

INTRODUCTION:

The Helena College Institutional Development, Effectiveness and Accreditation Committee (IDEA), formerly known as the Strategic Planning, Assessment and Accreditation Committee (SPAA), has identified three core themes that are central to defining mission fulfillment. Within each of these core themes, the committee selected measurable indicators of achievement as a means of operationalizing these themes within the work of the institution. Most of these indicators were used to develop either Key Performance Indicators (KPI) or Performance Indicators (PI) for the strategic enrollment planning process (SEP).

The broad KPI of program quality serves as the overarching focus for the Programs & Services: Excellence and Innovation workgroup. Helena College's Core Theme 2, Objective 1 serves as a logical source of KPIs and PIs to evaluate program offerings and look for opportunities for improvement, growth, or change. Broadly stated, this core theme is "High Quality Education." The more specific objective, stated as an outcome, is "Helena College students demonstrate achievement of learning outcomes." A benefit of the SEP process is helping the IDEA committee define and develop processes around assessment of this core theme objective.

To explore the state of the institution in relation to this objective, the workgroup looked at program quality, modalities of program delivery, and the competitive market environment. For the purposes of creating a situational analysis, the indicators of achievement for Core Theme 2, Objective 1 are described, followed by other areas of exploration and assessment under the broad umbrella of program quality as KPI.

CORE THEME TWO: HIGH QUALITY EDUCATION

2.1.1. – Institutional Competencies

This indicator is defined as "percentage of students demonstrating competency in information literacy and diversity." As institutional competencies, the expectation is that all students, regardless of program, will have the opportunity to develop and demonstrate proficiency in these areas. For SEP purposes this indicator has been identified as a KPI under Program Quality

Currently, the College is working through the IDEA committee to develop the process by which these competencies are assessed at the course and/or program level. The committee is further exploring whether or not the competency of information literacy is too broad, and therefore should be further refined into separate competencies in information literacy and technology literacy. Ultimately, this would result in three separate institutional competencies that will be assessed at the course and/or program level including diversity, information literacy and technology literacy. The College anticipates the collection of assessment data for the competencies using the Helena College Assessment Database to begin in AY 2019-2020.

2.1.2 – Program Learning Outcomes

This indicator is defined as "percentage of program outcomes achieved by students during each academic year." For SEP purposes, this indicator has been identified as a KPI.

Similar to institutional competencies, the IDEA committee is working on the development of a database system to track achievement of program learning outcomes. The process will allow the college to link course assessment of learning objectives to programmatic learning outcomes. The assessment database is to be piloted with select faculty during the spring 2019 semester with the goal of full implementation in the fall 2019 semester.

2.1.3 – Transfer Success

This indicator is defined as percentage of transfer students in good academic standing (2.0 or better GPA) after 1st semester following transfer to 4-year institution.

The program quality subgroup examined this indicator and finds Helena College to be excelling in this area. The target GPA defined as a goal by the IDEA committee is 3.0. The most recent year of data showed achievement above this benchmark, as well as the rolling 3-year average. For SEP purposes, this indicator has been identified as a PI under Program Quality.

% of Helena College Transfers Achieving 2.0 or Better GPA after 1st Semester at MUS 4-Year Campuses

1st Semester	# Transfers	≥ 2.0 GPA	Median GPA
Fall 2010	88	75%	3.10
Fall 2011	71	84%	3.00
Fall 2012	59	78%	2.95
Fall 2013	65	74%	2.75
Fall 2014	52	81%	3.10
Fall 2015	82	83%	2.98
Fall 2016	37	78%	2.68
Fall 2017	55	84%	3.12
Fall 2018	56	82%	3.29
3 Yr Average	49	81%	3.03

Source: Montana University System (MUS) Data Warehouse

There is also an opportunity for growth in this area. Although there is a success among those students who transfer, the rate of transfer is low as compared to those students indicating this as a goal upon entry to Helena College. General education students, defined as those enrolled in an AA/AS degree, make up 54.3% of annual enrollment. The chart below indicates that an average of 28% of general education/transfer students are transferring within 150% of the expected time to do so.

Cohort 150% Transfer Rates by Program (First-Time, FT & PT)

	Fall 2010*	Fall 2011	Fall 2012	Fall 2013	Fall 2014	3 Yr Ave
Accounting and Business	5%	10%	13%	27%	7%	15%
Associate of Art	22%	39%	26%	20%	35%	27%
Associate of Science	24%	21%	29%	22%	37%	30%
Gen Ed Total	22%	33%	27%	21%	36%	28%
Automotive Technology				11%	8%	
Aviation Maintenance		17%			20%	
Computer Aided Manuf				33%	29%	
Computer Technology	5%	10%	11%	17%		
Diesel Technology		9%				
Fire and Rescue	17%	40%	9%	17%	17%	14%
Office Technology	13%	8%	33%	11%	38%	27%
Welding Technology	5%	6%	12%	13%	8%	11%
Total	12%	23%	19%	18%	26%	21%
<i>*2010 Cohort includes only First-time, Full-Time</i>						

2.1.4 – Professional license and certification pass rate

This indicator is defined as “percentage of students attempting professional licensing exams and certifications that successfully pass.”

Helena College is doing well with this area of preparation for students in those areas for which results can be tracked and reported. For SEP purposes, this indicator has been identified as a PI.

The NCLEX pass rates for nursing students and FAA certification rates for Helena College students are consistently over the target of 85%.

NCLEX Pass Rates

Academic Year	PN		RN	
	# of Students	Pass Rate	# of Students	Pass Rate
1112	31	100%	16	100%
1213	29	100%	16	100%
1314	30	100%	16	94%
1415	32	100%	16	100%
1516	30	97%	25	100%
1617	N/A	N/A	22	100%
1718	N/A	N/A	40	93%

FAA Airmen Certification Pass Rates

(AMA=Airman Maintenance Airframe; AMP=Airman Maintenance Powerplant; AMG Airman Maintenance General)

Year	Pass Rates		
	AMA	AMP	AMG
2012	100%	100%	100%
2013	100%	100%	100%
2014	100%	100%	100%
2015	100%	100%	100%
2016	N/A	83%	100%
2017	100%	86%	100%

Assessment of this indicator has historically focused on the two programs where data collection is well-established; however, students in most of the trades programs offered at the Airport Campus are now completing a variety of industry recognized credentials (IRCs) that are imbedded within their curriculum. The Office of Institutional Research will coordinate with the Trades Division Chair, to begin collecting pass rates for these certifications/credentials.

PROGRAM EFFECTIVENESS:

Helena College completed a program prioritization in the spring 2016 in response to a system wide mandate from the Board of Regents of the Montana University System. To inform that effort a comparative academic program profile was compiled including 5-year median program data for the following indicators:

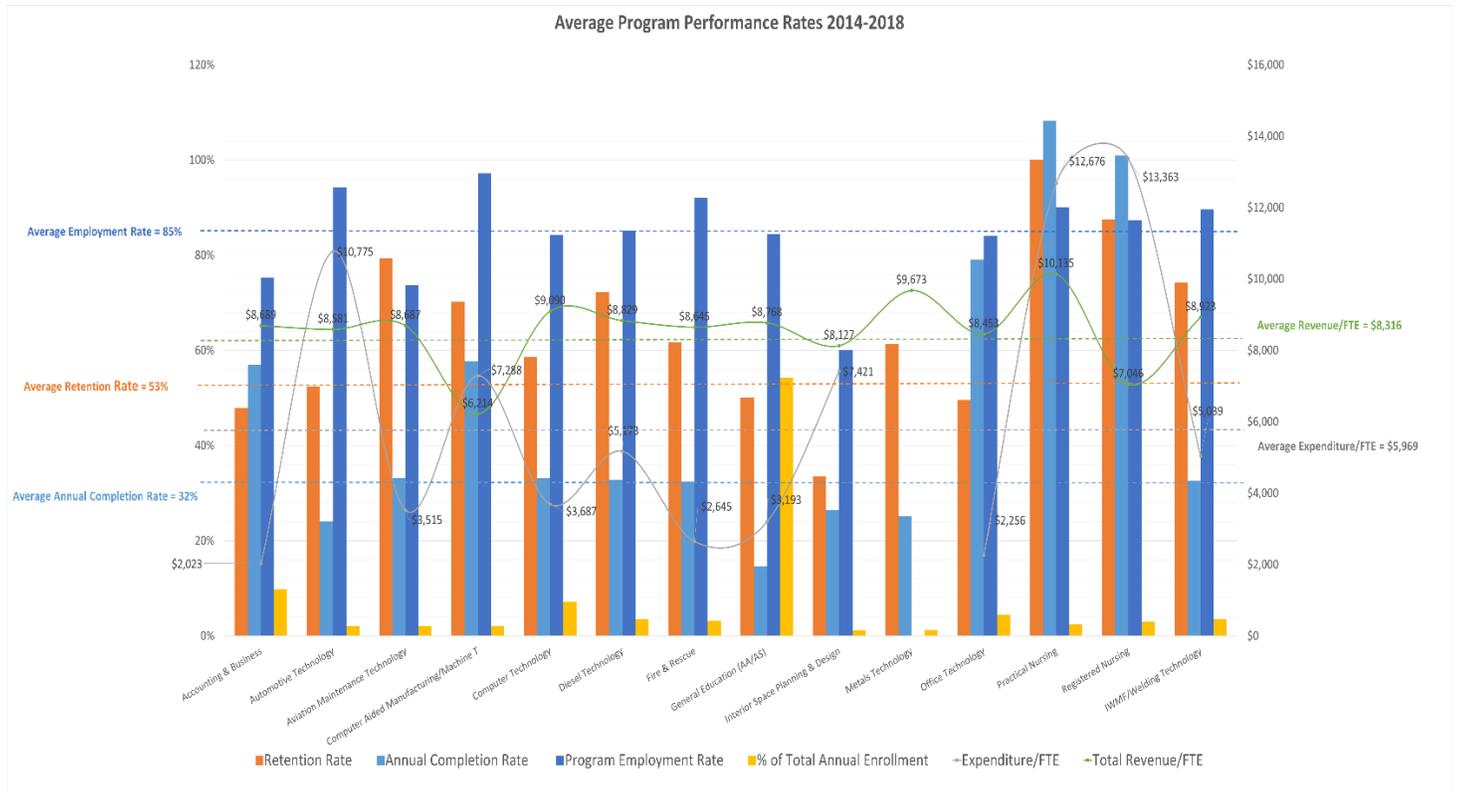
- Annual headcount enrollment
- Annual FTE enrollment
- Annual completion rate (Annual program completions/Annual FTE)
- Fall-to-fall retention of entering full-time and part-time students
- Annual expenditure/FTE and annual expenditure/completion
- Estimated average annual job openings based on Montana Department of Labor and Industry (MT DOLI) 10-year employment projections.

Using those criteria, programs were evaluated based on comparison to average institutional performance for fall-to-fall retention, annual completion rate, and expenditure/FTE. Because some programs have fixed enrollment capacity while others do not, enrollment as well as fiscal data was considered within the context of each program's opportunities, constraints, and expected differences in the cost of instruction. Average headcount enrollment was also plotted against estimated annual job openings to evaluate program capacity relative to the state job market. As part of the SEP process, the data was updated to reflect the most recent 5-year program performance data (AY1415-AY1718), and new employment projections available from the MT DOLI (2017-2027). As part of this situational analysis, new program level data has been added including:

- % of graduates entering state workforce each year based on query of Unemployment Insurance Wage Database by the MTDLI (2011-2016)
- Comparison of total revenue (state base funding + tuition) and expenditures per FTE by program.

Taken together these metrics, which could serve as potential Performance Indicators for program effectiveness, provide an excellent frame of reference for evaluating the college's current mix of programs as well as each program's performance relative to cost and revenue.

Situational Analysis
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From this data, the following SWOT analysis was completed:

	Findings	Data	Further Considerations
Strengths	Most programs are retaining students at or above the average rate of 53% which is good, but could be improved	Helena College average fall to fall program retention rates (2014-18)	MUS PBF retention rates for HC are higher because they include students persisting in MUS (transfers)
	The average employment rate for graduates is high at 85% with most programs performing at or near the average	MT DOLI data on % of graduates entering workforce 1 year after graduation (2011-2016)	Data does not indicate if students are employed in occupations related to program of study. Limited to Montana
	Program revenue/FTE exceeds program expense/FTE for most programs	Helena College total average program revenue (state funding + tuition)/FTE and average program expense/FTE (FY14-18)	Does not include college wide expenses/revenues or revenue from program course material fees
Weaknesses	FTE enrollment in most programs has declined significantly, -18% overall from 2013	Helena College annual enrollment data (AY1314-1718)	Follows general post-recession trend for 2-year colleges in MT (-15%)

Situational Analysis

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	Retention below average for Accounting & Business (48%), Automotive (52%), AA/AS (50%)	Helena College average fall to fall program retention rates (2014-18)	Large enrollments in some of these areas impact overall retention rate (AB, AA/AS = 64% of annual enrollment)
	Annual completion rates below average for Automotive, AA/AS, Metals	Helena College average annual program completion rates (AY1314-AY1718)	Lack of incentives for completing AA/AS degrees
Opportunities	Latest MT DOLI employment projections show significant growth in annual openings for graduates in most programs (demand > enrollment)	MT DOLI Employment Projections, 2017-2017	Variance between regional opportunities and statewide projections. Have to consider competition from other institutions with same programs
	Improving retention and annual completion rates for AA/AS would have significant institutional impact, because most students are enrolled in that program (54%)	Helena College Data (see above)	Transfer (with or without completion) is part of the College's mission. Should annual transfer rate be used to measure performance instead of annual completion rate?
	Some programs (trades and computer tech) have high retention and employment rates, but average completion rates. Incentivizing completion of degrees and certificates would have impact on overall annual completions	Helena College Data (see above)	Employers may place more value on skills and experience than earned credentials
	Fiscal data reveals that some programs with good outcomes and opportunity for potential growth might benefit from more investment (Accounting & Business, Aviation Maintenance, Computer Tech, Fire & Rescue, Office Technology)	Helena College Data (see above)	How funding should be invested may differ based on program needs. For example, marketing & recruitment, faculty development, equipment & facilities, scholarships, etc.
Threats	Very low unemployment regionally (3% in Lewis & Clark County) and across the state (3.7%)	MT DOLI	Raises questions about strategies for program delivery/scheduling and marketing necessary to attract those already working back to college.

MODALITIES OF PROGRAM DELIVERY:

Using a SWOT analysis to examine program delivery, the subgroup focusing on modality was able to draw conclusions and recommendations about the impact of modality on program quality. (Effectiveness?)

SWOT Analysis:

	Findings	Data	Further Considerations
Strengths	<p>Online course offerings have grown and classes fill to a greater capacity than face-to-face and hybrid classes.</p> <p>5-year average online capacity: 70%</p> <p>5-year average hybrid capacity: 57%</p> <p>5-year average f2f capacity: 63%</p> <p>5-year change seats offered online: +27%</p> <p>5-year change seats offered hybrid: +46%</p> <p>5-year change seats offered f2f: -11%</p>	Helena College Course Capacity Report 2010-18	Could look deeper into course capacity data to identify expansion of or change to course delivery options where appropriate
	Accounting and Business Technology and Computer Technology implemented elements of structured scheduling effective spring 2018	Helena College course schedule	Expand structured scheduling to other programs as appropriate
Weaknesses	<p>Course schedule may not be convenient for working students/or students commuting from rural outlying areas. Local unemployment rates: 3-4%</p> <p>Declining degree-seeking enrollment: -20% (5-yr change)</p>	<p>2017 Helena Chamber of Commerce Report</p> <p>MT DOLI</p>	Why are students not enrolling in HC where modality is concerned? Ryan/Kylie
	Availability and willingness of adjuncts to teach online courses	Anecdotal, current schedule	
	Less competitive statewide with only one online program (CAS) offering	FY18 MUS eLearning Report-Fully Online Program Inventory as of July 2018	
Opportunities	Identify programs that are almost fully online to convert to fully online to recruit students who are working full-time or live remotely	Academic programs, degree plans, and class schedules	Evaluating which programs/courses fill to or near capacity might help inform which

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			programs could move online
	Increase summer course offerings	Class schedules. Data about courses offered/capacity	
	Competency-based Education	Helena College attempted to develop and implement competency-based credential, which received MUS BOR and NWCCU approval; however, due to mistake in process for US DOE approval the proposal was shelved.	What do we know about CBE at other schools?
Threats	Quality of online courses, time and skill of instructors to put resources and courses online. Student proficiency with/preparation for online coursework. Overall pass rate for online courses 3 yr. average: 75% Overall pass rate for f2f courses 3 yr. average: 85% Difference in average pass rate between f2f and online for equivalent courses: -4% (3 yr. average)	Helena College Completion History Report	Online-specific faculty evaluation; student evaluations of online courses. Placement testing for students taking online courses
	Many business and health science programs online at other schools, as well as AA/AS means we are less competitive,	FY18 MUS eLearning Report-Fully Online Program Inventory as of July 2018	Are we losing students to other colleges offering online programs?

Conclusions:

- Successful completion data for online courses with face-to-face equivalents does provide consistent conclusions. Significant variance as far as which modality has the higher completion rate for each course. Changes from semester to semester. Only BGEN 105 and WRIT 121T have consistently better F2F pass rates, but some online math courses have better pass rates. Probably has a lot to do with how the instructor runs the course.
- Sandy Bauman, Robyn Kiesling, Amy Kong report that Accounting & Business Technology AAS has been identified as an ideal candidate to convert to a fully online program.
- AA/AS transfer degrees are potentially popular options for fully online delivery, but science courses present a challenge. BIOH 211 Anatomy & Physiology II will delivered as a hybrid course for the first

time in spring 2019. Jennifer Bergner, biology faculty, is researching the possibility of migrating BIO 101 and 102 fully online.

- Helena College was near implementation of competency-based certificate for computer software specialist; approval was granted by MUS and NWCCU, however difficulties occurred with federal approval process. CBE programs require complex processes for enrollment, financial aid disbursement and billing that are ongoing and not tied to the regular academic calendar. CBE would also require instructional/curriculum development training for faculty.
- Discussion about collaborating with another college like Dawson Community College has done with Community Colleges of Colorado Online. Some concern about “outsourcing.” University of Montana is exploring contracting with online program management companies for online courses. Opportunity for affiliates to participate?
- Interest in partnering with 4-years for more transfer opportunities where students can stay in Helena and complete a 4-year degree online, within the state and possibly region. Ex: Elementary Ed as a success. Ex: AS Programming degree does not transfer to 4-year CS programs in state (common course numbering issues) – so is there an out-of-state option.
- Per non-enrolling applicant data (fall 2014 - fall 2018) about 20% of students enroll elsewhere, primarily at 4 year public universities across Montana and Great Falls College. Top programs of study are Nursing, General Studies, Health Sciences, Education, Sociology/Social Work/Human Services/Criminal Justice and Pre-Engineering/Engineering.
- Need for faculty evaluation of online instruction. Completion rates show that doing online education right will result in good completion numbers. Robyn Kiesling would like all full-time faculty in her division to complete Quality Matters training.
- Student evaluations of online courses, as with other modalities, are collected but are not being used systematically to assess and improve the quality of instruction. In response to a recommendation from the College’s regional accreditor, the faculty evaluation process is currently being redeveloped, to include information gathered from student evaluations of face-to-face, hybrid and online courses.

EXTERNAL MARKET REVIEW:

Local area:

Helena has a strong economy with a low unemployment rate. As of January 2017, the unemployment rate was 3.4%. The rate is up slightly from the 2016 average of 2.8% (Helena Chamber of Commerce 2017 report). This has an impact on enrollment at the college as most adults who want to work can find a job.

High school enrollment in Lewis and Clark County, as reported in February 2018, shows a senior class of over 750 students, an increase from 2018. High school enrollments in adjacent counties serving the college (Jefferson and Broadwater) are low and relatively flat due to the rural character of the region with approximately 130 seniors in three high schools. The average capture rates of college going students from both Helena High and Capital High from 2014-2017 are 13% and 15% respectively, though both dropped significantly for 2016-17 graduates (-4% for Helena HS and -7% for Capital HS).

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The top 10 employers in Lewis and Clark County are:

1. State of Montana	6,000 employees
2. Local Government	1,700 employees
3. Federal Government	1,650 employees
4. St. Peter's Healthcare	1,700 employees
5. Blue Cross Blue Shield	550 employees
6. Walmart	435 employees
7. VA Hospital	425 employees
8. Montana State Fund	400 employees
9. Albertsons/Safeway	340 employees
10. Carroll College	225 employees

This review of employers indicates a high need for education in programs that prepare students for administrative and clerical work. When reviewing employment in the county by sector, there is further support for this assertion as over 6,300 jobs are listed under public administration, 2,488 in finance, insurance, and real estate; and 3,075 are identified as professional, scientific, and management. There were 7,051 jobs in health care and education in 2017, providing support for health care programs and the pathway for elementary education at Helena College. To support trades programs, there are 2,107 jobs in construction, 830 in manufacturing, and 989 in transportation.

Regional Job Growth

Analysis from the Montana Department of Labor and Industry reports that the Southwest region, including Helena, is one of the two regions anticipated to experience the fastest growth in the state, with an expected annual growth rate of 1,425 jobs at a .9% annual increase rate through 2027. Over the past five years, the Southwest region has experienced strong gains in the following occupational categories:

- Food services
- Healthcare
- Construction

Although there are fewer projected job openings requiring post-secondary education, these occupations receive significant attention by workforce planners because of the time it takes to raise workers for these occupations. The MT DOLI reports that education and training programs should be developed with a focus on teaching workers the technical skills they will need to succeed in a career utilizing strong soft skills, such as communication, time management and the ability to follow directions. Montana workers will need to have developed coordination, service orientation, and time management to successfully fill jobs in the future.

Statewide Employment Opportunities for Graduates

When comparing Helena College Programs with projected statewide job openings, there appears to be strong employment opportunities for graduates.

Program	Montana Job Projections 2017-2027 Estimated Annual Openings	Average Annual Headcount Enrollment 2013-2018
Accounting & Business	990	119
Automotive Technology	369	25
Aviation Maintenance	47	26
Computer Aided Manufacturing	170	26
Computer Technology	261	88
Diesel Technology	126	43
Fire & Rescue	112	38
Interior Space Planning & Design	14	15
Metals Technology		15
Office Technology	1801	54
Practical Nursing	217	29
Registered Nursing	765	36
Welding Technology	222	43
<i>Source:</i>	http://lmi.mt.gov/Projections	

Program Comparisons:

The nursing program is an area of strength for us when compared with competitor institutions. Helena College was recognized as the second highest-ranking nursing program in the state, behind the BSN at Montana Tech. This makes our ASN program the highest ranked in the state. The nursing program is currently at capacity based on available instructional and clinical space for students. If more space could be devoted to this program, additional students could be enrolled based on the ability to utilize simulated instruction in place of relying primarily on clinical experiences. Employment for graduates has been above the college average of 85% for the past five years in both LPN and ASN programs with 90% and 87% respectively. The completion rate of students in the program is 100% for the most recent five-year period.

Helena College has one of the two Fire and Rescue programs in the state, both of which are accredited by the International Fire Service Accreditation Congress (IFSAC). Looking at the five-year performance of the program, both retention and employment rates are above the college averages. Retention is 62% compared with 53%, and employment is 92% compared with 85%. Completion, however, appears to be low at only 32%

The Aviation program at Helena College is also unique in Montana. The retention rate is high at 79%, however completion is only 33%, and employment in Montana is 79%.

There is a need for a pre-engineering track to allow transfer to four-year programs. In order to allow for this program, Helena College would need to identify and retain qualified instructors in calculus-based physics.

The following SWOT analysis was developed based on a review of programs offered at other 2-year colleges across the state of Montana. There was insufficient time to review peer institutions in adjacent states across the region (Idaho, Wyoming, and Eastern Washington)

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SWOT Analysis:

	Findings	Data	Further Considerations
Strengths	Our overall program offerings are similar to most other 2-year colleges across the state	Montana 2-Year College Workforce Development Plan (MUS)	What about neighboring states in the region
	Helena College has unique program offerings in Aviation Maintenance and Fire & Rescue. Nursing is the highest rated 2-year program in the state	Montana 2-Year College Workforce Development Plan (MUS)	How best to capitalize on HC's unique program offerings, and reputation for quality instruction and outcomes.
Weaknesses	Helena College offers the least amount of fully online programs	Montana 2-Year College Workforce Development Plan & FY18 MUS eLearning Report	Need to develop more robust resources and training for online instruction and program/course development
Opportunities	Create online degree programs for AA/AS transfer degrees and/or MUS Core	Montana 2-Year College Workforce Development Plan & FY18 MUS eLearning Report	Instructional challenges associated with delivering science labs online. What are the enrollments for these programs at other campuses?
	Create pre-engineering degree program	Montana 2-Year College Workforce Development Plan (MUS)	Need to hire and retain qualified physics instructor(s) or identify accessible partnership to provide instruction