remains, however, including increased efforts to eliminate gaps among student groups.

Completion Rate: The 3-year completion rate for full-time entering students at state colleges is now 54.4 percent for Fall 2017 entrants. The 6-year completion rate for the state universities increased from 52.7 percent for Fall 2010 entering students to 55.7 percent for those entering in Fall 2014. It will be a year or more before we start to see these rates impacted by the disruption due to the COVID-19 pandemic.

Educational equity gaps remain stubborn in this metric. In this most recent cohort, students of color and American Indian students at state colleges showed a much stronger rate of improvement over the baseline than their white and nonresident peers; it is a different story for Pell eligible students, whose rate of gain tends to be about half of their non-Pell eligible peers. Equity gaps between disaggregated groups at the universities show very incremental but positive change, and rates of change between disaggregated groups are very similar.

Credits Earned at Graduation: The average cumulative credits at graduation decreased for certificate, and associate and bachelor's degree graduates, for all but white and nonresident students pursuing a certificate, and non-Pell eligible students pursuing an associate degree. Almost all student groups saw a higher average cumulative credit figure at graduation in the most recent cohort year as compared to the one before.

Students of color and American Indian students who earn Minnesota State certificates or associate degrees at system colleges complete with fewer credits than their comparison group of white and nonresident students. This pattern also holds true for Pell eligible students as compared to students who are not eligible for Pell grants. At the bachelor's degree level overall, and at the associate degree level comparison by race/ethnicity group, there were virtually no differences among the student groups in total credits earned at graduation.

Equity 2030

To ensure continued progress in increasing student success and to address critical educational equity gaps, the types of strategies and approaches discussed in this report will need to be applied strategically, systemically, and comprehensively.

Minnesota State is committed to eliminating, together with our partners, educational equity gaps at every Minnesota State college and university by the year 2030. This is both a moral imperative and Minnesota's economic imperative. The approach to eliminate the educational equity gaps will include:

- Enhanced Access to a higher education by strengthening partnerships and collaboration with K-12, business and industry, community-based organizations, and philanthropic

partners to expand and grow current programming and identify new ways to support students.

- Student Academic Success by establishing guided learning pathways that focus on academic preparation, progression, and accomplishment within an area of study and career.
- Student Engagement and Support within the institution, both academic and non-academic, including supporting basic needs.
- Data-Guided Decision Making by building a technology infrastructure and expanding capacity for deeper data analytics.
- Financial Resources and Support for students and growing the financial resource base for campuses.
- Workforce Diversity/Strategic Talent Management by incorporating the local and national context with the changing student and employee demographics and needs - focusing on cultural competence development, inclusive hiring practices, and improved campus climate.

REFERENCES

- ACT. (2021). Data retrieved from <https://content.govdelivery.com/accounts/MNMDE/bulletins/2f72de8>
- Bill and Melinda Gates Foundation. (2015, August 12). What we Do: Postsecondary Success Strategy Overview. Retrieved from Gates Foundation: <http://www.gatesfoundation.org/What-We-Do/US-Program/Postsecondary-Success>
- Engle, J. & Tinto, V. (2008). Moving beyond Access: College Success for Low-income, First Generation Students. Retrieved from http://www.pellinstitute.org/downloads/publications-Moving_Beyond_Access_2008.pdf
- Minnesota Office of Higher Education (2020). SLEDS. Retrieved from http://sleds.mn.gov/#developmentalEducation/orgId--999999000_groupType--state_ECODEVREGION--FOC NONE_devEdCOHORTID--2018_p--3
- Kuh, G.D., Kinzie, J., Schuh, J.H., Whitt, E.J., & Associates (2005). Student Success in College: Creating Conditions that Matter. San Francisco, CA: Jossey-Bass.
- MDRC. (n.d.). Aid Like a Paycheck. Retrieved from MDRC: <http://www.mdrc.org/project/aid-paycheck#overview>
- Minnesota Office of Higher Education. (n.d.). Facts about Enrollment. Retrieved from Minnesota Office of Higher Education: <http://www.ohe.state.mn.us/mPg.cfm?pageID=945>
- Minnesota Office of Higher Education (n.d.). Getting Prepared. Retrieved from <http://www.ohe.state.mn.us/sPages/GettingPrepared.cfm>
- Minnesota Office of Higher Education. (n.d.). Graduation Rates. Retrieved from Minnesota Office of Higher Education: <http://www.ohe.state.mn.us/mPg.cfm?pageID=1089>
- Moxley, D., Najor-Durack, A., & Dumbrigue, C. (2001). Keeping Students in Higher Education: Successful Practices and Strategies for Retention. London: Kogan Page.
- National Center for Education Statistics. (2017). The Condition of Education: Undergraduate Retention and Graduation Rates. Retrieved from https://nces.ed.gov/programs/coe/indicator_ctr.asp
- Shaffer, L. (2014). Advising Financially At-Risk Students: Detecting and Addressing Premature Affluence. NACADA Journal, 32-41.
- Straumsheim, C. (2015, December 9). It's the Little Things. Retrieved from Inside Higher Ed: <https://www.insidehighered.com/news/2015/12/09/using-data-driven-advising-colleges-find->

more-students-eligible-graduate?utm_source=Inside+Higher+Ed&utm_campaign=1093a31c03-DNU20151209&utm_medium=email&utm_term=0_1fcbc04421-1093a31c03-198623889

Trostel, P. (2015). It's Not Just the Money: The Benefits of College Education to Individuals and to Society. Margaret Chase Smith Policy Center and School of Economics Lumina Issue Papers. Retrieved from <https://www.luminafoundation.org/resources/its-not-just-the-money>

U.S. Department of Education. (2015, July 27). Fact Sheet: Focusing Higher Education on Student Success. Retrieved from <https://www.ed.gov/news/press-releases/fact-sheet-focusing-higher-education-student-success>

APPENDIX A: RELATED LEGISLATION

2015 Minnesota Session Law Chapter 69, Senate File 5, Article 3, Section 23

Section 1. COLLEGE COMPLETION; MINNESOTA STATE.

The Board of Trustees of the Minnesota State Colleges and Universities shall develop a comprehensive plan to encourage students to complete degrees, diplomas, or certificates in their fields of study. The board must consult with students, faculty, and administrators of the state colleges and universities and the Office of Higher Education to create a plan that would increase program completion at each state college or university. Components of this plan may include, but are not limited to:

- (1) replacing developmental or remedial courses, when appropriate, with co-requisite courses in which students with academic deficiencies are placed into introductory credit-bearing coursework while receiving supplemental academic instruction on the same subject and during the same term;
- (2) expanding intrusive advising, including the use of early alert systems or requiring the approval of an advisor or counselor to register for certain classes;
- (3) developing meta-majors in broad academic disciplines as an alternative to undecided majors;
- (4) making available alternative mathematics curriculum, including curriculum most relevant to the student's chosen area of study;
- (5) implementing "opt-out scheduling" by automatically enrolling students in a schedule of courses chosen by the student's department but allowing students to disenroll from such courses if they wish;
- (6) facilitating the transfer of credits between state colleges and universities; and
- (7) strategies to encourage students to enroll full time, including the use of financial assistance to reduce a student's need to work.

The development of the plan required under this section shall not discourage the development or delay the implementation or expansion of existing programs to encourage college completion.

The Board of Trustees of the Minnesota State Colleges and Universities shall submit a report describing the plan developed under this section and an implementation schedule to the legislative committees with jurisdiction over higher education policy no later than January 15, 2016. This report must include identification of the financial and other resources needed by state colleges or universities to implement the plan.

2017 Minnesota Session Law Chapter 89, Article 2, Section 25

Sec. 25. DEVELOPMENTAL EDUCATION REFORM.

(a) The Board of Trustees of the Minnesota State Colleges and Universities shall create a plan to reform developmental education offerings on system campuses aimed at reducing the number of students placed into developmental education. The plan must include, but is not limited to:

- (1) a systemwide multiple measures placement plan to guide campuses in placement of students into developmental education courses;
- (2) uniform cut scores for student placement, where appropriate, which will lead to fewer students being placed into developmental education courses;
- (3) other identified system policy changes, including an appeals process, that will decrease the number of students being placed into developmental education courses;
- (4) accelerated pathways in mathematics, reading, and composition to ensure students can complete developmental education work in no more than one year, including allowing for students to complete college-level gateway courses in one year whenever possible;
- (5) a comprehensive examination of the cost structure of developmental education, including potential financial incentives for students or other mechanisms to lower the cost of developmental offerings for students; and
- (6) identified best practices and targeted support strategies such as the use of supplemental instruction, that may be used on every system campus around developmental education offerings.

(b) The plan must include deadlines for implementation of proposed changes and must be submitted to the chairs and ranking minority members of the legislative committees with jurisdiction over higher education finance and policy by February 15, 2018.

(c) The plan, in its entirety, shall be implemented by the start of the 2020-2021 academic term, with individual provisions being implemented earlier as dictated by the plan.

APPENDIX B: COMPLETION MEASURE REPORT BY COLLEGE AND UNIVERSITY

See separate Appendix B document.

**30 East 7th Street, Suite 350
St. Paul, MN 55101-7804
651-201-1800
888-667-2848**

www.MinnState.edu



MINNESOTA STATE

This document is available in alternative formats to individuals with disabilities. To request an alternate format, contact Human Resources at 651-201-1664.

Individuals with hearing or speech disabilities may contact us via their preferred Telecommunications Relay Service.

Minnesota State is an affirmative action, equal opportunity employer and educator.