January 15, 2020

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 recent pieces of legislation related to credential completion and developmental education:

- **Completion Plan:** The 2015 Minnesota legislature passed legislation related to degree completion. The Minnesota State Colleges and Universities (Minnesota State) submitted a report in January 2016 detailing the system’s plan to encourage and assist students to complete credentials.

- **Completion Measures:** The 2015 Higher Education Appropriations Act (2015 Minnesota Session Law, Chapter 3, Article 3, Section 16) requires the Minnesota State Board of Trustees, beginning in January of 2018, to submit a report on its activities and achievements related to improving timely completion, including reporting on seven specific completion measures.

- **Developmental Education Plan:** The 2017 Minnesota legislature passed legislation that required the Minnesota State Board of Trustees to prepare a plan that reforms developmental education offerings. The Developmental Education Plan report was submitted to the legislature in February 2018.

This Degree and Certificate Completion report fulfills the second reporting requirement listed above and provides an update to the report submitted to the Legislature in January 2019. The report includes updated data on the progress made on the seven completion measures outlined in the legislation and also serves as a supplement to the 2016 College Completion Plan report and the 2018 Developmental Education Plan. The specific measures reported are: Developmental Education Enrollment, Developmental Education Completion, College Level Course Completion, Credit Completion, Student Persistence and Completion, Completion Rates and Credits Earned at Graduation.

**Completion Goals and Plan**

A core commitment of the 37 colleges and universities of Minnesota State is to provide access to higher education for all Minnesotans. The system has been very successful in providing this access, while acknowledging that there is still work to be done. However, many students leave our colleges and universities without earning a credential. Degree and certificate completion is important not only for the individual student and his or her 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 challenges as we seek to assist more students in reaching their educational goals in a timely manner. The challenges include Minnesota State’s open door mission, college affordability and the state’s low unemployment rate. The system’s open access mission means that it enrolls substantial numbers of students who face financial and academic challenges that are associated with lower rates of college completion.
Minnesota State has been actively working to improve completion rates through a variety of initiatives that have demonstrated promising outcomes. The initiatives include systemwide and local partnerships with K-12 school district associations, adult basic education, business and industries, and non-profit organizations, as well as a variety of campus based initiatives. The system’s completion plan capitalizes on the initiatives that are demonstrating success and promotes practices and policies that have been shown to have a positive impact on completion.

**Developmental Education**

Since many of our students come to college with readiness gaps, they require additional academic preparation to be successful in college. Minnesota State colleges and universities 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 coursework and support services.

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

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

The details of the developmental education plan are outlined in the 2018 Developmental Education Plan report. Each college and university has a 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 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. There are gaps between students of color and American Indian students in comparison to white and nonresident alien 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:

- **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/index3.html](https://www.minnstate.edu/Equity2030/index3.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 2019 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 progress on the legislative 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, descriptions of any differences between students of color and American Indian students compared to white students and nonresident alien students. The nonresident alien category consists primarily of international students and students who are not permanent residents of the United States. Federal, state and Minnesota State systemwide reporting standards specify that these students should not be included in a racial-ethnic group, but rather reported as nonresident students. Data on differences between Pell grant eligible students and students who are not eligible for Pell grants are also included.

Developmental Education Enrollment Rate:
• The number of fall entering undergraduate degree, diploma and certificate seeking students who took developmental courses during their first two years decreased by 43.8 percent between Fall 2010 and Fall 2017.
• The percent of students enrolled in developmental courses in their first two years also decreased, from 42.3 percent to 30.8 percent between Fall 2010 and Fall 2017, with the greatest decrease occurring for development math courses.
• The percent of students of color and American Indian students who took developmental courses decreased by 12.8 percentage points and the percent of Pell grant eligible students who took developmental courses also decreased by 11.6 points since Fall 2010, but both groups continued to have higher developmental course taking rates relative to their comparison groups of white and nonresident students and students who are not eligible for Pell grants.

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

Developmental Education Completion Rate:
• The percentage of students completing their developmental education requirements in their first year increased in math, reading and writing between Fall 2010 and Fall 2017.
• The percentage of students of color and American Indian students who completed all of their developmental courses by the end of the first year has increased in all three subjects since Fall 2010. Gaps between students of color and American Indian students relative to white and nonresident students in developmental course completion have narrowed in all three subject areas since Fall 2010, but significant gaps remain.
• The percentage of Pell grant eligible students who completed their developmental courses in the first year increased in all three subjects between Fall 2010 and Fall 2017. Gaps relatively to students who were not eligible for Pell grants remain, but decreased in all three subjects.

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 of student completion of developmental education courses by the end of their first year.

**College Level Course Completion Rate:**
- The percent of students completing college-level mathematics in their first year was 24.5 percent for those entering in Fall 2018 as compared to 19.6 percent for those entering in Fall 2010. The rate for math, which has remained stable the last three years, is **4.9 percent higher** than for those entering in Fall 2010.
- Completion of college level writing in the first year has fluctuated from 39 percent to 40 percent in recent years but the systemwide overall rate **remains higher** than the 38.1 percent rate observed for Fall 2010 entering students.
- The percent of students of color and American Indian students and of Pell grant eligible students who completed a college level course by the end of their first year has increased in both math and writing since Fall 2010, 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 nonresident students in completion of college level writing decreased substantially between Fall 2010 and Fall 2018 (from a gap of 11.9 percentage points to 4.4 points). Similarly the gap in completion of college writing for Pell grant eligible students as compared to students who were not eligible decreased from 8.8 percentage points for Fall 2010 to 3.9 points for Fall 2018.

The college-level completion rates for writing courses increased between Fall 2010 and Fall 2018 for students of color and American Indian students and for Pell eligible students and the gaps, relative to their comparison groups of students, narrowed. Some of the reduction in the gaps, however, is due to recent decreases in the college level writing completion rate for white and non-Pell eligible students.

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 20 and 30 semester credits during their first year **increased between Fall 2010 and Fall 2018**.
- The percentage of students of color and American Indian students who earned 20 credits and 30 credits within their first year increased, but remains below the rates for white and nonresident students and gaps have not decreased.
• The percent of Pell eligible students who earned 30 credits in their first year initially decreased between Fall 2010 and Fall 2016, but in Fall 2018 the percent completing 30 credits increased to 27.1 percent, a value 0.7 points above the Fall 2010 level.

Although overall credit completion rates have increased, educational outcome gaps have not decreased and remain a significant issue.

**Student Persistence and Completion Rate:**
• The second fall persistence and completion rate for Fall 2017 entering full-time undergraduate students was **1.2 percentage points higher** than for those entering in Fall 2010.
• The increase in second fall persistence and completion was greater for students of color and American Indian students, but the gap as compared to white and nonresident students remains close to ten percentage points.
• The rate for Pell eligible students has fluctuated, but the rate for Fall 2017 entering students was nearly the same as for Fall 2010 and the gaps have not decreased appreciably.

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

**Completion Rate:**
• The 3-year completion rate for the full-time entering state college students decreased during the recession and has increased in the years since then. The rate for full-time students entering in Fall 2015 was **1.7 points higher** than for Fall 2009 (53.9 percent as compared to 52.2 percent).
• The state college completion rate for students of color and American Indian students has increased but remains lower than the rate for white and nonresident students and gaps remain above ten percent.
• The completion rate for students who were not eligible for Pell grants increased 3.4 percentage points between the Fall 2009 and Fall 2015 entering cohorts; the rate for Pell eligible students increased only 0.9 percentage points during the same period, and substantial gaps between the two populations remain.
• The 6-year completion rate for the state universities **increased** from 52.0 percent for Fall 2009 entering full-time students to 54.8 percent for those entering in Fall 2012.
• Even with modest improvements in the 6-year state university completion rates for students of color and American Indian students and Pell eligible students, the gaps between both populations and their comparison groups are still substantial.

Credential completion continues to be an imperative and a primary commitment of Minnesota State. Despite more recent increases in completion rates, gaps have not decreased and in fact are greater than for those entering in Fall 2009. Eliminating the opportunity gaps between
students of color and American Indian completion rates and white and nonresident student completion rates, as well as the gaps between Pell eligible students and students who are not Pell eligible, is one of the most important priorities of Minnesota State.

Credits Earned at Graduation

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

The declining number of credits at graduation reflects, at least in part, credit caps Minnesota State implemented for the vast majority of its programs during the last decade. The Minnesota Legislature enacted language in 2007 that required the Minnesota State system to implement credit caps of 60 for associate degrees and 120 for bachelor’s degrees. 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.
BACKGROUND

The Minnesota legislature passed three recent pieces of legislation related to postsecondary completion and developmental education.

(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 February 2018 Developmental Education Plan report is available at http://www.minnstate.edu/system/asa/index.html.

This Degree and Certificate Completion report meets the second legislative requirement and includes comprehensive reporting and discussion of the specified seven completion measures. The report updates the data included in the second annual report submitted in January 2019. 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.
Completion Goals

One of the core commitments of the 37 colleges and universities of Minnesota State is providing access to higher education for all Minnesotans. As stated in the 2016 College Completion Plan, Minnesota State has been very successful in providing this access, with acknowledgement that there is still work to be done. In fiscal year 2019, over 239,000 students enrolled in credit courses at Minnesota State College and University campuses. Minnesota State institutions continue to be the first choice in higher education for the majority of Minnesotans and especially students of color, low-income students, adult learners, and those pursuing technical careers. Minnesota State educates more college graduates than any other provider of higher education in the state, and its graduates include the majority of the state’s K-12 school teachers, law enforcement professionals, and healthcare professionals.

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

Degree and certificate attainment increases average earnings over the course of a lifetime, decreases likelihood of unemployment, and increases contributions to communities and our society (Trostel, 2015; U.S. Department of Education, 2015). Degree and certificate completion is important not only for the individual student and his or her family, but also for the state to meet its talent needs. With a commitment to providing access and degree attainment, Minnesota State has implemented efforts to improve completion rates, at every level of award from certificates and diplomas to associate, bachelors and graduate degrees.

Challenges Related to Degree and Certificate Completion

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

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

- Open Door Mission: Minnesota State’s mission as the public-serving post-secondary education system for the state of Minnesota plays a critical role in this context. Minnesota State colleges have open admission policies and admit all students with a high school
diploma, regardless of academic preparation levels, which results in attracting students with a broad range of preparedness. Consequently, Minnesota State institutions enroll many students who require more intentional and expansive levels of academic support. Thirty percent of Minnesota high school graduates who took the ACT in 2018-2019 had a college ready score in all areas (ACT, 2019).

- **Affordability:** The cost of obtaining a college credential continues to be a barrier for many students. Thirty percent of Minnesota State students were Pell grant eligible in fiscal year 2019 and 56 percent received some form of financial aid. In addition, over half of Minnesota State graduates complete their credentials with some modest debt.

- **Low Unemployment:** Finally, the comparative strength of Minnesota’s economy and lower than average unemployment rates is good news for the state but a challenge to increasing college completion rates. 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.

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 FY2018-2019 indicate that among the Minnesota State student population:

- Thirty percent are Pell grant eligible;
- Fifty-two percent of students are enrolled on a part-time basis;
- The average age of our students is 24 and 32 percent are age 25 or older;
- Half of our students are first-generation by the federal definition that the student’s parents have not earned a bachelor’s degree;
- Twenty-eight percent of our students are American Indian or students of color;
- Over 9,000 students seek educational accommodations related to a physical or cognitive disability.

**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. Minnesota State’s comprehensive completion plan capitalizes on the initiatives that are already demonstrating success while also promoting practices and policies that have been shown on a national level to have a positive impact on completion rates.
Developmental Education

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

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

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

Although postsecondary institutions typically assess the academic 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 are able to graduate with postsecondary occupational certificates or diplomas and obtain a living wage job without taking developmental courses.

Across all Minnesota postsecondary institutions, the percent of recent high school graduates who enrolled in developmental education within two years of graduating has decreased from 30 to 23 percent between 2008 and 2015. As a result of our colleges’ open-door mission, Minnesota State Colleges and Universities enroll 97 percent of the public high school graduates who take developmental education courses within two years of graduating high school (OHE, Getting Prepared 2018).

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 and summarized briefly here:

- **Open Admissions**: The open admissions policies of Minnesota State mean that many of the students admitted to our colleges and universities are not academically prepared for college and need options for developmental education. The type and availability of offerings of developmental education often reflect an institution’s student demographics and selectivity.

- **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, as well as full pre- and post-assessment processes.

- **Developmental Education Curriculum**: Traditional developmental-level curricula is offered in a sequential fashion in which students with the highest levels of under-preparedness may enroll in two or three semesters of coursework before being able to take a college-level course in the corresponding subject area. Studies have illustrated that the more courses students are required to take before beginning their college-level coursework, the less likely they are to persist and complete. Minnesota State is working to implement multiple options for students that can include the traditional model and accelerated models that address students’ needs and reduce the time to completion of developmental coursework.

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

Most Minnesota State colleges and universities are currently implementing innovations in developmental education to increase student retention, persistence 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 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 have 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 has been reviewing and promoting 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.

Currently each college and university has a local action plan in place and is making progress on the goals outlined in the DESR.
Opportunity Gaps and Equity

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

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

Since addressing the opportunity gaps is a key priority for Minnesota State, the system has been collecting and reporting data with disaggregations by student demographics. Minnesota State colleges and universities and the system office have been engaging in collective discussions, strategic planning, and implementation of evidence-based policies, programs and practices toward eliminating the gaps. These discussions, strategic planning, 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:

- 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/index3.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 disaggregations 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 disaggregations, are presented in Appendix B.

Students, Measures, Disaggregations and Data Suppression

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

Students Reported

Since the measures focus on completion of credentials, only undergraduate students who were pursuing a degree, certificate or diploma when they entered the college or university are included in the cohorts. Students who were not pursuing a degree, were taking courses while in high school or who had previously earned a degree are not included. The number of fall entering undergraduate credential seeking students decreased by 24 percent between Fall 2010 and Fall 2018, 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

<table>
<thead>
<tr>
<th>Sector</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>55,363</td>
<td>52,139</td>
<td>51,602</td>
<td>48,664</td>
<td>46,429</td>
<td>44,857</td>
<td>44,236</td>
<td>42,656</td>
<td>42,039</td>
<td>-24.1%</td>
</tr>
<tr>
<td>Colleges</td>
<td>40,182</td>
<td>36,995</td>
<td>36,950</td>
<td>34,505</td>
<td>32,756</td>
<td>31,050</td>
<td>30,322</td>
<td>29,663</td>
<td>29,397</td>
<td>-26.8%</td>
</tr>
<tr>
<td>Universities</td>
<td>15,181</td>
<td>15,144</td>
<td>14,652</td>
<td>14,159</td>
<td>13,673</td>
<td>13,807</td>
<td>13,914</td>
<td>12,993</td>
<td>12,642</td>
<td>-16.7%</td>
</tr>
</tbody>
</table>

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 disaggregations are shown in Table 2. The developmental education enrollment rates and completion rates are reported separately for Mathematics, Reading and Writing or English. A few colleges and universities do not offer developmental reading and/or developmental writing and consequently will not have the developmental enrollment or completion rates reported. Although a few Minnesota State colleges and universities offer developmental courses in English as a Second Language and in other disciplines, the numbers of students taking these courses is relatively small, and consequently, measures are not reported separately for these disciplines, but the students are included in the overall rates.
<table>
<thead>
<tr>
<th>Legislative Measure</th>
<th>Measure Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Students Placed in Remedial Education</td>
<td>Developmental Education Enrollment Rate</td>
<td>Percent of entering students who took any Developmental Education course (Math, Reading, Writing, ESL, Other) in the first two years</td>
</tr>
<tr>
<td></td>
<td>Developmental Education Enrollment Rate: Math</td>
<td>Percent of entering students who took Developmental Math courses in the first two years</td>
</tr>
<tr>
<td></td>
<td>Developmental Education Enrollment Rate: Reading</td>
<td>Percent of entering students who took Developmental Reading courses in the first two years</td>
</tr>
<tr>
<td></td>
<td>Developmental Education Enrollment Rate: Writing</td>
<td>Percent of entering students who took Developmental Writing courses in the first two years</td>
</tr>
<tr>
<td>Percent of Students Completing Remediation in One Year</td>
<td>One-Year Developmental Completion Rate: Math</td>
<td>Percent of students who took Developmental Math who completed all required Developmental Math courses by the end of the first year</td>
</tr>
<tr>
<td></td>
<td>One-Year Developmental Completion Rate: Reading</td>
<td>Percent of students who took Developmental Reading who completed all required Developmental Reading courses by the end of the first year</td>
</tr>
<tr>
<td></td>
<td>One-Year Developmental Completion Rate: Writing</td>
<td>Percent of students who took Developmental Writing who completed all required Developmental Writing courses by the end of the first year</td>
</tr>
<tr>
<td>Percent of Students that Complete College-Level Gateway Courses in One Year</td>
<td>One-Year College Level Course Completion Rate: Math</td>
<td>Percent of entering students who completed a College-Level Math course by the end of the first year</td>
</tr>
<tr>
<td></td>
<td>One-Year College Level Course Completion Rate: Writing</td>
<td>Percent of entering students who completed a College-Level Writing course by the end of the first year</td>
</tr>
<tr>
<td>Percent of Students Who Complete 30 Credits per Year</td>
<td>Thirty Credit Completion Rate in First Year</td>
<td>Percent of full-time entering students who completed 30 credit hours in the first year</td>
</tr>
<tr>
<td></td>
<td>Twenty Credit Completion Rate in First Year</td>
<td>Percent of full-time entering students who completed 20 credit hours in the first year</td>
</tr>
</tbody>
</table>
Table 2: Measures and Definitions - Continued
Minnesota State Colleges and Universities

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

**Disaggregations**

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

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

The measures included in the January 2019 Degree and Certificate Completion report have been updated with the most recent information from the Minnesota State student record system and the system’s developmental education and completion data mart. The data mart was created to allow reporting of the legislatively required measures and to allow colleges and universities to more easily analyze data on their students to support efforts to increase student success.

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

**Data Suppression**

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

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

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

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

This section of the report presents data on each of the seven legislative completion measures. Each section describes the measure, presents system level trends in the measure, and describes any differences between students of color and American Indian students compared to white and nonresident alien 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. 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 43.8 percent, from 23,391 students in Fall 2010 to 13,136 in Fall 2017, as shown in Table 3. The decrease was 45 percent at the colleges and 36.3 percent at the universities during this time.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>23,391</td>
<td>21,550</td>
<td>21,277</td>
<td>19,022</td>
<td>16,390</td>
<td>14,817</td>
<td>14,212</td>
<td>13,136</td>
<td>-43.8%</td>
</tr>
<tr>
<td>Colleges</td>
<td>20,301</td>
<td>18,758</td>
<td>18,485</td>
<td>16,522</td>
<td>13,964</td>
<td>12,366</td>
<td>11,796</td>
<td>11,167</td>
<td>-45.0%</td>
</tr>
<tr>
<td>Universities</td>
<td>3,090</td>
<td>2,792</td>
<td>2,792</td>
<td>2,500</td>
<td>2,426</td>
<td>2,451</td>
<td>2,416</td>
<td>1,969</td>
<td>-36.3%</td>
</tr>
</tbody>
</table>

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 2010 and Fall 2017. The system percent of students who took any developmental courses decreased from 42.3 percent to 30.8 percent, as shown in Table 4. The largest decrease occurred among students taking developmental math courses, dropping 10.9 points from 33.0 percent for Fall 2010 to 22.1 percent for Fall 2017.
Table 4: Developmental Education (DE) Enrollment Rate by Subject  
Fall Entering Undergraduate Degree, Diploma and Certificate Seeking Students  
Minnesota State Colleges and Universities

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any DE</td>
<td>42.3%</td>
<td>41.3%</td>
<td>41.2%</td>
<td>39.1%</td>
<td>35.3%</td>
<td>33.0%</td>
<td>32.1%</td>
<td>30.8%</td>
<td>-11.5</td>
</tr>
<tr>
<td>DE Math</td>
<td>33.0%</td>
<td>32.3%</td>
<td>31.5%</td>
<td>30.2%</td>
<td>24.9%</td>
<td>23.2%</td>
<td>22.6%</td>
<td>22.1%</td>
<td>-10.9</td>
</tr>
<tr>
<td>DE Reading</td>
<td>14.8%</td>
<td>14.5%</td>
<td>14.9%</td>
<td>14.1%</td>
<td>12.5%</td>
<td>10.5%</td>
<td>9.8%</td>
<td>9.2%</td>
<td>-5.6</td>
</tr>
<tr>
<td>DE Writing</td>
<td>17.1%</td>
<td>17.4%</td>
<td>17.4%</td>
<td>16.0%</td>
<td>13.8%</td>
<td>12.9%</td>
<td>12.9%</td>
<td>11.4%</td>
<td>-5.7</td>
</tr>
</tbody>
</table>

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

We cannot address academic preparation alone, so our system is working closely with our external partners to increase the career and college readiness of students arriving at our colleges and universities. Minnesota State colleges and universities are collaborating with their K-12 partners to improve practice and curriculum alignment so that we can ensure that more high school students graduate career and college-ready. In addition, campuses continue to partner with their local adult basic education, 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 2010, but both groups continue to have higher developmental course taking rates relative to their comparison groups. Forty-six percent of Fall 2017 entering students of color and American Indian students took developmental courses compared to 23.7 percent of white and nonresident students, as shown in Table 5. For Fall 2017 entering students, 39.1 percent of Pell grant eligible students took developmental education courses, compared to 24.4 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

<table>
<thead>
<tr>
<th>Student Group</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any DE-White/NR</td>
<td>37.1%</td>
<td>35.6%</td>
<td>34.8%</td>
<td>32.4%</td>
<td>28.7%</td>
<td>26.3%</td>
<td>25.6%</td>
<td>23.7%</td>
<td>-13.4%</td>
</tr>
<tr>
<td>Any DE-SOC &amp; AI</td>
<td>58.8%</td>
<td>58.6%</td>
<td>59.0%</td>
<td>56.6%</td>
<td>51.3%</td>
<td>48.5%</td>
<td>47.1%</td>
<td>46.0%</td>
<td>-12.8%</td>
</tr>
<tr>
<td>Any DE-No Pell</td>
<td>35.5%</td>
<td>33.6%</td>
<td>33.0%</td>
<td>30.8%</td>
<td>27.9%</td>
<td>26.5%</td>
<td>25.7%</td>
<td>24.4%</td>
<td>-11.1%</td>
</tr>
<tr>
<td>Any DE-Pell</td>
<td>50.7%</td>
<td>50.1%</td>
<td>50.1%</td>
<td>48.1%</td>
<td>43.2%</td>
<td>41.2%</td>
<td>40.5%</td>
<td>39.1%</td>
<td>-11.6%</td>
</tr>
</tbody>
</table>

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

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

Developmental Education Completion Rate

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

The percentage of fall entering students completing their developmental education requirements by the end of their first year has fluctuated somewhat in recent years, but remains higher for Fall 2017 entering students as compared to Fall 2010. The greatest increase has been in the completion of developmental mathematics, although that rate remains lower than for developmental writing and reading.

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

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE Math-1st Year</td>
<td>30.5%</td>
<td>31.0%</td>
<td>31.3%</td>
<td>33.7%</td>
<td>41.0%</td>
<td>42.5%</td>
<td>43.5%</td>
<td>42.7%</td>
<td>12.2%</td>
</tr>
<tr>
<td>DE Writing-1st Year</td>
<td>59.3%</td>
<td>59.6%</td>
<td>60.1%</td>
<td>59.7%</td>
<td>61.3%</td>
<td>62.9%</td>
<td>64.3%</td>
<td>63.8%</td>
<td>4.5</td>
</tr>
<tr>
<td>DE Reading-1st Year</td>
<td>55.7%</td>
<td>56.0%</td>
<td>55.8%</td>
<td>55.5%</td>
<td>60.3%</td>
<td>60.6%</td>
<td>61.4%</td>
<td>61.3%</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Across Minnesota State campuses, faculty, departments and academic and student affairs divisions have been innovating both in and out of the classroom to support students enrolled in developmental education, as highlighted in the innovations previously described. As campuses improve, scale, and add new innovative practices and programs, it is anticipated that the percentage of students completing developmental education courses in their first year will continue to increase. Many campuses have also instituted campus-level policies that require or highly encourage students to enroll in developmental education courses their first semester or first year. These policies help ensure that students receive the academic and student support they need to be successful in completing their degree or certificate.

As shown in Table 7, the percentage of students of color and American Indian students who completed their developmental courses by the end of their first year has increased in all subjects since Fall 2010. Although the gaps relative to white and nonresident students have narrowed, the completion rates for students of color and American Indian students remain lower. Similar gaps remain for students who are eligible for Pell grants and those who are not eligible.

Table 7: Developmental Education (DE) Completion Rate by Student Group and Subject

<table>
<thead>
<tr>
<th>Subject &amp; Student Group</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE Math-White/NR</td>
<td>34.3%</td>
<td>35.3%</td>
<td>35.4%</td>
<td>37.9%</td>
<td>43.9%</td>
<td>46.5%</td>
<td>48.0%</td>
<td>47.1%</td>
<td>12.8</td>
</tr>
<tr>
<td>DE Math-SOC &amp; AI</td>
<td>21.6%</td>
<td>22.3%</td>
<td>23.6%</td>
<td>26.3%</td>
<td>35.5%</td>
<td>35.7%</td>
<td>36.6%</td>
<td>36.6%</td>
<td>15.0</td>
</tr>
<tr>
<td>DE Writing-White/NR</td>
<td>64.7%</td>
<td>64.9%</td>
<td>66.6%</td>
<td>66.8%</td>
<td>66.6%</td>
<td>69.3%</td>
<td>69.1%</td>
<td>69.8%</td>
<td>5.1</td>
</tr>
<tr>
<td>DE Writing-SOC &amp; AI</td>
<td>52.6%</td>
<td>53.6%</td>
<td>53.3%</td>
<td>52.9%</td>
<td>57.0%</td>
<td>57.5%</td>
<td>60.3%</td>
<td>59.8%</td>
<td>7.2</td>
</tr>
<tr>
<td>DE Reading-White/NR</td>
<td>61.8%</td>
<td>61.6%</td>
<td>63.4%</td>
<td>62.4%</td>
<td>67.1%</td>
<td>67.4%</td>
<td>66.9%</td>
<td>66.6%</td>
<td>4.8</td>
</tr>
<tr>
<td>DE Reading-SOC &amp; AI</td>
<td>49.5%</td>
<td>50.9%</td>
<td>49.4%</td>
<td>50.2%</td>
<td>55.7%</td>
<td>56.6%</td>
<td>58.2%</td>
<td>58.8%</td>
<td>9.3</td>
</tr>
<tr>
<td>DE Math-No Pell</td>
<td>38.3%</td>
<td>39.3%</td>
<td>39.3%</td>
<td>39.9%</td>
<td>47.1%</td>
<td>48.1%</td>
<td>49.2%</td>
<td>49.2%</td>
<td>10.9</td>
</tr>
<tr>
<td>DE Math-Pell</td>
<td>25.6%</td>
<td>26.0%</td>
<td>26.2%</td>
<td>29.1%</td>
<td>36.9%</td>
<td>38.2%</td>
<td>39.1%</td>
<td>38.4%</td>
<td>12.8</td>
</tr>
<tr>
<td>DE Writing-No Pell</td>
<td>66.9%</td>
<td>68.8%</td>
<td>69.1%</td>
<td>68.9%</td>
<td>68.6%</td>
<td>69.5%</td>
<td>68.6%</td>
<td>69.2%</td>
<td>2.3</td>
</tr>
<tr>
<td>DE Writing-Pell</td>
<td>56.0%</td>
<td>55.6%</td>
<td>56.1%</td>
<td>55.9%</td>
<td>58.0%</td>
<td>59.0%</td>
<td>61.5%</td>
<td>61.2%</td>
<td>5.2</td>
</tr>
<tr>
<td>DE Reading-No Pell</td>
<td>64.3%</td>
<td>64.4%</td>
<td>65.5%</td>
<td>64.8%</td>
<td>67.1%</td>
<td>67.6%</td>
<td>65.5%</td>
<td>66.9%</td>
<td>2.6</td>
</tr>
<tr>
<td>DE Reading-Pell</td>
<td>52.3%</td>
<td>52.1%</td>
<td>52.3%</td>
<td>51.7%</td>
<td>57.7%</td>
<td>58.0%</td>
<td>60.1%</td>
<td>59.5%</td>
<td>7.2</td>
</tr>
</tbody>
</table>

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

Student completion of college-level gateway courses was measured by a student 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.

The percentage of students completing a college level math or writing course in their first year increased between Fall 2010 and Fall 2018. As shown in Table 8, the percent of students completing college-level mathematics in their first year was 24.5 percent for those entering in Fall 2018 as compared to 19.6 percent for those entering in Fall 2010. The overall rate, which has remained stable the last three years, is 4.9 percent higher than for those entering in Fall 2010. Completion of college level writing in the first year has fluctuated around 39 to 40 percent in recent years, but remains higher than the 38.1 percent rate observed for Fall 2010 entering students.

Table 8: First Year College Level (CL) Course Completion Rate by Subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL Math</td>
<td>19.6%</td>
<td>20.6%</td>
<td>20.8%</td>
<td>21.2%</td>
<td>22.8%</td>
<td>23.5%</td>
<td>24.5%</td>
<td>24.5%</td>
<td>24.5%</td>
<td>4.9</td>
</tr>
<tr>
<td>CL Writing</td>
<td>38.1%</td>
<td>38.7%</td>
<td>38.0%</td>
<td>38.8%</td>
<td>39.2%</td>
<td>40.1%</td>
<td>39.9%</td>
<td>39.4%</td>
<td>39.0%</td>
<td>0.9</td>
</tr>
</tbody>
</table>

The lower completion rates for college-level mathematics compared to college-level writing courses is likely due to several factors. Some students are still enrolled in and are completing their developmental mathematics courses in their first year. Other students opt not to take college-level mathematics courses the first year of college. For Fall 2018 entering students, the first year college-level math completion rate was 40.9 percent at state universities as compared to 17.4 percent at state colleges. 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.

The percentage of students of color and American Indian students and the percentage of Pell grant eligible students who completed a college level course has increased in both math and writing since Fall 2010. Both groups, however, had lower college level course completion rates relative to the comparison groups of white and nonresident alien students and students who are not eligible for Pell grants (see Table 9).

For students entering in Fall 2018, 17.3 percent of students of color and American Indian students completed a college-level math course in the first year compared to 28.2 percent of white and nonresident students, as shown in Table 9. For the same entering terms, Pell eligible students completed a college-level math course at a rate of 19.8 percent compared to 30.8
percent for students who were not eligible for a Pell grant. The gaps observed for college level math completion have fluctuated over time but have not narrowed appreciably.

The college-level completion rates for writing courses increased between Fall 2010 and Fall 2018 for students of color and American Indian students and for Pell eligible students and gaps narrowed. Some of the reduction in the gaps, however, is due to recent decreases in the college level writing completion rate for white and non-Pell eligible students.

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.

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

<table>
<thead>
<tr>
<th>Subject and Student Group</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL Math-White/NR</td>
<td>22.2%</td>
<td>23.5%</td>
<td>23.7%</td>
<td>24.2%</td>
<td>26.1%</td>
<td>26.9%</td>
<td>27.8%</td>
<td>28.2%</td>
<td>28.2%</td>
<td>6.0</td>
</tr>
<tr>
<td>CL Math-SOC &amp; AI</td>
<td>11.4%</td>
<td>12.0%</td>
<td>12.6%</td>
<td>13.4%</td>
<td>14.8%</td>
<td>15.7%</td>
<td>16.8%</td>
<td>16.7%</td>
<td>17.3%</td>
<td>5.9</td>
</tr>
<tr>
<td>CL Writing-White/NR</td>
<td>41.1%</td>
<td>42.0%</td>
<td>41.1%</td>
<td>41.5%</td>
<td>41.8%</td>
<td>42.3%</td>
<td>41.8%</td>
<td>41.1%</td>
<td>40.5%</td>
<td>-0.6</td>
</tr>
<tr>
<td>CL Writing-SOC &amp; AI</td>
<td>29.2%</td>
<td>29.4%</td>
<td>29.8%</td>
<td>32.0%</td>
<td>33.1%</td>
<td>35.1%</td>
<td>35.5%</td>
<td>36.0%</td>
<td>36.1%</td>
<td>6.9</td>
</tr>
<tr>
<td>CL Math-No Pell</td>
<td>26.6%</td>
<td>28.4%</td>
<td>28.6%</td>
<td>28.0%</td>
<td>29.8%</td>
<td>30.2%</td>
<td>30.4%</td>
<td>31.2%</td>
<td>30.8%</td>
<td>4.2</td>
</tr>
<tr>
<td>CL Math-Pell</td>
<td>15.0%</td>
<td>15.0%</td>
<td>15.4%</td>
<td>16.1%</td>
<td>17.6%</td>
<td>18.1%</td>
<td>19.2%</td>
<td>19.5%</td>
<td>19.8%</td>
<td>4.8</td>
</tr>
<tr>
<td>CL Writing-No Pell</td>
<td>44.2%</td>
<td>45.7%</td>
<td>45.2%</td>
<td>44.9%</td>
<td>44.9%</td>
<td>45.4%</td>
<td>44.1%</td>
<td>43.3%</td>
<td>42.0%</td>
<td>-2.2</td>
</tr>
<tr>
<td>CL Writing-Pell</td>
<td>35.4%</td>
<td>34.7%</td>
<td>34.0%</td>
<td>35.0%</td>
<td>35.9%</td>
<td>37.0%</td>
<td>37.3%</td>
<td>37.7%</td>
<td>38.1%</td>
<td>2.7</td>
</tr>
</tbody>
</table>

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

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.
The percentage of students who completed 20 and 30 semester credits during their first year increased between Fall 2010 and Fall 2018. Sixty-seven percent of Fall 2018 entering students completed 20 in their first year, up from 64.7 percent for Fall 2010 entering students, as shown in Table 10. Almost thirty-three percent of Fall 2018 entering students completed 30 credits in the first year, up from 29.3 percent for Fall 2010 students.

Table 10: Twenty and Thirty Credit Completion Rates

<table>
<thead>
<tr>
<th>Credit Category</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 credits</td>
<td>64.7%</td>
<td>65.2%</td>
<td>65.1%</td>
<td>65.6%</td>
<td>66.5%</td>
<td>66.6%</td>
<td>66.1%</td>
<td>67.0%</td>
<td>67.0%</td>
<td>2.3</td>
</tr>
<tr>
<td>30 credits</td>
<td>29.3%</td>
<td>28.9%</td>
<td>29.3%</td>
<td>29.0%</td>
<td>29.3%</td>
<td>30.2%</td>
<td>30.8%</td>
<td>31.8%</td>
<td>32.6%</td>
<td>3.3</td>
</tr>
</tbody>
</table>

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

The percentage of students of color and American Indian students and of Pell eligible students that earned twenty credits in their first year increased between Fall 2010 and Fall 2018, but both groups had lower percentages than their comparison groups of white and nonresident students and students who were not eligible for a Pell grant. Almost fifty-six percent of Fall 2018 entering students of color and American Indian students earned 20 credits in their first year, up from 51.3 percent for Fall 2010 entering students, as shown in Table 11.

The percentage of students of color and American Indian students who earned 30 credits in their first year decreased between Fall 2010 and Fall 2012, but then increased 2.2 percentage points by Fall 2018 (as compared to Fall 2010). The percent of Pell eligible students who earned 30 credits in their first year had initially decreased between Fall 2010 and Fall 2016, but in Fall 2018 the percent completing 30 credits was 27.1 percent, a value 0.7 points above the Fall 2010 level.

Although overall credit completion rates have increased, educational outcome gaps have not decreased and remain a significant issue.
Table 11: Twenty and Thirty Credit Completion Rates by Student Group

<table>
<thead>
<tr>
<th>Student Group</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Credits-White/NR</td>
<td>68.2%</td>
<td>68.9%</td>
<td>68.9%</td>
<td>69.5%</td>
<td>70.4%</td>
<td>70.9%</td>
<td>70.5%</td>
<td>70.6%</td>
<td>71.8%</td>
<td>3.6</td>
</tr>
<tr>
<td>20 Credits-SOC &amp; AI</td>
<td>51.3%</td>
<td>51.8%</td>
<td>51.9%</td>
<td>53.2%</td>
<td>54.5%</td>
<td>54.4%</td>
<td>55.2%</td>
<td>54.9%</td>
<td>55.7%</td>
<td>4.4</td>
</tr>
<tr>
<td>20 Credits-No Pell</td>
<td>70.8%</td>
<td>72.4%</td>
<td>72.4%</td>
<td>72.4%</td>
<td>72.8%</td>
<td>73.5%</td>
<td>72.6%</td>
<td>72.7%</td>
<td>73.5%</td>
<td>2.7</td>
</tr>
<tr>
<td>20 Credits-Pell</td>
<td>59.5%</td>
<td>58.6%</td>
<td>58.2%</td>
<td>58.8%</td>
<td>60.1%</td>
<td>59.6%</td>
<td>59.8%</td>
<td>59.3%</td>
<td>60.4%</td>
<td>0.9</td>
</tr>
<tr>
<td>30 Credits-White/NR</td>
<td>31.9%</td>
<td>32.1%</td>
<td>33.0%</td>
<td>32.7%</td>
<td>33.1%</td>
<td>34.5%</td>
<td>35.1%</td>
<td>36.4%</td>
<td>37.4%</td>
<td>5.5</td>
</tr>
<tr>
<td>30 Credits-SOC &amp; AI</td>
<td>19.0%</td>
<td>17.3%</td>
<td>16.8%</td>
<td>17.3%</td>
<td>18.0%</td>
<td>17.7%</td>
<td>18.8%</td>
<td>20.4%</td>
<td>21.2%</td>
<td>2.2</td>
</tr>
<tr>
<td>30 Credits-No Pell</td>
<td>32.8%</td>
<td>33.7%</td>
<td>35.2%</td>
<td>34.0%</td>
<td>33.9%</td>
<td>35.6%</td>
<td>36.5%</td>
<td>36.7%</td>
<td>38.0%</td>
<td>5.2</td>
</tr>
<tr>
<td>30 Credits-Pell</td>
<td>26.4%</td>
<td>24.3%</td>
<td>23.8%</td>
<td>23.9%</td>
<td>24.2%</td>
<td>24.1%</td>
<td>24.4%</td>
<td>26.6%</td>
<td>27.1%</td>
<td>0.7</td>
</tr>
</tbody>
</table>

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

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.

The second fall persistence and completion rate for Fall 2017 entering students was 1.2 percentage points higher than for those entering in Fall 2010. The increase was greater for students of color and American Indian students, but the gap as compared to white and nonresident students remains close to ten percentage points. The rate for Pell eligible students has fluctuated but for Fall 2017 entering students the rate was nearly the same as for Fall 2010 and the gaps have not decreased appreciably. Although efforts have been aimed to address the opportunity gaps and increase students of color and American Indian and Pell eligible students’ persistence rates, it is evident that there is still much work to do. In addition to expanding evidence-based programs, practices, and initiatives, campuses are focusing on increasing student engagement and sense of belonging and creating positive campus climates.

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.
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

<table>
<thead>
<tr>
<th>Student Group</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>75.0%</td>
<td>75.2%</td>
<td>74.9%</td>
<td>75.4%</td>
<td>77.1%</td>
<td>76.9%</td>
<td>76.9%</td>
<td>76.2%</td>
<td>1.2</td>
</tr>
<tr>
<td>White/NR</td>
<td>77.5%</td>
<td>77.8%</td>
<td>77.4%</td>
<td>78.0%</td>
<td>79.6%</td>
<td>79.8%</td>
<td>79.4%</td>
<td>79.0%</td>
<td>1.5</td>
</tr>
<tr>
<td>SOC &amp; AI</td>
<td>65.4%</td>
<td>66.0%</td>
<td>66.7%</td>
<td>67.5%</td>
<td>69.4%</td>
<td>68.5%</td>
<td>70.1%</td>
<td>69.2%</td>
<td>3.8</td>
</tr>
<tr>
<td>No Pell</td>
<td>80.1%</td>
<td>81.6%</td>
<td>81.0%</td>
<td>81.4%</td>
<td>82.6%</td>
<td>82.6%</td>
<td>81.9%</td>
<td>81.3%</td>
<td>1.2</td>
</tr>
<tr>
<td>Pell</td>
<td>70.4%</td>
<td>69.4%</td>
<td>69.1%</td>
<td>69.4%</td>
<td>71.5%</td>
<td>70.7%</td>
<td>71.3%</td>
<td>70.5%</td>
<td>0.1</td>
</tr>
</tbody>
</table>

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

Completion Rate

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

The 3-year completion rate for the state colleges decreased during the recession and has increased in the years since then. The rate for full-time students entering in Fall 2015 was 1.7 points higher than for Fall 2009 (53.9 percent as compared to 52.2 percent) as shown in Table 13. The state college completion rate for students of color and American Indian students has increased but remains lower than the rate for white and nonresident students and gaps remain above ten percent. The completion rate for students who were not eligible for Pell grants increased 3.4 percentage points between the Fall 2009 and Fall 2015 entering cohorts; the rate for Pell eligible students increased only 0.9 percentage points during the same period and substantial gaps remain.

The 6-year completion rate for the state universities increased from 52.0 percent for Fall 2009 entering students to 54.8 percent for those entering in Fall 2012, as shown in Table 13. Even with modest improvements in the 6-year state university completion rates for students of color and American Indian students and Pell eligible students, the gaps between both populations and their comparison groups remain substantial.
### 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

<table>
<thead>
<tr>
<th>Sector and Student Group</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges: Completion Rate</td>
<td>52.2%</td>
<td>51.0%</td>
<td>50.8%</td>
<td>51.0%</td>
<td>52.5%</td>
<td>53.7%</td>
<td>53.9%</td>
<td>1.7</td>
</tr>
<tr>
<td>Colleges: Completion-White/NR</td>
<td>55.1%</td>
<td>54.8%</td>
<td>54.8%</td>
<td>54.9%</td>
<td>56.7%</td>
<td>58.0%</td>
<td>58.2%</td>
<td>3.1</td>
</tr>
<tr>
<td>Colleges: Completion-SOC &amp; AI</td>
<td>42.2%</td>
<td>39.0%</td>
<td>39.6%</td>
<td>40.5%</td>
<td>41.9%</td>
<td>43.4%</td>
<td>44.4%</td>
<td>2.2</td>
</tr>
<tr>
<td>Colleges: Completion-No Pell</td>
<td>57.9%</td>
<td>57.5%</td>
<td>59.4%</td>
<td>58.8%</td>
<td>60.9%</td>
<td>61.1%</td>
<td>61.3%</td>
<td>3.4</td>
</tr>
<tr>
<td>Colleges: Completion-Pell</td>
<td>46.7%</td>
<td>46.0%</td>
<td>44.6%</td>
<td>44.8%</td>
<td>45.8%</td>
<td>47.5%</td>
<td>47.6%</td>
<td>0.9</td>
</tr>
<tr>
<td>Universities: Completion Rate</td>
<td>52.0%</td>
<td>53.4%</td>
<td>53.7%</td>
<td>54.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universities: Completion-White/NR</td>
<td>53.3%</td>
<td>55.2%</td>
<td>55.7%</td>
<td>56.9%</td>
<td></td>
<td></td>
<td></td>
<td>3.6</td>
</tr>
<tr>
<td>Universities: Completion-SOC &amp; AI</td>
<td>42.8%</td>
<td>42.4%</td>
<td>41.5%</td>
<td>43.6%</td>
<td></td>
<td></td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>Universities: Completion-No Pell</td>
<td>53.4%</td>
<td>56.3%</td>
<td>57.6%</td>
<td>58.7%</td>
<td></td>
<td></td>
<td></td>
<td>5.3</td>
</tr>
<tr>
<td>Universities: Completion-Pell</td>
<td>47.1%</td>
<td>48.1%</td>
<td>46.6%</td>
<td>48.1%</td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>

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

Credential completion continues to be an imperative and a primary commitment of Minnesota State. Despite more recent increases in completion rates, gaps have not decreased and in fact are greater than for those entering in Fall 2009. Eliminating the gaps between students of color and American Indian completion rates and white and nonresident student completion rates, as well as the gaps between Pell eligible students and students who are not Pell eligible, is one of the most important priorities of Minnesota State. The strategies and approaches listed previously will need to be applied strategically, systemically, and comprehensively to ensure that students’ completion rates increase and Minnesota State addresses these critical gaps.

### Credits Earned at Graduation

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

The average cumulative credits at graduation has decreased for certificates, and associate and bachelor’s degrees. The average cumulative credits for state college certificate graduates decreased from 42.8 credits for Fall 2009 entering students to 40.2 credits for Fall 2016 entering students, as shown in Table 14. The average cumulative credits for state college associate degree graduates decreased from 80.6 credits for Fall 2009 entering students to 79.4 credits for Fall 2016 entering students. Average cumulative credits for state university bachelor’s degree graduates decreased from 140.5 credits for Fall 2009 entering students to 138.9 credits for Fall 2012 entering students.
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.

As shown in Table 14, students of color and American Indian students who earn Minnesota State certificates or associate degrees complete with fewer credits than their comparison group of white and nonresident students. This pattern also holds true for Pell eligible students at state colleges as compared to students who are not eligible for Pell grants. At the bachelor’s degree level, there were virtually no differences among the student groups in total credits earned at graduation.

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

<table>
<thead>
<tr>
<th>Sector and Student Group</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleges: Certificate</td>
<td>42.8</td>
<td>42.6</td>
<td>43.0</td>
<td>41.5</td>
<td>42.4</td>
<td>42.8</td>
<td>41.2</td>
<td>40.2</td>
<td>-2.6</td>
</tr>
<tr>
<td>Colleges: Certificate-White/NR</td>
<td>43.8</td>
<td>42.6</td>
<td>43.8</td>
<td>42.2</td>
<td>43.5</td>
<td>43.7</td>
<td>42.9</td>
<td>42.0</td>
<td>-1.8</td>
</tr>
<tr>
<td>Colleges: Certificate-SOC &amp; AI</td>
<td>40.2</td>
<td>42.6</td>
<td>41.5</td>
<td>40.4</td>
<td>40.1</td>
<td>41.0</td>
<td>37.9</td>
<td>36.8</td>
<td>-3.4</td>
</tr>
<tr>
<td>Colleges: Certificate-No Pell</td>
<td>49.6</td>
<td>50.5</td>
<td>48.9</td>
<td>49.5</td>
<td>50.8</td>
<td>48.9</td>
<td>47.2</td>
<td>46.2</td>
<td>-3.4</td>
</tr>
<tr>
<td>Colleges: Certificate-Pell</td>
<td>41.6</td>
<td>41.6</td>
<td>41.6</td>
<td>39.7</td>
<td>40.0</td>
<td>40.7</td>
<td>39.4</td>
<td>37.9</td>
<td>-3.7</td>
</tr>
<tr>
<td>Colleges: Associate</td>
<td>80.6</td>
<td>79.8</td>
<td>79.5</td>
<td>79.6</td>
<td>80.3</td>
<td>80.3</td>
<td>79.6</td>
<td>79.4</td>
<td>-1.2</td>
</tr>
<tr>
<td>Colleges: Associate-White/NR</td>
<td>80.2</td>
<td>79.6</td>
<td>79.2</td>
<td>79.5</td>
<td>80.6</td>
<td>80.5</td>
<td>80.2</td>
<td>80.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>Colleges: Associate-SOC &amp; AI</td>
<td>82.2</td>
<td>81.0</td>
<td>80.8</td>
<td>79.9</td>
<td>79.4</td>
<td>79.4</td>
<td>77.4</td>
<td>77.5</td>
<td>-4.7</td>
</tr>
<tr>
<td>Colleges: Associate-No Pell</td>
<td>80.5</td>
<td>80.0</td>
<td>79.3</td>
<td>80.0</td>
<td>81.3</td>
<td>81.9</td>
<td>81.4</td>
<td>81.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Colleges: Associate-Pell</td>
<td>80.3</td>
<td>79.1</td>
<td>79.4</td>
<td>78.7</td>
<td>78.9</td>
<td>78.4</td>
<td>77.3</td>
<td>76.9</td>
<td>-3.4</td>
</tr>
<tr>
<td>Universities: Bachelor's</td>
<td>140.5</td>
<td>139.9</td>
<td>139.7</td>
<td>138.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.6</td>
</tr>
<tr>
<td>Universities: Bachelor's-White/NR</td>
<td>140.6</td>
<td>139.8</td>
<td>139.7</td>
<td>139.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.6</td>
</tr>
<tr>
<td>Universities: Bachelor's-SOC &amp; AI</td>
<td>139.8</td>
<td>140.2</td>
<td>139.7</td>
<td>139.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.6</td>
</tr>
<tr>
<td>Universities: Bachelor's-No Pell</td>
<td>140.0</td>
<td>139.7</td>
<td>138.9</td>
<td>138.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.7</td>
</tr>
<tr>
<td>Universities: Bachelor's-Pell</td>
<td>141.1</td>
<td>139.4</td>
<td>139.9</td>
<td>138.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-2.5</td>
</tr>
</tbody>
</table>

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

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

**Institution Level Data**

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

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

Completion Measures

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

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

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 43.8 percent between Fall 2010 and Fall 2017. We attribute much of this developmental education enrollment decline to curricular and support innovations that have been implemented across our campuses. It is anticipated that with the implementation of the DESR, Minnesota State will see continued enrollment declines in developmental education courses.

The percentage of students of color and American Indian students and of Pell grant eligible students who took developmental courses has decreased substantially since Fall 2010, but both groups continue to have higher developmental course taking rates relative to their comparison groups.

Developmental Completion Rate: The percentage of students completing their developmental education requirements in their first year increased in math, reading and writing between Fall 2010 and Fall 2017. 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 of student completion of developmental education courses by the end of their first year.
Gaps between students of color and American Indian students relative to white and nonresident students in developmental course completion have narrowed in all three subject areas since Fall 2010, but significant gaps remain.

**College Level Course Completion Rate:** The percent of students completing college-level mathematics in their first year was 24.5 percent for those entering in Fall 2018 as compared to 19.6 percent for those entering in Fall 2010. The rate, which has remained stable the last three years, is 4.9 percent higher than for those entering in Fall 2010.

Completion of college level writing in the first year has fluctuated from 39 to 40 percent in recent years, but remains higher than the 38.1 percent rate observed for Fall 2010 entering students. The college-level completion rates for writing increased between Fall 2010 and Fall 2018 for students of color and American Indian students and for Pell eligible students and the observed gaps have narrowed. Some of the reduction in the gaps, however, is due to recent decreases in the college level writing completion rate for white and non-Pell eligible students.

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 20 and 30 semester credits during their first year increased between Fall 2010 and Fall 2018. Although the overall credit completion rates have increased for student groups examined in this report, the educational outcome gaps have not decreased and remain a significant issue.

**Student Persistence and Completion Rate:** The second fall persistence and completion rate for Fall 2017 entering full-time undergraduate students was 1.2 percentage points higher than for those entering in Fall 2010. The increase was greater for students of color and American Indian students than for white and nonresident students, but the gap between those populations remains close to ten percentage points. The rate for Pell eligible students has fluctuated but for Fall 2017 entering students was nearly the same as for Fall 2010 and the gaps have not decreased appreciably.

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 decreased during the recession and has increased in the years since then. The 6-year
completion rate for the state universities increased from 52.0 percent for Fall 2009 entering students to 54.8 percent for those entering in Fall 2012.

Despite more recent increases in overall completion rates, educational equity gaps have not decreased and in fact are greater than for those entering in Fall 2009.

**Credits Earned at Graduation:** The average cumulative credits at graduation decreased for certificate, and associate and bachelor’s degree graduates. Students of color and American Indian students who earn Minnesota State certificates or associate degrees at system colleges complete with fewer credits than their comparison group of white and nonresident students. This pattern also holds true for Pell eligible students as compared to students who are not eligible for Pell grants. At the bachelor’s degree level, there were virtually no differences among the student groups in total credits earned at graduation.

**Equity 2030**

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

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

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


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.
Sec. 25. DEVELOPMENTAL EDUCATION REFORM.

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

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

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

(c) The plan, in its entirety, shall be implemented by the start of the 2020-2021 academic term, with individual provisions being implemented earlier as dictated by the plan.
APPENDIX B: COMPLETION MEASURE REPORT BY COLLEGE AND UNIVERSITY

See separate Appendix B document.