The Montana University System (MUS) is driving and delivering growth in dual enrollment opportunities for high school students across the state by working to address access and affordability. Strategic program improvements and active management of a system-wide team of dual enrollment program staff yielded many dividends in the past year. This rise in concurrent enrollment participation, in particular, is the result of several years of work and multiple initiatives to increase the number and type of courses offered, to grow the pool of qualified instructors, and to decrease the cost of courses for Montana families.

Enrollment Trends
This year the MUS saw continued growth in headcount, significant increases in the portion of dual enrollment offerings in Career and Technical Education subjects (CTE), and an expansion of the percent of Montana high schools offering concurrent enrollment, including strong gains in class A, B, and C schools (Figures 1-4).
Dual Enrollment: Value to Students and Montana

Students benefit from the rigorous, accelerated academics found in dual enrollment and learn college lingo, procedures, and timelines; skills integral to success in college. Montana and national data show clear benefits from participation. Dual enrollment also helps connect Montana students with Montana colleges, building a relationship that helps keep our students here in Montana. Dual enrollment courses can also save students time and money in pursuing a degree or credential.

Student Success:

Compared to students who do not participate in dual enrollment, dual enrollment students outperform their peers in key success areas.

- Higher rate of first year retention (77% DE, 70% non-DE)
- Higher freshman GPA (3.1 DE, 2.8 non-DE)
- Earn more credits in their first year of college (27.5 DE, 23.8 cr.)
- The benefits are independent of high school GPA, and often “B” and “C” students make larger gains than “A” students when compared to non-participating peers.
- Pell-eligible dual enrollment participants perform substantially better in college than Pell-eligible non-dual enrollment participants.
  - 18% higher first year retention rate (80% Pell-DE, 62% for Pell non-DE)
  - Higher freshman GPA (2.8 Pell-DE, 2.6 Pell non-DE)
  - Earn more credits as a freshman (31 cr. Pell-DE, 24.1 Pell non-DE)

Montana data is on trend with national research from large, longitudinal studies published by a variety of research groups and programs.

- Several national, longitudinal studies have demonstrated that dual enrollment students have higher high school graduation rates, higher rates of college enrollment, higher rates of persistence to degree, better academic performance while in a postsecondary program, and markedly higher rates of degree attainment than their non-dual enrolled peers (Adelman, 2006; Allen et. al., 2008; Karp et. al., 2007; Morrison, 2008; Swanson, 2008; Wang et. al., 2015).
- Dual enrollment positively influences all student persistence and completion, but has been shown to particularly impact low socioeconomic and first-generation students, those who are more likely to be intimidated by the hidden language and rules in higher education (An, 2013).

Attracting Students to the MUS:

Dual Enrollment helps keep Montana Talent in Montana.

- 63% of high school students earning dual enrollment credit enter the MUS as college students. In comparison, approximately 40% of public high school graduates attend a MUS campus within 16 months of graduation.
- Montana resident, first time freshmen, overwhelmingly choose to work in Montana upon completing their degrees/certificates.
75% of MUS graduates from 4-year programs are employed in Montana within one year of receiving a degree.
85% MUS graduates from 2-year programs are employed in Montana within one year of receiving a degree.

**Cost Savings:**
Dual enrollment can decrease the cost of pursuing a postsecondary degree or certificate.

Dual enrollment courses are offered at a significant discount. Students pay 50% of the two-year college tuition rate and no fees. As a result, dual enrollment courses cost about one quarter their cost to a traditional student at a four-year campus in the system. Montana’s Common Course Numbering system ensures transferability within the state, and courses are widely accepted at other accredited postsecondary institutions outside of Montana. During the 2016-17 academic year Montana dual enrollment students saved about five million dollars in future tuition costs.

**Increasing Access & Affordability**

**Expanding Access:**
The MUS has been working aggressively to grow the number of high schools offering dual enrollment onsite (concurrent enrollment). Ongoing, overlapping initiatives have contributed to an expansion in these courses’ availability across the state (Figure 2). Over the past three years we have seen strong growth in concurrent enrollment due to growth in small and rural schools, increased diversity in offerings due to growth in CTE courses, and increases in the number of qualified instructors resulting from multiple efforts. We anticipate this trend to continue.

Since 2014, the number of schools offering concurrent enrollment has grown 47%, there are more than 100 new concurrent enrollment teachers, and the number of small schools (Class C) offering these courses has more than doubled. Last academic year, approximately 78% of Montana high school students had access to concurrent enrollment. While we are making notable progress, there is still work to be done. Despite the recent gains, just 20% of Class C schools offer concurrent enrollment and a little more than half Class B schools (53%) have these courses in place (Figure 2). However, we anticipate continued increases in smaller schools due to the efforts underway with Perkins Reserve and Title IIa Grants (discussed below).
Expanding Options through CTE Dual Enrollment:
The prioritization of dual enrollment in Montana’s Career Pathways program is yielding results. The system saw progressive increases in the number of CTE concurrent enrollment offerings as well as the percentage of student enrollments in CTE courses.

- In addition to increasing the number of students taking all dual enrollment courses (+28% since AY 2015), the proportion of those enrollments in career exploration courses (CTE-Career & Technical Education) has grown steadily from 25% to 32% over the past three academic years (Figures 3 & 4).
- Between AY 2014-15 and 2016-17 the number of CTE dual credit courses offered in high schools nearly doubled (from 109 sections to 215, last academic year).
- Areas of CTE course expansion are aligned with workforce needs and include health care, manufacturing, IT/computing, and business.
Addressing Access: Growing the Pool of Qualified Instructors

Over the past four years the MUS has worked to increase the number of teachers offering high-quality college courses within their classrooms. This has included increased outreach to secondary teachers and administrators, utilized a targeted incentive program, and created graduate courses and technical training needed to teach concurrent enrollment.

Credit for Credit:

• Nearly 2000 credits issued to over 220 teachers across the state over the two-year pilot (F14-Sp16).
  • Over the life of the program ~60% of the C4C’s were redeemed for a total value of $217,646.
  • About 20% of redeemed C4C’s were used by the receiving teacher, 80% were assigned to a student, colleague, child or spouse.
Supporting CTE Educators via Rural Reserve Funds:
• $500k in Perkins Rural Reserve funds awarded via competitive application process for colleges to grow CTE dual enrollment and integrate dual credit into cohesive postsecondary planning with students.
• The Perkins Rural Reserve grants assist campuses in increasing CTE dual enrollment in partner high schools by developing technical training for CTE teachers.
  • Summer teacher trainings proposed for this grant year cover a wide range of subject areas including: Advanced manufacturing, welding/fabrication, culinary, automotive, construction, agriculture, education/early childhood ed., health sciences, IT/computing, and technical math and writing.

Training Teachers via Title II-A¹ Funds:
• Utilized to grow the pool of qualified dual enrollment instructors by increasing the availability of free/low cost online and summer face-to-face graduate credits for current and aspiring DE instructors.
• Four campuses (UM, Tech, MSU, MSUB) received awards to offer graduate courses to prepare teachers to offer concurrent enrollment via graduate courses at low/no cost to teachers.
  • Advanced Visual Arts
  • Creative and Expository Writing
  • Advanced Political Science
  • Introduction to Teaching and Learning
  • Nine different online math courses
• Initial information indicates a strong potential impact on Montana’s concurrent enrollment program (Table 1). We will evaluate which actually schools added concurrent enrollment courses at the end of the 2017-18 academic year.

<table>
<thead>
<tr>
<th>TABLE 1: Title IIA Participating Schools*</th>
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<tbody>
<tr>
<td>Class AA</td>
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<tr>
<td>Skyview High School</td>
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<td>Billings Senior</td>
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<td>Great Falls High School</td>
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<td>Sentinel High School</td>
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<td>Capital High School</td>
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<td>6 class AA schools</td>
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*Reported to OCHE as of 11/8/17, some schools had more than one participant.

¹ NCLB-Preparing, Training, and Recruiting Highly Qualified Teachers
Addressing Affordability

Last year Montana families saved nearly five million dollars in tuition and fees through dual enrollment courses. Dual enrollment students pay 50% the two-year college tuition rate, no mandatory or non-mandatory fees, cost savings is in comparison to average four-year tuition rate including fees. Add to this the fact that DE students are better prepared for college, and tend to complete degrees at a higher rate and faster rate, the potential for cost savings continues well after high school graduation. Despite the substantial cost savings, tuition is still a barrier for some students. Therefore, several campuses have developed tuition free options, and several have seen enrollments grow as a result.

Free Tuition Programs in Montana

City College-MSU Billings
Students taking concurrent enrollment (dual enrollment courses on-site at their high school) through City College MSUB have their tuition waived. This is a one-year pilot that has been extended an additional year.

Partner schools:
- SD2 (West, Senior, Skyview, Career Center), Billings Central, Columbus, Hardin, Park City, and Laurel.

Resulting Growth:
- Fall 2016: 198% growth in headcount (+163 students over previous fall) 257% growth in credit hours taken (+657 credit hours). In Fall 2017: Additional 44% growth in headcount (over previous year) (+109 students), 26% growth in credit hours taken (+237 credit hours).

Miles Community College
Students taking concurrent enrollment (dual enrollment courses on-site at their high school) through Miles CC have their tuition waived.

- A three-year pilot (in second year) allows Custer Co. and Sidney high school students to take concurrent enrollment courses offered on-site at their high school tuition free.

Resulting Growth:
- Nearly doubled dual enrollment headcount from partner high schools in first year (2015-16 51 students, 2016-17, 93 students).

Flathead Valley Community College
Long-standing policy for FVCC Running Start students in Lake and Flathead Counties take their first 6 credits for free as dual enrollment students. Also offers a free “summer experience” for summer classes.

- FVCC reported nearly doubling enrollment in the first year of the 6 credits free program

Dawson Community College
Students taking concurrent enrollment (dual enrollment courses on-site at their high school) through DCC have their tuition waived. This is the first year of a pilot, partner high schools: Sidney, Dawson County HS, and Glasgow.
Bitterroot College
The Greater Ravalli Foundation pays tuition, textbook, and other associated costs for students in need.

MSUN and UM Western
Both campuses have set their dual enrollment tuition at $50/credit to mitigate the impact of recent tuition increases that would have increased dual enrollment tuition 30%, to around $90/credit.