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Academic and Student Affairs

Degree and Certificate Completion Report to the Legislature

Minnesota State

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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 annually to the Legislature starting in January 2018. 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.

In addition, in 2023 the Legislature initiated a review of "admission and course placement polices, practices and assessments used by the Minnesota State Colleges and Universities system" (2023 Minnesota Session Law, Chapter 41, Article 2, Section 34); this review is being overseen by the Minnesota Office of Higher Education. Over the course of 2024, Minnesota State has supported the efforts of the consultants undertaking the review, providing data access and supporting outreach and information gathering processes. The final report and recommendations to the Legislature are set to be shared in February 2025, so the January 2026 update to this report will feature more detailed information around the impact of this review and relevant completed or ongoing work related to it.

Completion Goals and Plan

A core commitment of the 33 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 to meet our Equity 2030 goal to eliminate the educational equity gaps at every Minnesota State college and university. 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, the uncertainty of the effects of the COVID-19 pandemic on many factors impacting the state's population and the potential recovery from those effects. 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 industry, 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. The system is committed to meeting students where they are and building on the range of strengths and assets they bring to the colleges and universities, and to better serve students as they pursue their educational goals. Minnesota State's work towards structural changes in the broad developmental education space has been underway to address challenges associated with open admissions policies, assessment testing and course placement, traditional developmental education curriculum, and the need for holistic student support.

Minnesota State Colleges and Universities has rolled out a course placement pilot that incorporates a Multiple Measures approach to course placement. There have been several iterations of Multiple Measures models utilized in recent years. Broadly, the current placement pilot includes a range of measures to help recognize and capture student preparation, including High School Grade Point Average (HSGPA) as a standalone measure or in connection with high

school course taking, self-guided placement options for students who do not have a valid HSGPA, and a range of standardized assessments including the ACT, SAT, MCA and ACCUPLACER examinations.

This pilot was based on research about the accuracy of HSGPA in course placement (Bahr, Fagioli, Hetts, Hayward, Willett, Lamoree, Newell, Sorey & Baker, 2019), the recognition that students arrive at Minnesota State campuses with a range of experiences, and that traditional, test-first placement approaches can exacerbate equity gaps in placement. This broader range of placement options allows for more accurate and equitable student placement. It also continues improvement efforts in this space that have been implemented over several years. A previous model included the above measures but specifically paired HSGPA with testing results to potentially move students to a higher placement level than their standalone test score would have allowed. The results of this current pilot are still being evaluated, and the system is moving towards adopting an updated procedure built on findings from the student success results of the pilot and informed by national best practices.

Minnesota State institutions are also implementing innovations in developmental education to increase student retention, persistence, and completion rates. Additionally, 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.

Essentially, the DESR is the framework under which system institutions can develop and engage in curriculum development redesign and delivery efforts coinciding with academic support mechanisms to further help students develop their academic acumen to meet their educational goals. Curriculum redesign efforts include co-requisite models in Mathematics, Reading and English, intrusive academic support systems such as PTIC (peer tutors in the classroom), as well as curriculum improvements in gateway coursework, and efforts to better align the required Math courses in programs with the outcomes and learning needs that are specific to those programs. This, combined with increasing access to co-requisite support courses for math students, has been the focus of Minnesota State's Math Pathways project.

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 U.S.

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 2025 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 U.S. nonresident students. The U.S. nonresident category consists primarily of international students and students who are not permanent residents of the United States, in line with federal, state and Minnesota State systemwide reporting standards. 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 73.5 percent** between Fall 2013 and Fall 2022. This decline was vastly accelerated by both the COVID-19 pandemic and the implementation of Multiple Measures Course Placement (MM/CP); about 20 percentage points of this decline occurred between Fall 2019 and Fall 2020.
- The percentage of entering students enrolled in developmental courses in their first two years also decreased, from 38.9 percent to 14.6 percent between Fall 2013 and Fall 2022, with the greatest decrease occurring for developmental math courses.
- The percent of students of color and American Indian students who took developmental courses declined by more than a third (34.0 percentage points) and the percent of Pell grant eligible students who took developmental courses declined by more than a quarter (27.6 percentage points) since Fall 2013, but both groups continued to have higher developmental course taking rates relative to their comparison groups of white and U.S. nonresident students and students who are not eligible for Pell grants. Equity gaps in these rates continued to tighten.

Much of the enrollment decline in developmental education can be attributed to the placement, curricular, and support innovations that have been implemented across our campuses. Ongoing efforts to develop and scale co-requisite courses in place of longer, prerequisite course sequences also change the experience of developmental education as students who place below college level would still have direct access to gateway college-level courses, but with additional support to improve success outcomes.

Developmental Education Completion Rate:

- The percentage of students completing their developmental education requirements in their first year declined in writing and increased by 4.4 points in math and by 2.7 points in reading between Fall 2013 and Fall 2022.
- 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 by 5.7 points in math and by 5.3 points in reading since Fall 2013. Gaps between students of color and American Indian students relative to white and U.S. nonresident students in developmental course completion have narrowed somewhat but remain significant. Gaps in math completion remained essentially the same since Fall 2013.
- The percentage of **Pell grant eligible students** who completed their developmental courses in the first year **increased by 3.4 points in math and by 5.3 points in reading** between Fall

2013 and Fall 2022. The percentage of non-Pell eligible students completing a writing course in their first year fell so dramatically over the ten-year period (by 13.1 percentage points) that coupled with a relatively flat trend for Pell eligible students, the equity gap between these groups is now only 0.6 points apart.

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 developmental education pathways. As campuses improve, scale, and/or add new innovative practices and programs across campuses, and as co-requisite models are implemented more broadly throughout the system, 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 percentage of students completing college-level mathematics in their first year was 27.9 percent for those entering Fall 2023 as compared to 22.8 percent for those entering Fall 2014. The rate for math course completion is 5.1 percentage points higher than for those entering Fall 2014.
- Of Fall 2023 entrants, 40.3 percent completed **college level writing in the first year**, compared to the 39.1 percent rate observed for Fall 2014 entering students. This result stops a pandemic-era decline in this metric since Fall 2019.
- 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 strongly in both math and writing since Fall 2014, but both groups had lower college level course completion rates relative to their comparison groups.
- The gap between students of color and American Indian students as compared to white and U.S. nonresident students in completion of college level writing tightened between Fall 2014 and Fall 2022 (from a gap of 8.7 percentage points to 5.5 points). Similarly, the gap in completion of college writing for Pell grant eligible students as compared to students who were not eligible decreased from 9.0 percentage points for Fall 2014 to 5.9 points for Fall 2023 students.
- Gaps for completion of a college level math course proved harder to close; the gap in comparison based on race/ethnicity declined slightly from 11.2 percentage points in Fall 2014 to 9.3 points in Fall 2023, and the gap based on Pell eligibility with regard to completion of a college level math course was 12.2 percentage points in Fall 2014 and still 11.5 points among the Fall 2023 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).

Additionally, as the system moves towards adopting a co-requisite model across mathematics, writing, and reading, more students will have earlier access to college-level courses in these disciplines, reducing or eliminating a stop out point in the transition from developmental to college-level coursework that can impact even students who successfully complete their developmental courses. This could specifically impact the gaps in first-year completion rates for Pell-eligible students and students of color as the percentage of students taking part-time course loads is higher in both groups relative to their comparison groups.

Credit Completion Rate:

- The percentage of fall full-time entering students who completed 30 semester credits
 during their first year increased by 8.2 percentage points between Fall 2014 and Fall 2023
 establishing a historic high benchmark of 37.3 percent, but the percentage of fall entrants
 who completed 20 semester credits grew slightly (2.5 points) between Fall 2014 and Fall
 2023.
- The percentage of students of color and American Indian students who earned 20 credits within their first year increased and the **gap is widening**, at 18.5 percentage points.
- The percentage of students of color and American Indian students who earned 30 credits within their first **year increased by eight percentage points**. This gap continues to be greater than 15 percentage points.
- Some of the disaggregated groups in Fall 2021 made up some of the ground that had been lost between the Fall 2019 and Fall 2020 incoming students, and in Fall 2023 Pell eligible students halted the loss in ground in completing 20 credits their first year; this group may still require some further support.

Student Persistence and Completion Rate:

- The second fall persistence and completion rate for Fall 2022 entering full-time undergraduate students was **2.3 percentage points higher** than for those entering in Fall 2013, setting a historic high benchmark of 77.8 percent.
- The increase in second fall persistence and completion was equal for students of color and American Indian students as compared to white and U.S. nonresident students.
- The rate for Pell eligible students increased by double the rate as their non-Pell eligible peers between Fall 2013 and Fall 2022; this gap is on track to fall below ten points.

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 be done. 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 first years of the previous decade and has increased in the years since then. The rate for full-time students entering Fall 2020 was 57.6 percent, a new historic high benchmark. This rate is an impressive 6.9 points higher than for Fall 2011 entrants, made

even more impressive by the fact that this is the cohort of students who began their educational careers at the start of the COVID-19 pandemic.

- The state college completion rate for students of color and American Indian students has increased but remains lower than the rate for white and U.S. 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 widening of that gap has halted and the gap is closing again.
- The 6-year completion rate for the state universities increased by 3.7 percentage points to 57.4 percent, another new historic high benchmark for the entering cohort of Fall 2017.
- Even with modest improvements in the 6-year state university completion rates for students of color and American Indian students (up 5.4 points from Fall 2011) and Pell eligible students (up 3.5 points from Fall 2011), 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. The range of transfer pathway degrees has increased opportunities for smooth transfer and reduced obstacles towards completion as students transfer, such as program courses being treated as elective credits at the receiving institution. Despite more recent increases in completion rates, gaps have not narrowed enough as compared to those entering Fall 2011.

Eliminating the opportunity gaps between students of color and American Indian student completion rates and white and U.S. 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 pivot to a broad adoption of a co-requisite developmental education model has shown indications of success (Ran & Lin, 2022) in improving completion rates and reducing such gaps in other state public higher education systems such as Tennessee, Georgia and other such states/systems, and Minnesota State will be building on the best practices and learning shared from these implementations over the next few years.

Credits Earned at Graduation

- The average **cumulative credits at graduation decreased** for certificate, and associate and bachelor's degree graduates, with the exception of non-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 U.S. 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, there were only very subtle 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. The introduction of transfer pathway degrees has also reduced the likelihood of students needing to retake coursework to meet program requirements after transferring.

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. Co-requisite models of developmental education have also been implemented at colleges and universities throughout the system, and in combination with curricular alignment changes around math courses in programs, these changes have reduced the total number of required credits to reach graduation for students in specific pathways, and this implementation will expand systemwide in the next few years.

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 each annual report submitted beginning in January 2018. 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 33 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 2023, approximately 207,000 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 schoolteachers, law enforcement professionals, and healthcare professionals.

Data on students enrolled in FY2022-2023 indicate that among the Minnesota State student population:

- Thirty-six percent of degree seeking undergraduates are Pell grant eligible;
- Fifty-four percent of students are enrolled on a part-time basis;
- The average age of our undergraduate students is 27, and 26 percent of our students are age 25 or older;
- Forty-seven percent of our students are first-generation by the federal definition that the student's parents have not earned a bachelor's degree;
- Thirty-one percent of our students are students of color or Indigenous;
- Over 6,000 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 Minnesota State 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 (Postsecondary Value Commission, 2021).

Degree and certificate attainment increases average earnings over the course of a lifetime (Carnevale, Rose & Cheah, 2011), is associated with improved health outcomes (Raghupathi & Raghupathi, 2020), decreases likelihood of unemployment, and increases contributions to communities and our society (Ma, Pender & Welch, 2019). 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 meeting the Governor's credential attainment goal (MOHE, 2022), Minnesota State has implemented efforts to improve completion rates, at every level of award from certificates and diplomas to associate, bachelor's 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 they 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. Only 28 percent of Minnesota high school graduates who took the ACT in 2021-2022 had a score reflecting college readiness in all areas (Compuzano, 2022), a ten-year low in that figure. A clear gap in academic preparation for college-level coursework persists and was exacerbated by the COVID-19 pandemic.
- Affordability: The cost of obtaining a college credential continues to be a barrier for many students. Thirty-six percent of Minnesota State degree seeking undergraduates were Pell grant eligible in fiscal year 2023 and 56 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 concern regarding the 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. 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 unprecedented wage increases, historic lows in the unemployment rate, 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 FY2023-2024 indicate that among the Minnesota State student population:

- Thirty-eight percent of degree seeking undergraduates are Pell grant eligible;
- Fifty-five 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

Given that academic preparation is a significant predictor of persistence and completion, Minnesota State 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 has served as one component of this critical bridge.

From 2018-2021, the Minnesota State Colleges and Universities created a Developmental Education Strategic Roadmap (DESR) to guide the system-wide work on developmental education redesign with clearly identified strategic goals, key action steps, targeted timelines for implementation, and measurable outcomes. In addition, the DESR provides the framework under which system institutions develop and engage in curriculum development re-design and delivery efforts coinciding with academic support mechanisms to further student academic acumen to meet their educational goals. Curriculum redesign efforts include co-requisite models in Mathematics (see Appendix C), Reading and English, intrusive academic support systems such as PTIC (peer tutors in the classroom) and curriculum improvements in gateway coursework.

Developmental education consists of precollege-level courses and/or co-requisite support 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 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 percentage of recent high school graduates who enrolled in developmental education within two years of graduating has decreased from 30 to 13 percent between 2008 and 2020, cutting the rate by more than half. However, as a result of our colleges' open-door mission, Minnesota State Colleges and Universities enroll 93 percent of the public high school graduates who take developmental education courses within two years of graduating high school. (OHE, 2024).

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 allows for admitting students to our colleges and universities along the continuum of readiness that may benefit from co-requisite developmental education and additional student support services. The of offerings of co-requisiste developmental education often reflect an institution's student demographics and program admission criteria. 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 take to scale a co-requisite developmental education model that addresses students' needs and reduces the time to completion of developmental coursework.
- Holistic Student Support: When considering how to best support students, post-secondary 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 socio-economics. 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.

Building on the work and innovative practices implemented in recent years, a Developmental Education Steering Committee was convened in Spring 2024 to support and oversee the development and implementation of a co-requisite model for developmental education in mathematics, writing, and reading across the system. This also coincided with the convening of faculty workgroups representing each discipline who met over the course of 2024 to develop recommendations for the parameters of the model and related guidance and support. These recommendations are currently under consideration in Minnesota State's shared governance processes, with the goal of scaling the model systemwide by Fall 2027. This work has drawn from existing co-requisite work and expertise across the system and national best practices. In conjunction with improvements in course placement practices, Minnesota State is undertaking systemic change efforts to meet the Equity 2030 goals and better serve students across the state.

The ongoing Minnesota Office of Higher Education review of Minnesota State placement and admissions practices also intersects with the work being done internally to meet completion goals and the broader Equity 2030 goals. While the final recommendations are pending, the core questions (1) where barriers persist and (2) how best to remove them, so that there are no longer predictable patterns of disproportionate impacts for specific student groups, have already informed the internal work of groups charged with the developmental education redesign work and course placement policy and procedure updates.

Opportunity Gaps and Equity

National, state, and Minnesota State data show the opportunity gaps that exist between underrepresented and majority students in higher education. 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 U.S. 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, 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 U.S. nonresident students. The U.S. nonresident category consists of international students and students who are not permanent residents of the United States, in line with federal, state and system reporting standards.

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 (a source of enrollment increase), or who had previously earned a degree are excluded. The number of fall entering undergraduate credential seeking students decreased by approximately a quarter between Fall 2014 and Fall 2023, 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

	Fall										
Sector	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change
System	46,333	44,725	44,078	42,465	41,821	40,333	36,239	34,778	34,379	35,725	-22.9%
Colleges	32,663	30,924	30,174	29,479	29,200	28,364	25,022	24,559	24,289	25,194	-22.9%
Universities	13,670	13,801	13,904	12,986	12,621	11,969	11,217	10,219	10,090	10,531	-23.0%

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 be included in 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. As such, measures are not reported separately for these disciplines, but the students are included in the overall success measures and in the persistence and completion rates.

Table 2: Measures and Definitions
Minnesota State Colleges and Universities

Legislative Measure	Measure Name	Definition
	Developmental Education Enrollment Rate	Percent of entering students who took any Developmental Education course (Math, Reading, Writing, ESL, Other) in the first two years
Percent of Students Placed in Remedial	Developmental Education Enrollment Rate: Math	Percent of entering students who took Developmental Math courses in the first two years
Education	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
	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
Percent of Students Completing Remediation in One 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	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
Gateway Courses in One 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	Student Persistence and	Percent of full-time entering students that were
Rate	Completion Rate	either Retained, Transferred, or Graduated as of
		the beginning of the second fall term one year
		after entry
Time to Completion	Completion Rate	Colleges: The percent of full-time entering State
of a Degree or		College students that Transferred or Graduated
Certificate		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	Average Credits Earned by	Average number of credits students had earned
Those Completing a	Graduation	at graduation with their first award for a
Degree or		Certificate or an Associate degree at the colleges
Certificate		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 33 Minnesota State Colleges and Universities as well as for all colleges, all universities and for the system as a whole.
- Age: The measures are reported for the following three student age groups
 - o 24 and Under
 - o 25 and Over
 - o Unknown age
- Race-Ethnicity: The measures are reported for the following nine race and ethnicity groups as the data is rolled up to be reported to IPEDS
 - o American Indian
 - o Asian and Pacific Islander
 - o Black or African American
 - o Hispanic of any race
 - o Two or more races
 - o All Students of Color and American Indian Students: Includes the five categories above
 - o White
 - o U.S. nonresident: A student who is not a citizen or permanent resident of the U.S.
 - o 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
 - o Pell Eligible: A student who applied for a Pell Grant and was determined to be eligible.
 - o Not Pell Eligible: A student who applied for a Pell Grant and was determined not to be eligible.
 - o Unknown Pell Eligibility: A student who did not apply for a Pell Grant.

Data Mart Updates

The measures included in the January 2025 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.

Additionally, for the report this year, courses that were categorized as "other" developmental education were no longer counted as DE course activity; some of these courses appeared to work as placeholders and could not be tied back to the goals of the DESR.

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 U.S. 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, note that 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 three quarters, from 18,919 students in Fall 2013 to 5,005 students in Fall 2022, as shown in Table 3. The decrease for the same time period was 74.2 percent at the colleges and 69.1 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

	Fall	Fall	Fall Fall							
Sector	2013	2014	2015	2016	2017	2018	2019	2020	2021 2022	Change
System	18,919	16,284	14,739	14,146	13,047	12,397	11,223	6,912	5,912 5,005	-73.5%
Colleges	16,410	13,851	12,278	11,718	11,065	10,328	9,236	5,768	4,946 4,229	-74.2%
Universities	2,509	2,433	2,461	2,428	1,982	2,069	1,987	1,144	966 776	-69.1%

This overall decline includes one particular year in which a dramatic drop off occurred, from Fall 2019 to Fall 2020; the count of fall entering students at the colleges taking developmental courses between these two semesters was nearly cut in half. This time period coincides not only with the start of the COVID-19 pandemic, as well as the myriad changes and interventions that our institutions undertook to maximize delivery of support services to students, but also specific planned-before-the-pandemic changes to the Multiple Measures/Course Placement (MM/CP) procedures that affect advisement and placement in courses for beginning students. This juncture should be thought of as an important comparison point between results prior to

this point and results afterward. It could be said that developmental education, as well as the techniques used to track and describe its efficacy, changed permanently for the colleges and universities of the Minnesota State system at this point.

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 2013 and Fall 2022, and especially dramatically between Fall 2019 and Fall 2020. The system percent of students who took any developmental courses decreased from 38.9 percent to just 14.6 percent, as shown in Table 4. The largest decrease occurred among students taking developmental math courses, dropping 20.4 points from 30.2 percent for Fall 2013 to just 9.8 percent for Fall 2022.

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

	Fall										
Subject	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change
Any DE	38.9%	35.1%	33.0%	32.1%	30.7%	29.6%	27.8%	19.1%	17.0%	14.6%	-24.3
DE Math	30.2%	24.9%	23.3%	22.6%	22.2%	21.4%	19.4%	12.8%	11.1%	9.8%	-20.4
DE Reading	14.1%	12.5%	10.5%	9.8%	9.2%	7.4%	6.8%	4.9%	4.0%	2.5%	-11.6
DE Writing	16.0%	14.0%	13.0%	13.0%	11.4%	11.1%	10.4%	7.6%	6.7%	5.9%	-10.1

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. Starting in Summer 2019 and stepping up with the interruptions to course placement testing procedures necessitated by shelter-in-place restrictions during the COVID-19 pandemic, Minnesota State Colleges and Universities engaged its institutions to utilize a system-wide course placement pilot incorporating a Multiple Measures model. As a result, Minnesota State continues to enhance the course placement process, and 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 needed for their success.

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 2013, but both groups continue to have higher developmental course taking rates relative to their comparison groups. Approximately 22.5 percent of Fall 2022 entering students of color and American Indian students took developmental courses compared to 9.8 percent of white and U.S. nonresident students, as shown in Table 5. For Fall 2022 entering students, 20.3 percent of Pell grant eligible students took developmental education courses, compared to 9.9 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 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Change
Any DE-White/NR	32.3%	28.6%	26.2%	25.5%	23.6%	22.5%	20.6%	13.3%	12.0%	9.8%	-22.5
Any DE-SOC & AI	56.5%	51.1%	48.4%	47.1%	45.9%	43.8%	41.7%	30.1%	26.5%	22.5%	-34.0
Any DE-No Pell	30.7%	27.7%	26.4%	25.7%	24.4%	22.9%	21.4%	14.0%	12.3%	9.9%	-20.8
Any DE-Pell	47.9%	43.0%	41.1%	40.5%	39.0%	38.3%	36.0%	26.4%	23.4%	20.3%	-27.6

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. 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 U.S. 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.

The significant drop off in taking any developmental education coursework between the Fall 2019 entering class and the Fall 2020 entering class continued the trend, but there was also progress toward closing equity gaps based on both ethnicity and Pell eligibility status. The gap based on race/ethnicity had been as much as 18 percentage points as recently as the entering cohort of Fall 2019, and decreased to 12.7 percentage points among the Fall 2022 cohort. The gap based on Pell eligibility status had been 14.5 percentage points in Fall 2019, and decreased to 10.4 points for the Fall 2022 entering students. These outcomes are consistent with available literature and trend data highlighting multiple measures placement, particularly the inclusion of High School GPA (HSGPA) as one measure, as a tool to address equity gaps in course placement. However, equity gaps can also be present in any single measure, including HSGPA, so approaching placement more holistically is an ongoing goal.

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

	Fall										
Subject	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change
DE Math	33.7%	41.0%	42.8%	43.9%	43.7%	44.9%	48.0%	42.2%	41.3%	38.1%	+4.4
DE Writing	59.8%	61.1%	62.9%	64.2%	63.6%	64.7%	66.1%	57.1%	56.2%	56.1%	-3.7
DE Reading	55.5%	60.4%	60.7%	61.5%	61.4%	60.0%	59.5%	53.4%	54.2%	58.2%	+2.7

The percentage of fall entering students completing their developmental education requirements by the end of their first year has fluctuated somewhat in recent years, and retrenched significantly between Fall 2019 and Fall 2020. The completion rate for Fall 2022 entrants continues the retrenched trend. Cumulative increases were seen for both the percent of students completing developmental mathematics in the first year as well as developmental reading, with a cumulative decline in the percent of students completing developmental writing.

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; examples include acceleration of supplemental education opportunities such as peer tutoring in the classroom (PTIC), engagement system-wide course redesign work in areas such as Mathematics, and campus cooperational delivery of Reading and Writing instruction.

As campuses and the system office work collaboratively to improve, scale, and add new innovative practices and programs, and in particular as a systemwide co-requisite developmental education model is implemented for mathematics, reading, and writing, 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.

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 had increased in all subjects since Fall 2013, up until Fall 2020. Taking Fall 2020 into account, the increase has held for developmental courses in math, but not for developmental writing. Developmental reading is continuing to recover.

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

Subject & Student Group	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Change
DE Math-White/NR	38.0%	43.9%	46.9%	48.6%	48.3%	50.6%	53.7%	46.7%	48.0%	45.1%	+7.1
DE Math-SOC & AI	26.2%	35.6%	35.9%	36.9%	37.3%	37.6%	41.1%	37.4%	34.0%	31.9%	+5.7
DE Writing-											
White/NR	66.9%	66.0%	69.3%	68.8%	69.5%	69.5%	73.4%	64.3%	66.1%	63.2%	-3.7
DE Writing-SOC & AI	53.0%	57.1%	57.6%	60.4%	59.7%	61.6%	61.5%	52.7%	50.3%	53.0%	n/c
DE Reading-											
White/NR	62.4%	67.2%	67.6%	67.1%	66.6%	66.6%	69.0%	59.0%	64.9%	66.5%	+4.1
DE Reading-SOC & AI	50.2%	55.9%	56.7%	58.3%	58.9%	57.4%	56.4%	51.0%	50.6%	55.5%	+5.3
DE Math-No Pell	39.8%	47.1%	48.3%	49.7%	50.7%	51.6%	55.8%	47.4%	47.4%	44.8%	+5.0
DE Math-Pell	29.2%	37.0%	38.5%	39.4%	39.1%	40.7%	43.7%	38.0%	36.6%	32.6%	+3.4
DE Writing-No Pell	68.8%	68.1%	69.4%	68.4%	69.0%	68.7%	70.4%	64.6%	61.6%	55.7%	-13.1
DE Writing-Pell	56.0%	57.9%	59.1%	61.4%	61.1%	63.0%	63.8%	55.3%	52.4%	55.1%	-0.9
DE Reading-No Pell	64.7%	67.2%	67.6%	65.5%	67.0%	63.6%	65.5%	56.9%	63.0%	63.0%	-1.7
DE Reading-Pell	51.8%	57.8%	58.1%	60.2%	59.6%	59.0%	57.2%	52.4%	51.7%	57.1%	+5.3

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. nonresident students

Pell: Pell eligible students No Pell: Not Pell eligible

The developmental education course completion rates for students of color and American Indian students remain lower overall than those for white and U.S. nonresident students and some gaps have proven difficult to close. For developmental courses in math, the student of color/American Indian group from Fall 2022 is completing math in the first year at a rate 13.2 percentage points behind the white/U.S. nonresident group, compared to 11.8 points in Fall 2013. In writing courses, percentage completion rates are 3.7 points lower in Fall 2022 than they were in Fall 2013 for white/U.S. nonresident students, compared to the same rate over the period for students of color/American Indian students. White and U.S. nonresident students are completing developmental reading courses at a rate 4.1 points higher in Fall 2022 than in Fall 2013, compared to a gain of 5.3 percentage points for students of color/American Indian students.

With regard to students who are eligible for Pell grants and those who are not eligible with regard to developmental education completion rates in the first year, completion of developmental math courses increased over the ten-year period; Pell eligible students gained 3.4 percentage points compared to 5 points among their non-Pell eligible peers. Pell eligible students completed developmental reading courses at a rate 5.3 percentage points higher in

Fall 2022 than they did in Fall 2013. Conversely, completion of developmental writing courses decreased 13.1 percentage points among non-Pell eligible students over the ten year period.

As mentioned earlier, the window between Fall 2019 and Fall 2020 reflects a substantial shift in the approach to course placement across Minnesota State, which resulted in a lower percentage of students being placed in developmental courses. As the multiple measures approach was informed by national best practice findings for improving placement accuracy and addressing equity gaps in placement, the declines in completion rate in this time period reflect not just the challenges of the pandemic, but also a reduction in under placement in courses across the system.

As indicated in the *College Level Completion Rate* data presented in the following section, as fewer students were placed into developmental education, the college-level outcomes were steady or improved. One explanation for the decline in developmental education first-year completion rates is that placement accuracy improved from the multiple measures pilot approach, so the students who were placed into developmental courses after its adoption were more likely to be those with greater academic support needs. However, it is clear that there is still work to be done to improve these outcomes, and there is still potential for inequitable outcomes in the measures included in even the most robust multiple measures approaches, so ongoing evaluation is needed.

Innovations implemented at Minnesota State campuses have positively impacted students of color and American Indian students and white and U.S. 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

	Fall										
Subject	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change
CL Math	22.8%	23.5%	24.4%	24.6%	24.5%	25.5%	26.1%	26.1%	26.9%	27.9%	+5.1
CL Writing	39.1%	40.0%	39.8%	39.3%	39.0%	39.9%	38.7%	38.6%	39.0%	40.3%	+1.2

The percentage of students completing a college level math or writing course in their first year increased between Fall 2014 and Fall 2023. As shown in Table 8, the percentage of students completing college-level mathematics in their first year was 27.9 percent for those entering in Fall 2023 as compared to 22.8 percent for those entering in Fall 2014. This rate is 5.1 percentage points higher than those entering in Fall 2014 and sets an all-time high for the period this metric has been tracked.

Over 40 percent of students completed a college level writing course, another historic high level, in their first year in Fall 2023, which constitutes a 1.2 percentage point increase from the 39.1 percent rate observed for Fall 2014 entering students. This percentage firmly reverses the 2020-to-2021 slide of college level writing course completion in the first year.

The still-lower completion rates for college level mathematics compared to college level writing courses are likely due to several factors. Some students are still enrolled 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. The Math Pathways work undertaken across system colleges and universities in the last few years directly address both of these factors, first by incorporating co-requisite developmental support courses instead of standalone developmental sequences, and secondly by focusing on curricular alignment such that students are taking the math courses that are best tailored to their program needs. 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	Fall										
Student Group	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change
CL Math-White/NR	26.1%	26.8%	27.8%	28.2%	28.2%	29.2%	28.9%	29.9%	30.6%	31.5%	+6.4
CL Math-SOC & AI	14.9%	15.8%	17.0%	16.8%	17.4%	18.5%	20.8%	19.2%	20.6%	22.2%	+7.3
CL Writing-White/NR	41.7%	42.2%	41.7%	41.0%	40.5%	41.2%	39.9%	40.2%	40.6%	42.4%	+0.7
CL Writing-SOC & AI	33.1%	35.0%	35.6%	36.0%	36.2%	37.7%	36.5%	35.8%	36.3%	36.9%	+3.8
CL Math-No Pell	29.8%	30.2%	30.3%	31.2%	30.8%	32.0%	32.2%	32.7%	33.6%	34.5%	+4.7
CL Math-Pell	17.6%	18.1%	19.2%	19.5%	19.8%	20.6%	21.6%	20.8%	21.7%	23.0%	+5.4
CL Writing-No Pell	44.8%	45.3%	43.9%	43.3%	42.0%	43.8%	42.8%	42.3%	42.8%	44.2%	-0.6
CL Writing-Pell	35.8%	36.8%	37.1%	37.6%	38.1%	38.9%	37.7%	37.0%	37.2%	38.3%	+2.5

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. 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 2014. Both groups, however, had lower college level course completion rates relative to the comparison groups of white and U.S. nonresident students and students who are not eligible for Pell grants. The gaps between the completion rates 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 2023, every disaggregated group rate of completion set a ten-year high, with the exception of completion of college-level writing for both Pell eligible and non-Pell eligible students—but the rate for Pell eligible students was only half a percentage point lower than the previous high mark.

For students entering in Fall 2023, 22.2 percent of students of color and American Indian students completed a college level math course in the first year compared to 31.5 percent of white and U.S. nonresident students, as shown in Table 9. Pell eligible students completed a college level math course at a rate of 23.0 percent compared to 34.5 percent for students who were not eligible for a Pell grant. Both of these equity gaps widened somewhat since the start of the COVID-19 pandemic but strong showings for Fall 2023 brought the gap for college level math completion back under ten percentage points for students of color and American Indian students.

The college level completion rates for writing courses increased between Fall 2014 and Fall 2023 for all disaggregated groups except for students not eligible for Pell grants. The reduction in gaps for completion of college level writing has been due both to large gains made by students of color and American Indian students (3.8 percentage points over the decade in completion of college level writing) and by students eligible for Pell grants (2.5 percentage point gain) compared to declines or flat performance among their reference group (a loss of more than half a point by non-Pell eligible 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	Fall										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change
20 credits	66.4%	66.6%	66.4%	66.0%	66.4%	67.4%	64.4%	65.1%	67.0%	68.9%	+2.5
30 credits	29.1%	30.3%	30.7%	31.6%	31.9%	34.0%	33.3%	33.2%	35.0%	37.3%	+8.2

The percentage of students who completed 30 semester credits during their first year increased well between Fall 2014 and Fall 2023; the percentage of students who completed 20 credits grew less and recovered a pandemic-years loss that was seen after Fall 2019. Both percentages are at historic highs for the period the metrics have been tracked. Among Fall 2023 entrants, 68.9 percent of students completed 20 credits in their first year, beating the previous high recorded in Fall 2019, as shown in Table 10. Over thirty-seven percent of Fall 2023 entering students completed 30 credits in the first year, up from 29.1 percent for Fall 2014 students.

Although 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.³ Students across our 2-year and 4-year institutions often have financial constraints or external commitments such as work and family which impact their ability to take a full load of courses each semester. Moreover, the rate at which many students are able to take courses is in opposition to credit intensity research which reflects and benefits 'traditional' student activity. In response, some colleges within the system are engaged in planning and curriculum design that promote credit momentum (e.g., intentional scaffolding of programmatic coursework) to meet the educational needs of students as they navigate work-life balance.

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

	Fall										
Student Group	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change
20 Credits-White/NR	70.4%	70.8%	70.5%	70.4%	71.3%	72.4%	69.2%	71.0%	73.4%	75.1%	+4.7
20 Credits-SOC & AI	54.5%	54.4%	55.2%	54.9%	54.9%	55.9%	53.1%	51.9%	54.0%	56.6%	+2.1
20 Credits-No Pell	72.8%	73.5%	72.6%	72.4%	72.9%	73.3%	71.1%	71.9%	74.6%	76.1%	+3.3
20 Credits-Pell	60.1%	59.6%	59.7%	59.2%	59.8%	60.9%	56.7%	56.9%	58.1%	60.3%	+0.2
30 Credits-White/NR	32.9%	34.6%	35.1%	36.2%	36.8%	39.2%	37.7%	38.2%	40.7%	43.1%	+10.2
30 Credits-SOC & AI	17.9%	17.7%	18.7%	20.1%	20.4%	22.1%	22.7%	21.8%	23.6%	25.9%	+8.0
30 Credits-No Pell	33.7%	35.6%	36.5%	36.5%	37.2%	39.8%	38.8%	38.3%	41.0%	43.4%	+9.7
30 Credits-Pell	24.0%	24.1%	24.4%	26.4%	26.5%	28.0%	26.4%	26.8%	27.7%	30.3%	+6.3

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. nonresident students

Pell: Pell eligible students No Pell: Not Pell eligible

The percentage of students of color and American Indian students that earned twenty and thirty credits in their first year increased between Fall 2014 and Fall 2023, as shown in Table 11. The percentage of Pell eligible students who earned thirty credits in their first year continued this trend, but the percent of Pell eligible students who were able to earn 20 credits remained very static in this period. Both groups had lower percentages for credit completion than their comparison groups of white and U.S. nonresident students and students who were not eligible for a Pell grant.

All disaggregated groups showed historic high levels of credit completion across the ten years, with the exception of completion of 20 credits by Pell eligible students. Almost 57 percent of Fall 2023 entering students of color and American Indian students earned 20 credits in their first year, up two points from the rate for Fall 2014 entering students. The Fall 2023 entering cohort recovered all of the loss from the entering class of Fall 2019 that then continued with the Fall 2020 and Fall 2021 cohorts. White and U.S. nonresident students fully recovered the pandemic-years setback in that rate at 75.1 percent.

The percentage of students of color and American Indian students who earned 30 credits in their first year grew at about four-fifths the rate of their white and U.S. nonresident peers from Fall 2014 to Fall 2023. All student groups disaggregated by race/ethnicity have strongly recovered the pandemic-years decline in percent completing thirty credits in the first year; this rate was 43.1 percent of white and U.S. nonresident students in the entering Fall 2023 cohort, compared to 25.9 percent of students of color and American Indian students. The percentage of Pell eligible students who earned 30 credits in their first year grew by 6.3 percentage points between Fall 2014 and Fall 2023, putting Pell eligible students earning 30 hours in their first year over 30 percent for the first time.

Although overall credit completion rates have increased with these new historic high rates, outcome equity gaps have remained stubbornly similar.

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	Fall										
Group	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change
Total	75.5%	77.1%	76.9%	77.0%	76.3%	76.9%	75.9%	75.8%	76.1%	77.8%	+2.3
White/NR	78.1%	79.7%	79.8%	79.5%	79.1%	79.9%	78.8%	78.5%	79.3%	81.2%	+3.1
SOC & AI	67.5%	69.6%	68.8%	70.4%	69.5%	69.9%	69.3%	69.6%	68.9%	71.0%	+3.5
No Pell	81.4%	82.7%	82.6%	82.0%	81.4%	82.2%	81.2%	80.6%	80.6%	82.6%	+1.2
Pell	69.4%	71.5%	70.8%	71.4%	70.7%	71.4%	70.4%	70.0%	70.5%	72.3%	+2.9

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. nonresident students

Pell: Pell eligible students No Pell: Not Pell eligible

The second fall persistence and completion rate for Fall 2022 entering students was 2.3 percentage points higher than for those entering Fall 2013; this reverses a pandemic-years series of small declines and sets a historic high benchmark (77.8 percent) for this rate. The increase was evenly matched between students of color and American Indian students and white and U.S. nonresident students, and the gap that had fallen below ten percentage points for the Fall 2019 and Fall 2020 cohorts has steadied to just 10.2 points.

Pell eligible students in the entering class of Fall 2022 returned at a rate almost three points higher than those in Fall 2013, setting a benchmark high for the Pell eligible rate only, and the persistence rate for non-Pell eligible students in Fall 2022 was just a point higher than that in Fall 2013. The gap between Pell eligible and non-Pell eligible students with regard to second-Fall persistence is 10.3 percentage points.

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 new student support services. Much of the federal CARES/HEERF funding received by Minnesota State colleges and universities was directed toward basic needs and student support. Currently, several campuses have adopted and incorporated high-touch student

support practices which were initiated by COVID relief and supported by Higher Education Relief Federal (HEERF) funds. Practices include increased access to technologies (e.g., computer loan and Wi-fi Hot Spot programs) and academic support mechanisms such as extended virtual tutoring, and extended hours for on-campus and virtual computer center assistance. Each of these practices has seen increases in access.

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.

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

	Fall										
Sector and Student Group	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change
Colleges: Completion Rate	50.7%	51.2%	52.7%	53.9%	54.1%	54.3%	54.6%	55.3%	54.4%	57.6%	+6.9
Colleges: Completion-White/NR	54.7%	55.1%	56.9%	58.3%	58.4%	58.4%	59.5%	60.2%	59.8%	62.6%	+7.9
Colleges: Completion-SOC & AI	39.5%	40.6%	42.0%	43.5%	44.5%	45.5%	44.6%	46.2%	44.5%	47.8%	+8.3
Colleges: Completion-No Pell	59.4%	59.0%	61.0%	61.3%	61.5%	60.5%	61.6%	62.2%	61.2%	63.4%	+4.0
Colleges: Completion-Pell	44.4%	45.0%	45.9%	47.7%	47.8%	48.9%	48.4%	49.6%	48.0%	50.8%	+6.4
Universities: Completion Rate	53.7%	54.8%	55.1%	55.7%	56.5%	55.9%	57.4%				+3.7
Universities: Completion-White/NR	55.8%	56.8%	57.2%	58.1%	59.2%	58.8%	60.2%				+4.4
Universities: Completion-SOC & AI	41.5%	43.9%	44.2%	44.8%	45.1%	44.0%	46.9%				+5.4
Universities: Completion-No Pell	57.6%	58.7%	58.2%	58.5%	60.6%	59.9%	61.7%				+4.1
Universities: Completion-Pell	46.6%	48.1%	48.5%	50.0%	48.2%	47.8%	50.3%				+3.5

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. nonresident students

Pell: Pell eligible students No Pell: Not Pell eligible

The 3-year completion rate for the state colleges decreased during the previous recession and came back strong in this cohort. The rate for full-time students entering Fall 2020 was 6.9

points higher than for Fall 2011 (57.6 percent as compared to 50.7 percent) as shown in Table 13. The Fall 2020 completion rate for the colleges stands at the historic high for this metric.

The state college (3-year) completion rate for students of color and American Indian students has increased most steeply of all the disaggregated comparisons (gain of 8.3 percentage points) since the results of the Fall 2011 cohort, but remains lower than the rate for white and U.S. nonresident students and gaps remain larger than ten percentage points. The completion rate for students who were eligible for Pell grants increased by 6.4 percentage points between the two percentage points between the Fall 2011 and Fall 2020 entering cohorts; the rate for non-Pell eligible students increased by four percentage points during the same period and substantial gaps remain.

The 6-year completion rate for the state universities increased from 53.7 percent for Fall 2011 entering students to 57.4 percent (another historic high) for those entering Fall 2017, as shown in Table 13. Even with strong 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 U.S. 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.

Table 14: Average Credits Earned at Graduation by Award and Student Group

By Fall Entering Cohort

Minnesota State Colleges and Universities

	Fall	Fall	Fall	Fall							
Sector and Student Group	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change
Colleges: Certificate	43.0	42.2	42.9	43.7	42.5	42.4	40.5	43.2	42.0	40.0	-3.0
Colleges: Certificate-White/NR	43.8	42.7	43.9	44.3	43.7	43.7	40.4	44.7	42.7	40.6	-3.2
Colleges: Certificate-SOC & AI	41.6	41.4	40.7	42.3	40.9	40.2	41.0	40.8	41.1	38.9	-2.7
Colleges: Certificate-No Pell	48.8	49.7	51.2	49.3	48.2	47.7	44.2	48.3	47.9	43.9	-4.9
Colleges: Certificate-Pell	41.8	40.7	40.5	41.7	41.0	40.5	40.0	41.3	40.9	37.3	-4.5
Colleges: Associate	79.7	79.7	80.5	80.6	80.2	80.0	78.9	79.8	78.8	78.2	-1.5
Colleges: Associate-White/NR	79.3	79.6	80.7	80.9	80.7	80.5	79.3	80.0	79.4	79.0	-0.3
Colleges: Associate-SOC & AI	80.9	80.2	79.8	79.8	78.7	78.7	78.1	79.0	77.1	76.0	-4.9
Colleges: Associate-No Pell	79.4	80.3	81.3	82.1	81.6	81.5	79.8	81.3	79.7	79.7	+0.3
Colleges: Associate-Pell	79.5	78.7	79.2	78.8	78.3	77.7	77.4	77.0	77.0	75.0	-4.5
Universities: Bachelor's	139.7	139.0	138.1	138.4	138.7	138.6	137.7				-2.0
Universities: Bachelor's-											
White/NR	139.7	139.1	138.5	138.8	138.8	138.6	137.8				-1.9
Universities: Bachelor's-											
SOC & AI	139.4	139.1	135.9	136.7	138.5	138.4	137.2				-2.2
Universities: Bachelor's-No Pell	139.0	138.5	137.7	138.4	138.3	137.8	137.1				-1.9
Universities: Bachelor's-Pell	139.9	138.6	136.8	137.0	138.3	138.1	137.4				-2.5

SOC & AI: Students of color and American Indian students

White/NR: White and U.S. nonresident students

Pell: Pell eligible students No Pell: Not Pell eligible

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 U.S. nonresident students, and non-Pell eligible students. This trend did not continue with the Fall 2020 entrants, and average credits for this cohort look more like levels seen in 2017 and prior.

The average cumulative credits for state college certificate graduates declined from 43.0 credits for Fall 2011 entering students to 40.0 credits for Fall 2020 entering students, as shown in Table 14. Average cumulative credits for state college associate degree graduates decreased slightly from 79.7 credits for Fall 2011 entering students to 78.2 credits for Fall 2020 entering students. Average cumulative credits for state university bachelor's degree graduates decreased from 139.7 credits for Fall 2011 entering students to 137.7 credits for Fall 2017 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 U.S. nonresident students; for associate degree earners students of color and American Indian students do so with 4.9 fewer credits. 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.

While this type of exploration can be a valuable part of a students' experience, efforts to support students' efficient completion of their programs of choice are in place across the system as well. These include the overall Guided Learning Pathways efforts to help students identify areas of interest early and take courses that could apply to a range of programs within such an area. Additionally, the work around Math Pathways and co-requisite developmental education is helping to streamline students' paths towards graduation and could allow for more exploratory course taking if desired within max time frame and financial aid availability limitations.

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 reports submitted each January to the legislature starting in January 2018.

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 U.S. nonresident students. Students who are eligible for federal Pell grants are compared to students who completed the FAFSA but were found not eligible for Pell 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 the developmental education enrollment decline to curricular and support innovations that have been implemented across our campuses. In particular, this most recent year of data largely reflects systemic changes in placement procedures and philosophy, as well as emergency support structures put in place by our institutions to address the challenges presented to students by the COVID-19 pandemic, as well as the possible normalization of how the COVID-19 pandemic affected student behavior. 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. At some point it may be that the most recent class of students entering our institutions and consuming our courses at all levels are materially different, and therefore less comparable, from those at the beginning of the decade encompassed by this study.

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 2013, but both groups continue to have higher developmental course taking rates relative to their comparison groups. In nearly every measure of success, students of color and American Indian students are making gains at higher rates than white and U.S. nonresident students. Pell eligible students are making gains as compared to non-Pell eligible students, but at a smaller rate of improvement.

Developmental Completion Rate: The percentage of students completing their developmental education requirements in their first year increased by 4.4 points in math and 2.7 points in reading between Fall 2013 and Fall 2022, but decreased by nearly four points in writing. 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 U.S. nonresident students in developmental course completion have narrowed in reading and writing but to a lesser degree in math since Fall 2013, and significant gaps remain.

College Level Course Completion Rate: The percent of students completing college-level mathematics in their first year was 27.9 percent for those entering Fall 2023 as compared to 22.8 percent for those entering Fall 2014. The rate, which has remained fairly stable, is 5.1 percentage points higher than those entering in Fall 2014.

Less so for college level writing in the first year; 40.3 percent of Fall 2023 entrants completed a college level writing course in their first year compared to the 39.1 percent rate observed for Fall 2014 entering students. The college-level completion rates for writing increased strongly between Fall 2014 and Fall 2023 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.

As co-requisite developmental education is implemented more broadly across the system, more students will have direct access to college-level courses in combination with co-requisite support courses. This could impact the college-level course completion rate as access increases.

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 by 8.2 points between Fall 2014 and Fall 2023 and increased more modestly for the greater set of students who completed 20 credits, who did so at a rate 2.5 points higher. All reference groups strongly increased their course taking habits throughout the decade, with the exception of Pell eligible students trying to get 20 credits in the first year, with a rate only 0.2 points higher. 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 2022 entering full-time undergraduate students was 2.3 percentage points higher than for those entering Fall 2013. All disaggregated groups showed gains, with Pell eligible students doubling the gain in the comparison rate of non-Pell eligible students over this period regarding second fall persistence.

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 57.6 percent for Fall 2020 entrants, setting a historic high benchmark despite being the group who started school during the COVID-19 pandemic. The 6-year completion rate for the state universities increased from 53.7 percent for Fall 2011 entering students to 57.4 percent for those entering Fall 2017, also setting a historic high benchmark.

Educational equity gaps remain stubborn in this metric. In this most recent cohort, students of color and American Indian students as well as Pell eligible students at state colleges showed a much stronger rate of improvement over the baseline than their white and U.S. nonresident and 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 non-Pell eligible students pursuing 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 U.S. 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, in comparison by race/ethnicity group and Pell status, there were more modest declines in 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.

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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.

2023 Minnesota Session Law Chapter 41, Article 2, Section 34

REPORT ON MINNESOTA STATE COLLEGES AND UNIVERSITIES COURSE PLACEMENT PRACTICES. Subdivision 1. Review.

- (a) The Office of Higher Education shall document, review, and analyze college admission and course placement policies, practices, and assessments used by the Minnesota State Colleges and Universities system. The review shall seek to determine if policies, practices, and assessments used have:
- (1) adverse consequences for a student and their family, including burdensome economic and related costs of delaying their degree plans;
- (2) hindered the participation of students;
- (3) hindered the placement, retention, or timely college graduation of students; and

- (4) excluded students from admission thereby hindering their full participation in higher education.
- (b) The review must consider impacts for various student communities, including but not limited to Indigenous students, English as a second language (ESL) students, and students of color.
- Subd. 2. Determination. Utilizing the review conducted under subdivision 1, the commissioner shall determine whether:
- (1) students, including Indigenous students, ESL students, and students of color, are:
- (i) denied admission;
- (ii) disproportionately assigned to enroll in developmental courses; or
- (iii) delayed or deterred in their educational progress; and
- (2) policies, practices, and instruments:
- (i) are disproportionately reliant on test scores;
- (ii) impose barriers for students in terms of enrollment, retention, and completion; and
- (iii) may be culturally biased.

Subd. 3. Recommendation. The commissioner shall recommend changes based on the information obtained in subdivisions 1 and 2 to existing measures, instruments, and placement practices. By February 1, 2024, the commissioner shall provide a preliminary report and by February 1, 2025, report the recommendations and findings to the chairs and ranking minority members of the legislative committees with jurisdiction over higher education. The commissioner shall seek external advice and expertise to address the above reviews, determinations, findings, and recommendations.

APPENDIX B: COMPLETION MEASURE REPORT BY COLLEGE AND UNIVERSITY

See separate Appendix B document.

APPENDIX C: PRELIMINARY DATA ON OUTCOMES AND SUBSEQUENT COURSE COMPLETION BY INSTRUCTIONAL MODE IN MATHEMATICS



Chart displays persistence outcomes and subsequent course completion outcomes for incoming Minnesota State system freshmen/transfers from FY2019 to FY2023

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