

**MSU Program Assessment Report**  
**Summary of Results & Assessment Activities**  
**AY2021-2022**



## Introduction

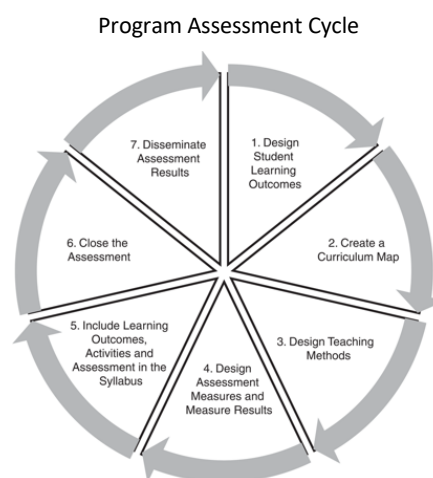
At Montana State University (MSU), all undergraduate majors, minors, and certificates are expected to conduct annual assessment of their programs. Graduate programs, including graduate certificates, are assessed biennially. The program assessment cycle is focused on improving student learning. Each program is encouraged to revisit their goals from the previous cycle, determine which program learning outcomes (PLOs) they will assess within their programs and create a plan to collect, assess, and analyze the student work related to specific courses using specially created program assessment rubrics. This data informs future program improvements and complies with accreditation requirements set forth by MSU's regional accreditor, the Northwest Commission on Colleges and Universities (NWCC).

The assessment process is led by the Office of Academic Affairs and guided by the University Assessment and Outcomes Committee (AOC) made up of representatives from each College. The following report contains information about Program Assessment at MSU, the results of the 2021-22 Academic Program Assessment, and information about the work of the AOC.

## Assessment Process

This report covers results from program assessment reports that were submitted in the fall of 2022 for data collected during the 2021-2022 academic year for undergraduate programs or covering data collected during the 2020-2021 and 2021-2022 academic years for graduate programs on the even year program assessment cycle. The assessment process requires faculty to gather and analyze data during the academic year, discuss the results and possible changes as a faculty at the beginning of the next academic year, and submit the annual or biennial report to the Office of Academic Affairs by October 15.

Members of the [Assessment and Outcomes Committee](#) (AOC) review submitted reports throughout the fall semester using a specially created rubric to measure the six steps of the reporting process. Then, the Assistant Provost prepares feedback reports based on AOC review to share with report submitters and Department Heads by the middle of the following spring semester and provides summary reports to College Deans by the end of the spring semester.



## Assessment Results

The list of programs at MSU is constantly changing as new options, certificates, and degree programs are approved and others moved into moratorium. Maintaining an accurate list has been challenging; however, updates to the list are an ongoing endeavor and maintained by the Assistant Provost. In past annual reporting on program assessment at MSU, only undergraduate program assessment was reported. Since the list of programs strives to account for all majors, minors, and certificates at both the undergraduate and graduate level, all academic programming is included in the numbers presented in this summary report.

## Program Reports Expected

Table 1 demonstrates the total number of assessable academic programs that are offered at Montana State University currently. This total of 387 includes all majors, minors, and certificates at the undergraduate and graduate level. Minors that carry the same name as a major are assessed as a part of the major annually; standalone minors and certificates are assessed separately. For the purposes of this report, all “value to degree” options (i.e., minors and certificates) are included as a part of assessable academic programming offered at MSU.

*Table 1: Program Assessment Reports Expected, Assessed, and Not Received*

College	Total Academic Programs*	UG	Minors	UG CERT	GR Programs	GR CERT	Externally Accredited	Expected Program Reports 2021-2022	Total Programs Assessed 2021-2022	Year 0 Reports Submitted 2021-2022	Expected Reports 2021-2022 no submit	Expected Reports 2022-2023+
AG	69	36	11	1	18	3	2	67	54	0	11	55
AA	19	12	2	0	5	0	16	3	3	0	0	2
EHHD	73	21	13	4	27	8	34	30	12	7	11	27
GC	23	0	0	0	0	0	0	0	12	1	4	23
HONOR	2	2	0	0	0	0	0	0	0	0	0	2
JCBE	13	4	5	2	2	0	13	0	0	0	0	0
L&S	121	47	33	1	31	9	10	99	71	5	23	17
MRJCON	11	2	0	0	6	3	10	1	1	0	0	0
NACOE	56	15	14	1	25	1	22	33	13	0	19	22
<b>TOTALS</b>	<b>387</b>	<b>139</b>	<b>78</b>	<b>9</b>	<b>114</b>	<b>24</b>	<b>107</b>	<b>233</b>	<b>166</b>	<b>13</b>	<b>68</b>	<b>148</b>

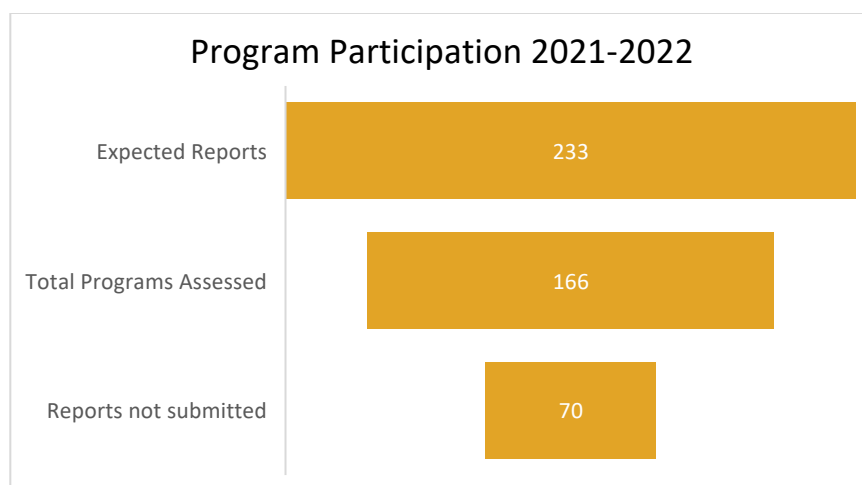
\*Total academic programs include majors, minors, and certificates – both UG and GR. Note: Minors that carry the same name as a major are generally assessed with the major it is attached to. All standalone UG minors and certificates are required to be assessed annually; GR certificates are a part of the biennial cycle unless departments wish to assess annually.

+Includes UG Annual, GR Biennial Odd Year Cycle, and UG/GR reports that were expected but not submitted during the AY 2021-2022.

## Program Participation

There was a 71% participation rate for program assessment reports that were expected to be submitted for AY 2021-2022. For program assessment reports that were expected, but not submitted, various reasons were shared by department heads including: faculty sabbatical, internal review and program changes being undertaken during the summer in preparation for upcoming fall 2023 assessment, faculty retirements, and leadership transitions within departments.

*Figure 1. Program Participation during 2021-2022 Assessment Cycle*



The participation rate is lower than that reported in the AY 2020-2021 report (85% participation was reported last year); however, it should be noted that departments undergoing their 6-year program review cycle were not required to turn in program assessment reports and may have been included in the expected but not submitted numbers. Regardless, the goal is 100% participation and there is room to improve.

## AOC Assessment Review Process and Results

As noted above, members of the AOC review submitted program assessment reports and provide feedback as a part of the mission to continuously improve the quality of programs and student learning at MSU. Although there are 387 majors, minors, and certificates offered at the undergraduate and graduate level at MSU, departments generally submit a single report covering multiple program assessments. In some cases, this is to keep reporting of multiple programs to a single document for future reference, but most times it is for efficiency purposes (e.g., using the same student artifacts to assess for similar PLOs across program or to assess for more than one PLO).

During the 2021-2022 assessment cycle, 63 program assessment reports were submitted to the Office of Academic Affairs and the AOC for review. This number does not include the Year 0 Program Assessment Planning reports that were also reviewed by the AOC. Year 0 reports are used by new programs or programs undergoing extensive curricular revision to create assessment plan that is submitted for feedback from the

AOC and do not include any program assessment reporting. Programs are given time to create and plan their assessment schedule and then begin to implement that plan the following academic year.

## Review Process

Two members of the Assessment and Outcomes Committee were assigned to review each program assessment report using a specially created rubric to measure how programs reported their data. This rubric was created in Qualtrics software to aid in data collection and analytics later. Criteria were created to measure six aspects of program assessment reporting on a 5-point Likert scale ranging from Outstanding to Inadequate: 1) how well program learning outcomes are written and mapped to the program curriculum; 2) the assessment plan and schedule; 3) interpretation of the assessment findings; 4) sharing results with faculty; 5) changes that will be made in response to the findings to improve student learning within programs; and 6) “closing the loop” – a review of what assessment was done previously, how that was impacted by the current assessment, and what the plan for the next assessment might be.

The data exhibited in Table 2 demonstrates how AOC reviewers scored program reporting processes and assessment findings. On average, across all criteria, departments are doing well in their program assessment endeavors: 57% of programs were rated “outstanding” or “excellent,” 32% were rated as “achieving.” These averages indicate positive forward direction and demonstrate that a culture of assessment is occurring at Montana State University. As noted in Table 2, AOC reviewers scored the Assessment Findings criteria as Achieving (65%) rather than Excellent indicating there is still room for improvement in how programs are either reporting their assessment findings or interpreting them for future use.

*Table 2. AOC Review of Program Assessment Reports for AY 2021-2022*

Criteria	Outstanding	Excellent	Achieving	Needs Development	Inadequate
<b>Program Learning Outcomes:</b> Student learning outcomes identify the intended knowledge, understandings, or abilities that students will acquire through the academic program. The majority of these outcomes are at a high cognitive level.	24%	37%	34%	3%	2%
<b>Assessment Plan:</b> The report describes the methodology about data collection and analysis.	30%	39%	19%	8%	4%
<b>Assessment Findings:</b> Findings describe what was learned from the assessment measures. Comparisons are made to threshold values (if they are present). Thoughtful interpretation is made to define areas of strength and areas that need improvement based on analysis of data.	22%	*	65%	5%	11%
<b>Sharing Results:</b> Faculty results were communication to the department, or program faculty, with a forum for faculty feedback and recommendations.	22%	33%	23%	12%	10%
<b>Changes in Response to Findings:</b> The findings are used to inform annual action plans to improve the program. Assessment findings are appropriately used as information that drives improvement in learning, instruction, curriculum, or strategic planning.	28%	27%	23%	10%	11%
<b>Closing the Loop:</b> Based on assessment or faculty discussion from previous years, program level changes that have led to program improvements have been implemented and are described.	20%	29%	26%	15%	10%
<b>Averages of Success Overall</b>	57%		32%	9%	8%

\*Qualtrics did not generate any data related to the “Excellent” rating for Assessment Findings criteria. Upon closer look at the raw data, it appears that reviewers did not use the “excellent” level of rating for the assessment findings criteria. This indicator will be reviewed further by the AOC before the next review cycle.

## Building a Culture of Assessment

Building a culture of assessment is an ongoing part of organizing and leading program assessment endeavors at MSU. It can be a challenging undertaking, but based on the data collected, that culture is improving each year. As already noted in Table 2, most programs that are participating in this process are thoughtfully reporting their assessment plans, processes, and findings.

Since one of the primary purposes of program assessment is to engage in continuous student improvement by utilizing assessment results to make changes, two self-reporting measures have continued to be included on the program assessment reporting template: 1) Was the assessment conducted consistent with the assessment plan? And 2) Will there be any changes based on the results of the assessment. Data from these two self-reported measures for the past three years are listed below in Figure 2.

*Figure 2: Percentage of Reports With Positive Response on Two Measures (n=63)*

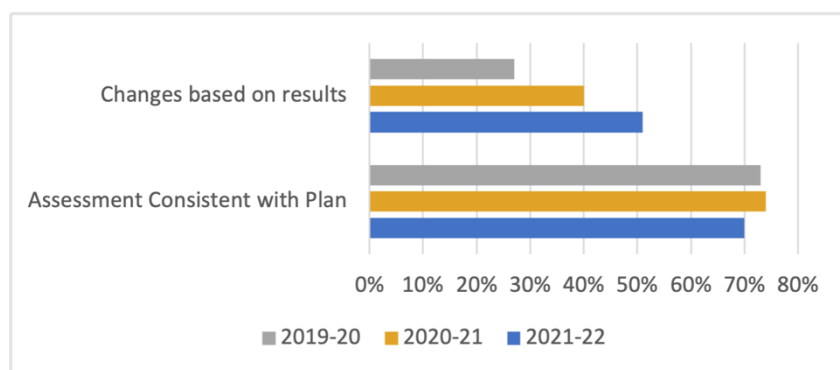


Figure 2 demonstrates that programs continue to make assessment plans and see them through. The percentage of consistency with the initial assessment plan dipped a little this year; however, the changes based on results rose considerably. It can be inferred that the results of the 2020-2021 assessment endeavors impacted the plans for the 2021-2022 assessment cycle and programs made the intentional decision to make revisions to their assessment plans based on the previous assessment cycle. This is exactly what we should happen because of thoughtful and intentional program assessment.

## Summary of 2022 Assessment Results

### Areas of Strength

1. Most programs are using the provided templates which aids in streamlining the AOC review process, and most turn in reports by the October 15 deadline.
2. Programs have been engaged in reworking PLOs to make them actionable and measurable so that the assessment process goes more smoothly, and they have made strides in mapping out the PLOs as they relate to the courses in the program so they have an assessment schedule.
3. Many programs have embraced the idea that program assessment is focused on continuous improvement. Programs are reviewing previous assessment feedback and using that information to make changes to their program and assessment plans.

## Areas of Attention

1. Some programs have reported that they refrained from conducting program assessment because their program has fewer declared students in it; or their program has undergone leadership transitions which made following through with the assessment plan challenging. In response to these observations, the AOC discussed potential interventions that could serve as support for faculty including a “best practices” handout for program assessment, training opportunities, and a more formal plan to schedule in-person meetings with the Assistant Provost.
2. Many programs continue to use course grades, pass rates, and retention percentages to prove student learning rather than assessing student work directly. This seems to correlate to programs that have not developed program assessment rubrics. The AOC began preliminary discussions on providing campus-wide training in addition to individual departmental training with the Assistant Provost to address these concerns more directly.
3. Many programs either skip the “closing the loop” section of reporting or are perfunctory in their reflection process about how student learning is being improved from assessment cycle to assessment cycle.

## Areas for Continued Monitoring

1. Reviewers may have rated some criteria lower than others, not because the work itself was not accomplished by the program assessment, but because it was not explained fully in the reporting itself. This may be an issue of norming the review survey rubrics for the AOC, an issue of training and support for faculty curriculum and assessment committees, or an issue with the rubric itself that needs to be addressed.
2. The goal for participation and compliance with annual and biennial assessment is 100%. There is room for improvement in this regard.
3. While programs are making steady progress in their assessment planning and reporting, they are not fully interpreting and reporting out on their results in a manner that demonstrates how they will use the information to improve their programs.
4. Some graduate programs continue to find the current model of assessment to be challenging for the way fieldwork or lab oriented programs operate. There may be an opportunity to expand our understanding of improving student learning to include specific competencies or skills that need to be acquired at the graduate level.

## Assessment and Outcomes Committee

The Assessment and Outcomes Committee (AOC) monitors and guides the assessment processes at MSU, provides feedback to departments, and develops templates and information about the assessment process. The membership for 2021-2022 included:

College	Member
Agriculture	Tracy Dougher
Arts and Architecture	Jim Zimpel
Business	Brian Gillespie
EHHD	Sarah Pennington
Engineering	Brett Gunnink
Letters & Science	Michelle Miley, Maggie Thorsen
Faculty	Matt Herman

Nursing	Susan Raph
Gallatin College	Sarah Maki
Honors	Steven Davis
Office of Planning & Analysis	Ian Godwin
Graduate School	Craig Ogilvie, Donna Negaard
Office of Academic Affairs	Deb Blanchard

## 2021-22 AY AOC Activities & Plans for the 2022-23 AY Reporting Cycle

The AOC met biweekly or monthly during the fall 2021 and spring 2022 semesters to discuss the program assessment cycle and plan for the next semester. A new Assistant Provost was hired in October 2022, so some of the initiatives and activities planned by the previous Assistant Provost were not undertaken as planned in the 2020-2021 MSU Program Assessment Report summary.

### *AOC Rubric Review Training*

Although one session was held to “norm” the review template set up as a Qualtrics Survey to discuss how the scale worked in reviewing submitted reports in fall 2022, not all AOC members were in attendance. For the 2022-2023 cycle that will be held in October 2023, a more intensive norming session will be held to ensure all members have a glossary of terms, appropriate responses to common challenges, and a list of resources they could suggest to programs while reviewing assessment reports (e.g., partnering with the Writing Center for additional support). These documents will be organized by the Assistant Provost with input from the AOC in September 2023.

As a part of that endeavor, the AOC will review *Assessment by Design: A practical approach to improve student learning* by Sheri H. Barrett, to help norm language and processes for the AOC members new to assessment as well as to determine if this is an appropriate foundational text upon which to design training and support for faculty assessment and curriculum teams across campus.

### *Program Assessment Reporting Template Edits for AY 2022-2023*

Based on the AOC review feedback results, the AOC made adjustments to the reporting template for the AY 2022-2023 cycle to include additional instructions and explanation for each step in the reporting process, as well as to expand the sections in the report to include the following: 1) Past Assessment Summary, 2) Action Research Question, 3) Assessment Plan, Schedule, and Data Source(s), 4) What was Done, 5) What was Learned, 6) How we Responded, and 7) Closing the Loop(s). This will entail an update to the review rubric used in the fall semester to review the 2022-2023 program assessment reports.

### *Assessment and Innovation Grants Summary*

As a pilot, the Office of Academic Affairs in conjunction with the AOC, created a one-time Assessment and Innovation Grants opportunity for to the purpose of “enhanc[ing] their assessment efforts in programs in demonstrable ways”. Funding was for the 2022-2023 fiscal year with summary reports due June 30, 2023.

The AOC reviewed eight applications and awarded seven grants. Grant recipients undertook a variety of projects at the undergraduate and graduate level to investigate and improve their respective programs and turned in reports summarizing what they did, their results, and how having additional funds helped support their endeavors. Copies of summary reports are available by request from the Assistant Provost.



Grant funding was largely used by all recipients to provide summer stipends and to fund workshops designed to get faculty more involved in curriculum and assessment planning. The following highlights summarize the goals and outcomes of each project:

Agriculture and Technology Education: “Developing the Graduate Student Experience”

Project Lead: Dr. Dustin Perry

- Evaluated the quality of learning by 1) exploring the graduate student experience in both coursework and the culminating graduate learning assessments; 2) examining current course offerings for relevancy and sequencing; and 3) revising the current graduate handbook.
- Utilized graduate student help via an independent study to create a graduate student survey exploring current student experiences that will be administered in fall 2023.
- Examined current course offerings for relevancy and sequencing and revised the current graduate handbook.

Animal and Range Sciences: “Evaluating Program Assessment Criteria and Improving AnRS Student’s Education”

Project Lead: Dr. Carl Yeoman

- Grant funding was used to partially support two faculty retreats (pre- & post-survey) to examine the current state of the program assessment approach and metrics and identify potential strengths, weaknesses, and opportunities that can be probed through a survey of former graduates and major employers (faculty retreat Aug 4-5, 2022).
- A second retreat scheduled for Aug 15-17, 2023, will examine survey results, update assessment metrics if and as necessary, and identify opportunities to improve classroom content and curriculum to address any learning outcomes that are found to be deficient.
- The grant also supported the development and dissemination of the survey, and partially supported meetings with major industry and stakeholder groups.

Education, Health and Human Development: “Educational Leadership Graduate Survey and Program Assessment Project”

Project Leads: Dr. Tena Versland, Dr. Sarah Schmitt-Wilson

- The EDLD Graduate Survey Project was conducted to help the MSU Educational Leadership faculty gather data from Educational Leadership Program completers (those who obtain degrees and gain licensure as principals and superintendents) to determine their satisfaction with their preparation at MSU. Survey was administered in spring 2023 and data analysis is ongoing.
- Data collected so far is being used to inform decisions about program coursework, curricula, and experiences in the MSU EDLD program as well as to satisfy requirements set aside for the CAEP (Council for the Accreditation of Educator Preparation) and Montana K12 accreditation reports and site visits occurring Fall 2023.
- Surveys will be used every two years to look at the program completer data for CAEP accreditation processes and MSU program assessments.

Education, Health and Human Development: “MAT Assessment, Alignment & Revision”

Project Lead: Dr. Sarah Pennington

- Review of Master of Arts in Teaching program to redevelop it from a one-year program to a two-year program to provide options for teacher candidates who either have a bachelor’s degree and wish to enter a teaching career or who have been hired on a Montana Class V provisional

teaching license, which requires teachers to be enrolled in an education preparation program while serving as a teacher of record in a K-12 classroom..

- Eight faculty and staff met for two 4-hour meetings to revise the course sequence to offer a 2-year program that meets student and stakeholder needs and to align signature assignments with CAEP and PEPPS accreditation standards.

#### English: “Implementing the English Department Year 0 Undergraduate Assessment Plan”

Project Lead: Dr. Kate Ryan

- Used Year 0 assessment plan opportunity to undertake a significant revision to assessment planning in the department; reorganized to undertake a three-year assessment experiment focusing on student learning within one option per year (Literature, Writing, English Education).
- Three required courses for each option will be used to assess learning at the beginning, middle, and end of students’ careers — an introductory seminar, a 300-level course selected by the option faculty, and the senior capstone.
- Reduced number of program learning outcomes to three, revised their wording to encompass ways of learning for all options.
- More than two-thirds of the faculty were involved in some aspect of assessment work during 2022-2023 as part of the grant.

#### Gallatin College: “Increasing Retention Through Increased Pass Rates for M021/121Q college Algebra with Co-requisite”

Project Lead: Katie Ivester

- M021/121Q College Algebra with Co-requisite has grown from 4 sections in 2017-2018 to 34 sections in 2021-2022, with a steady decline of pass rates as the program has gotten larger (51% pass rate in Fall 2021). Goal was to improve student success. Outcomes: increase of 35% pass rate from F21 (51%) to F22 (69%); S23 pass rate (69%) indicates 5% increase over S22 (64%).
- Looked at all homework assignments to determine where adjustments in workload could be made, removed duplicates, reformatted assignments for better accessibility for students, and removed homework problems that created bottlenecks for students.
- Worked through the curriculum lessons, edited student notes, instructor notes, and lecture videos, and removed topics that went beyond the LOs of the course.
- Course supervision/weekly student success meetings were focused on addressing student outreach rather than content; all faculty worked on tracking attendance, pulling grade checks, using NavMSU to send Early Alerts, and worked with a new retention specialist.

#### Mark and Robyn Jones College of Nursing: “MRJCON Graduate Program Assessment Workshop”

Project Lead: Dr. Susan Raph

- The MRJCON Graduate Academic Affairs Committee (GAAC) hosted a 1.5-day workshop to facilitate an in-person gathering of 21 graduate faculty who teach from one of MRJCON’s five campuses across the state (Billings, Bozeman, Great Falls, Kalispell, and Missoula).
- Faculty reviewed and discussed the MRJCON Program Learning Outcome statements and the Nurse Midwifery specialty Program Learning Outcome statements. Minor revisions were made to both at that time.
- Review of graduate course curricular mapping to the new AACN Essentials sub-competencies and program learning outcomes. Faculty members analyzed the results of individual course mapping of the new AACN Essential sub-competencies that had been submitted in advance and were

asked to identify gaps and overlaps, make proposed changes to course master resource outlines [MROs], and identify teaching/learning assessment exemplars with proposed thresholds.

- Finalized the MRJCON Program Assessment Plan with identified key course teaching/learning exemplars. The faculty collectively reviewed, discussed, and identified 10 key teaching/learning exemplars linked to the MN and DNP program learning outcome statements. GAAC reviewed and approved the proposed changes for the DNP core courses and 10 new DNP-Nurse midwifery courses.

### College & Department-Level Training & Workshops Conducted

- Gallatin College (Spring 2023). The Assistant Provost partnered with Associate Dean Sarah Maki to develop and present a workshop with Gallatin College Department Heads and faculty called “Program Assessment Training: Mapping PLOs and Developing Assessment Rubrics.” Challenges addressed were assessing skills-based programs versus content-based programs and developing appropriate program-assessment rubrics; collecting student artifacts from NTT instructors; and reworking PLOs to keep updated to industry standards and within OCHE/BOR parameters. A new handout was developed for the workshop outlining direct and indirect evidence examples that can be used at the program assessment level.