Office of
Teaching & Learning

2023 Assessment Report

UNIVERSITY OF DENVER

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FROM THE DIRECTOR

Dear Colleagues,

It is with great pleasure that I share this annual assessment report, a reflection of the University of Denver's unwavering commitment to excellence in teaching and learning.

Over the past year, I have had the privilege of collaborating with faculty and staff across various disciplines and departments, witnessing firsthand the thoughtful and meaningful work that underpins DU's academic excellence. I continue to be impressed by the dedication and innovation that permeates our campus, evident in the diverse and engaging learning experiences we offer our students.

In the various conversation I have in my role, I am reminded that assessment serves several purposes. Three particularly important ones are worth highlighting as I write my second report. First, assessment is primarily done to *enhance student learning*. We engage in assessment to help students succeed academically. Second, assessment helps us make better decisions. As we assess, we gather important data as a resource for making well-informed decisions across the university. Finally, we engage in assessment to share with our constituent groups, both external and internal, our successes and out areas for growth as a way of being accountable to them. While accreditation is often seen as the accountability force for assessment, it is better understood that our students, alumni, trustees, as well as our educational partners should be able to see how we are doing in upholding quality and our progressing toward our mission. These purposes help frame the ways we continue to go about assessment, and as we look towards the future, I am excited to continue exploring creative and meaningful approaches to outcomes assessment. By clearly defining what success looks like in our programs, we can effectively evaluate our experiences against our expectations. Moreover, by harnessing data-driven insights and narratives, we can refine our teaching and learning practices, ensuring that every student thrives in our vibrant academic environment.

I am grateful for the collective dedication of DU faculty and staff, whose unwavering commitment to meaningful assessment fuels our collective success. I look forward to another year of collaboration, innovation, and transformative learning.

Sincerely,

Stephen P. Riley, Ph.D.
Director of Academic Assessment

EXECUTIVE SUMMARY

- This year, assessment report submissions reached **80%** for all programs, up by **10%** from last year. This continues the trend of increased submission following a drop off during the COVID-19 Pandemic years.

- This past year, we also asked programs to report the types of data they were engaging with in the assessment process. Programs were able to select any of the following data types:
    - **Direct Data at Program Level**-student work connected to program level outcomes. For example, a capstone assignment.
    - **Indirect Data at Program Level**-student reporting about progress. For example, alumni survey.
    - **Direct Data at Course Level**-student work connected to course level outcomes. For example, exam, paper, or project assignment.
    - **Indirect Data at Course Level**-student report about progress. For example, end of course survey or advising meeting.

  A significant percentage of programs are using direct data, such as student submitted work, to assess student learning.

- Additionally, submitted reports scored well on the feedback rubric. The feedback rubric for reflection scored reports on the following four areas with a scale of 0-3:

    - **Data**-the faculty's engagement with data in the assessment process. *Average program score 2.6.*

    - **Dialogue**-the faculty's discussion about data in the assessment process. *Average program score 2.3.*

    - **Discernment**-the faculty's decision about the future of the program (whether to make changes or report successes) based on the data and dialogue from the assessment process. *Average program score 2.4.*

    - **Diligence**-the faculty's plan for the coming year based on their discernment. *Average program score 2.1.*

- Some takeaways from the report:
    - Programs should ensure that **multiple data** is analyzed and to inform curricular decisions.
    - Programs should ensure that there is **connection between one year's work to the next year** with careful planning and reporting.
    - If programs are looking for different models of assessing student learning, look to other programs across DU for **some innovative and meaningful models**.

Introduction

The University of Denver seeks to empower students from diverse backgrounds to contribute to a sustainable common good. Through its transformative educational programs in its eleven colleges, schools, and divisions, DU offers a comprehensive range of degree programs across numerous disciplines to help students fulfill their educational dreams. In 2022, DU earned the prestigious designation of an R1, Doctoral/Very High Research university by the Carnegie Classification of Institutions of Higher Education. This distinction reflects the university's unwavering commitment to the public good through research. DU accomplished this recognition while upholding its commitment to its students' intellectual and personal growth.

Throughout the year, faculty, staff, and students work together to accomplish the mission of the university and achieve learning outcomes through various means. At the end of the year, each degree program is asked to submit a report of its assessment of student learning efforts to reflect on the ways in which those goals have been accomplished. The purpose of this report is to summarize the work of the numerous assessment groups across campus so that the university can learn from its practices for facilitating student growth and faculty thriving in our various academic settings.

The report begins by highlighting some of the important statistics related to assessment for this past year. Following that, various assessment practices will be highlighted from different sectors of campus. At the end of the report, a series of recommendations for all assessment work on campus are made followed by a set of appendices with helpful information about assessment at DU.

By The Numbers

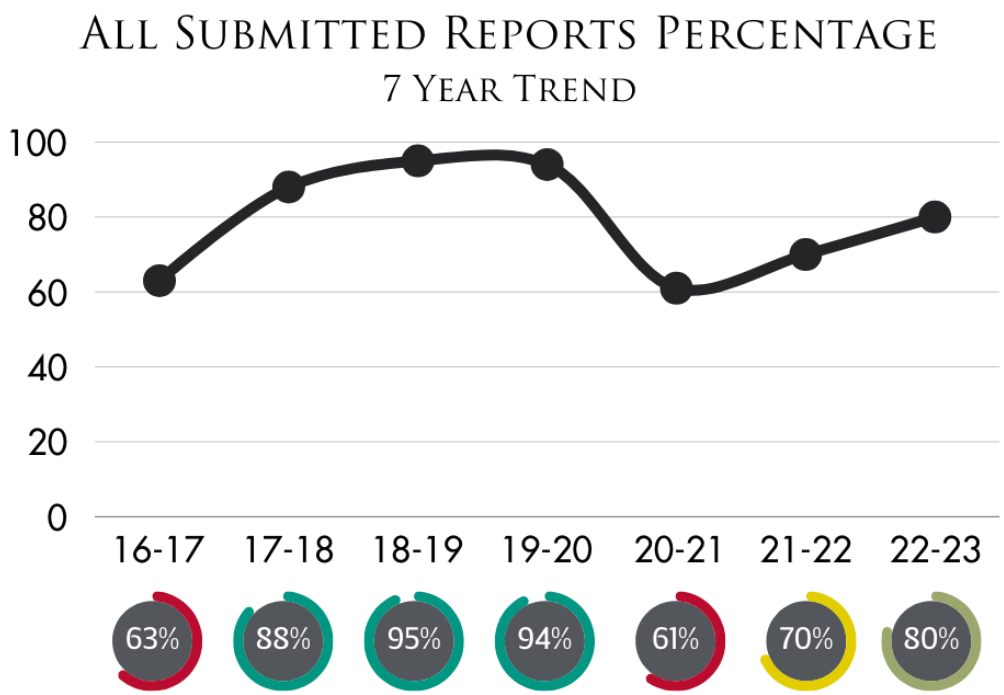
The following section highlights some of the numbers related to the submitted reports. The highlighted numbers help show trends in submission rates, data engagement, and scoring from the feedback rubric, see Appendix C. These numbers help us see areas of strength as well as some areas for growth.

Assessment Report Submission Rates

This section highlights some of the numbers relating to the submission of assessment reports.

For the 2022-2023 academic year, the total percentage of submitted reports by all units was 80 percent. This was an increase of 10 percentage points from last year.

The graph to the right highlights the seven-year trend of submission percentages for all assessment reports within the university. The line clearly shows the high level of submission rates prior to the COVID-19 pandemic and the drop during the pandemic years. Alongside the pandemic, there was also a transition in assessment leadership at the university which also affected submission rates during this time. Thus, the rebound in submission rates for the past two years is a positive development as assessment infrastructure is rebuilt.



ASSESSMENT REPORT SUBMISSIONS-TYPES OF DATA ENGAGED

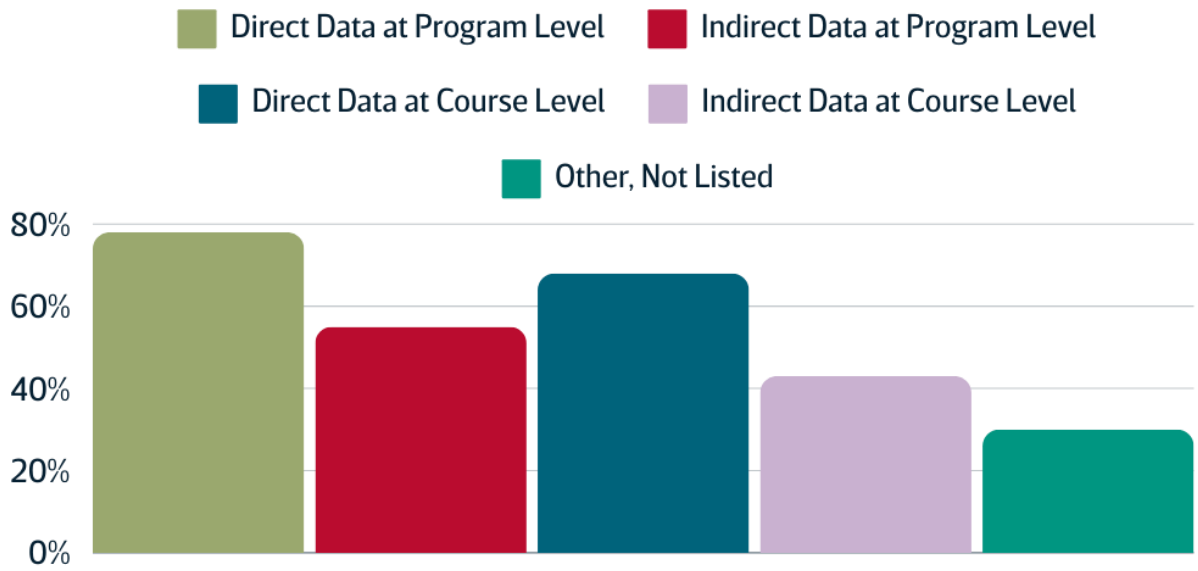
This past year, as part of the assessment reporting process, each program was asked what type of data they were engaging. The goal of this question was to collect a baseline for understanding the types of data being used in for assessment purposes across academic programs. Report authors were asked one question to which they could select multiple answers. The answer options given for the question were:

- Direct Data at Program Level: such as internship reports, capstone assignments, thesis assignments, licensure exams, etc.
- Indirect Data at Program Level: such as exit surveys, NSSE data, placement data, retention data, etc.
- Direct Data at Course Level: such as course papers, exams, projects, etc.
- Indirect Data at Course Level: such as course surveys, student evaluations, interviews, etc.
- Other, Not Listed.

For all submitted reports, the highest percentage of responses were direct data at program level (78% of respondents) and direct data at course level (68% of respondents). This high level of engagement with direct data, such as internships reports, capstone reflections, course assignments, nationally normed field exams, and eportfolios represents a positive development in our reflective assessment practice.

TYPES OF DATA USED FOR ASSESSMENT

The percentage of annual assessment reports that engaged with each type of data as part of their assessment process for the academic year 2022-23. Assessment reports could select multiple types of data as part of their assessment process.



ASSESSMENT REPORT SUBMISSIONS-FEEDBACK RUBRIC DATA

Additionally, all submitted reports were given feedback based on the assessment rubric for faculty reflection, see Appendix C for the full rubric. Each report was given feedback by the Director of Academic Assessment based on the four categories. The Director also offered written feedback and a consultation to each program's assessment leader to aid the next steps in the assessment cycle.

In the area of data, which highlights the way data was described in the report as contributing to the assessment work, 66% of reports scored in the enhancing category while 28 scored in the emerging and 6% in the entry categories.

DIALOGUE:
The faculty of the program engaged in meaningful discussions about assessment

In the dialogue area, which highlights the ways in which faculty members participated in the assessment work, 44% percent scored in the enhancing category while 53% scored in the emerging and 3% scored in the entry categories.

DISCERNMENT:
The faculty of the program reported how their assessment work helped inform decisions about the future of the program.

In discernment, which describes the process for making decisions for which assessment work is used 66% scored in the enhancing category while 13% scored in emerging and 22% scored in the entry categories.

DILIGENCE:
The faculty reported a plan for implementing changes that will be made regarding student learning.

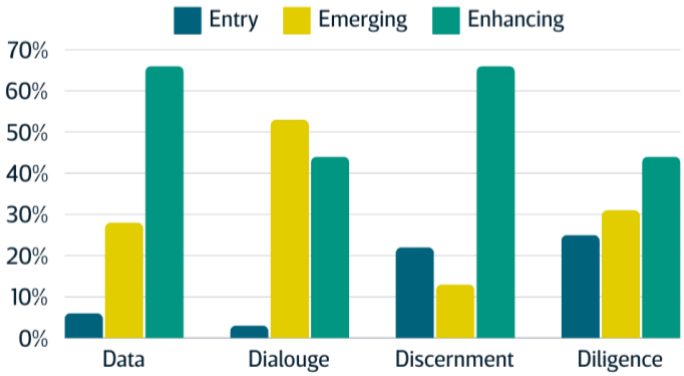
Finally, in diligence, which shows the plans for carrying out decisions for the coming year because of assessment work, 44% scored in the enhancing category while 31% scored in emerging and 25% scored in the entry categories.

The graph to the right visualizes the combined scoring percentages of all programs in each of the possible scoring categories of the rubric.

Programs did well in the use of data and in discernment. Which highlights that programs reporting on their assessment work are doing well connect data to decisions about the future of the program. There is still a need for better reporting in diligence, which highlights plans for how the decisions about the future of the program will be implemented.

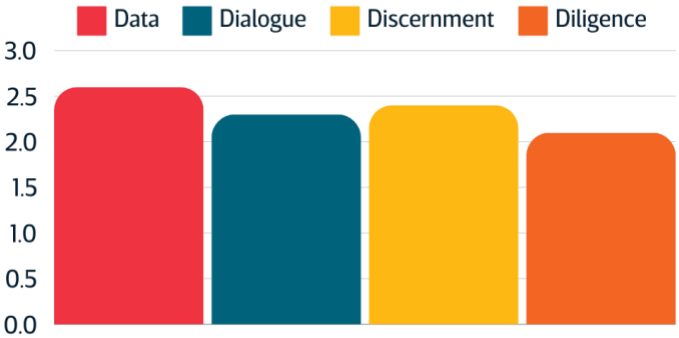
ALL SUBMITTED REPORTS RUBRIC SCORING

The percentage annual assessment reports scored in each category on the rubric. For example, 6% of the reports scored "entry" while 28% score "emerging and 66% score "enhancing in their use of data.



TOTAL SUBMITTED REPORTS RUBRIC SCORING

This graph shows the average scores for all submitted reports for the AY 22-23in each of the feedback categories for assessment reports. The scale used was 0-3.



The graph to the left shows the combined average score on a scale of 0-3 for all programs in each of the categories. For all programs, the engagement with data scored the highest, with an average score of 2.6. At the other end, the average diligence score was a 2.1 for all programs.

This information will be used in designing future supports for assessment work across the university.

Promising College, School, and Division Assessment Strategies

The following snapshots highlight some of promising assessment work happening across the university. These snapshots are organized according to the categories of the assessment report rubric: Data, Dialogue, Discernment, and Diligence. While there were many strategies to choose from, the snapshots below reveal ideas in the different areas that could be helpful for all units in their own assessment work.

Data: Engaging Student Learning Data for Curricular Decisions.

Collecting and analyzing data related to student learning is an important portion of assessment cycle. Data for assessment can come from many different places, there are two main types of data that can help programs assess student learning. First, direct evidence from student scores on assignments related to learning outcomes is the clearest data of student learning. Whether this is in the form of student scoring on particular questions for an exam or lab report, a rubric score for a paper or presentation, or an evaluation of capstone assignment, analyzing student work aligned with learning outcomes is a clear indicator of student learning. A second type of data that is indirect can be just as helpful, though, in our assessment work. Data from student responses to surveys, post-graduation placement data, and alumni feedback can all help faculty reflection on the curriculum and forms a key component in the decision-making process. The following examples offer insights into the ways different programs are using data to inform their curricular decisions.

Using Capstone Data to Improve Student Performance

The Emergent Digital Practices program collected meaningful data from their capstone project this past year. The program learned that time management is a critical skill for student success in the 10-week project. As Trace Reddell, professor and director of the Emergent Digital Practices program says, “the program will use this information to develop new strategies for helping students develop their time management skills in the next version of the course (Reddell).”

Using Student Feedback to Update Course Policy and Instruction

The History program faculty have collected student feedback for the past three years regarding the learning outcomes related to the senior thesis. Jonathan Sciarcon, department chair, has led the faculty to work with the data and to help senior students understand historiography and how to correctly select and cite sources for their senior thesis. They implemented much of this work in a two-part sequence senior major take and focused the effort on classroom instruction as well as syllabus policy (Sciarcon).

Using Rubric Data to Inform Student Supports

To measure student learning in the areas of analytic argumentation, marshaling evidence, and writing clearly, Joshua Wilson, chair of the Political Science department, and his colleagues developed a rubric and assessed student performance using student essays. The faculty score the essays using the common rubric then collate the data. The faculty found that students generally possess these skills, but there is variation in their performance. To enhance student learning, the program faculty will refine their teaching methods, including an assignment that emphasizes evidence-based arguments, a workshop on clear and concise writing, and revised instructions for strong analytical essays (Wilson).

The Political Science Department saw the mean scores on for their 31 students increase in Analytical Argumentation (2.5), Incorporation of Evidence (2.8), and Clarity of Writing (2.5) on a 1-4 scale.

Using Survey Data

The Biological Sciences graduate program proactively tackled assessment redesign, prioritizing the collection of honest and longitudinal data on student progress. Shannon Murphy, professor in the program, and her colleagues are moving beyond paper forms. This year, they adopted an anonymous Qualtrics survey, capturing valuable feedback from both advisors and committee members on student performance during qualifying exams and thesis defenses. This increased transparency, coupled with inclusive data gathering, yielded insightful findings, illuminating areas for improvement such as faculty recall bias and the need for immediate post-exam/defense assessments (Murphy).

The Biological Sciences program has implemented the use of a standardized rubric for evaluating student qualifying exams to better facilitate student growth.

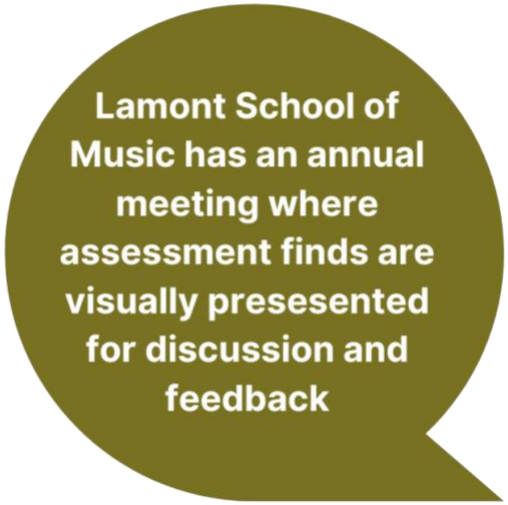
Dialogue: Discussing the Assessment Data

Dialogue refers to the process of actively engaging in conversations and interpretations about assessment data to inform program decisions. Such dialogues may occur as formalized meetings among program faculty, informal discussions that arise throughout the course of a year, or as a consultation with the Director of Academic Assessment. Less important than how they occur is the fact that when they do occur, assessment data is a focus of the discussion. As faculty analyze and interpret data, questions may arise that lead to new possibilities or reaffirm current strategies. The following snapshots highlight various ways that departments are including various stakeholders: faculty, students, and staff in those conversations.

Using a Retreat to Review Outcomes and Data

The Alejandro Cerón, chair of the Anthropology department, led a program review this year, focusing on revising their learning outcomes, requirements, and assessment plan. This review was prompted by the department's assessment work over the past three years, as well as the hiring of two new faculty members in 2019. The department held a faculty retreat at the

beginning of the year to review previous assessment data and compare their program's learning outcomes and requirements to those of other institutions. This was followed by quarterly meetings throughout the year to develop and approve new learning goals, requirements, and an assessment map (Cerón).



Data Presentations in Faculty Groups

The Lamont School of Music is host to several programs that are accredited by the National Association of Schools of Music. Lamont faculty have developed three distinct learning outcomes for each of their degree programs. They use faculty-designed rubrics to evaluate student learning and collect meaningful data for interpretation. Jack Sheinbaum, professor and assessment coordinator, helps lead an annual faculty meeting, where leaders present data visualization to the faculty. This meeting helps ensure transparency and foster collaboration in the assessment process (Sheinbaum).

Using multiple methods of dialogue to create an action plan

Scott Horowitz, associate professor and assessment coordinator for the Chemistry & Biochemistry graduate program, employed a multifaceted approach to assess first-year student preparation for the critical research proposal exam. The faculty incorporated feedback from students, instructors, and faculty to achieving a comprehensive understanding. Departmental meetings and online feedback forums led to a clear action plan for addressing key areas for the upcoming year (Horowitz).

Engaging with an External Conversation Partner

The International Business (IB) major at Daniels College of Business has a strong focus on dialogue, with several opportunities for faculty to discuss assessment results. One helpful example of this is the program's collaboration with Sara Bularzik, who focused her dissertation on the IB student experience in the context of study abroad. The program is working with Bularzik to see how the results of her study can help them take full advantage of the fact that about 80% of their IB majors study abroad. While the experience is extremely powerful even as it is currently implemented, the findings of Sara's study point toward several opportunities to build a more coherent context for study abroad in this major both pre and post the actual time spent overseas. Douglas Allen, professor and assessment coordinator for the program, has highlighted how finding an external partner for dialogue is a great way to engaging in assessment for growth (Allen).

Discernment: Making Decisions Based on Assessment Data

Discernment is the process of using the information from assessment work to help inform programmatic decisions. There are many ways to report how assessment work is informing the decision-making process, the following examples show how some programs have connected assessment work from the previous year into action steps of improvement or sharing about student success.

Revising Orientation and Handbook to Help Students Understand Learning Outcomes

The Professional Science Master's (PSM) in Biomedical Sciences program exemplifies a robust commitment to student learning and success. Over the past year, the program leadership focused on creating a curriculum map to help students visualize where learning outcomes were emphasized. This coming year the focus will be on revising the student handbook and orientation to ensure that the learning outcomes and the courses where those outcomes are measured are clearly discussed. The goal of these revisions is to help students understand the goals of the program. By understanding the outcomes and the places in which these goals will be highlighted, students have the opportunity to integrate their learning across the curriculum (Lorenzon).

The Professional Science Master's program used feedback from students to help make decisions about how to update the student handbook in the coming year.

Morgridge College of Education (MCE) Programs Discern Areas for Program Revision

As many programs in Morgridge College of Education are accredited by state and federal agencies, the faculty of these programs are consistently assessing their teaching and student learning. This past year, several programs engaged in discernment process about the best way to improve their work and Nicole Holland, MCE Director of Assessment, helped them tell their story. The Library and Information Science program assessed alumni and employer satisfaction. Findings revealed an 84% overall student satisfaction with courses, materials, and faculty but also identified opportunities for improvement in student involvement, faculty advisor support, and research participation (Holland, *Library and Information Science (2023)*). Finally, informed by student surveys revealing a desire for flexible learning and faculty discussions highlighting the need for increased program accessibility, the Curriculum and Instruction program decided to begin the process of offering an online EdD program to better serve their students (Holland, *Educational Leadership and Policy Studies (2023)*).

Creating a Curriculum Map to Align Outcomes to Offerings

The MA program in International Security is creating a curriculum map to help align course assessments with program goals.

The MA program in International Security in the Joseph Korbel School of International Studies has been working on updating their assessment plan. The COVID-19 pandemic and key leadership changes have caused difficulties in developing a holistic approach. However, under the leadership of Lewis Griffith, associate dean, the program has begun curriculum mapping to align courses with program goals. This mapping is being aided by alumni feedback to ensure that current offerings and outcomes match the necessary disciplinary skills needed for future student endeavors (Griffith).

Diligence: Planning for the Future

Diligence the step in the assessment process where concrete plans for future programmatic improvement are reported. This closing of the loop, as it is referred to in assessment jargon, helps ensure that there is a clear understanding of who is responsible and what will be done in the upcoming year to help student success.

Working on Course Offerings in the Bulletin

The Asian Studies program, an interdisciplinary program, has made progress in the 2022-2023 academic year. The program director is working to implement several changes in the bulletin to make it easier for students to find Asian Studies courses. Students had given feedback that they had difficulty finding courses listed for the program and that it was a barrier to their progress. Additionally, the director made efforts building community among Asian Studies faculty, particularly by integrating language-teaching faculty into the program. The program also plans to host a community-building event in the fall quarter to enhance students' sense of belonging and engagement (Smith).

The director of the Asian Studies program, an interdisciplinary program, is working with the Registrar's Office to make course offerings easier for students to find.

Updating Rubrics, Competencies, and Data Collection

Two programs in the Graduate School of Professional Psychology engaged in comprehensive reviews this past year. Both the International Disaster Psychology (Mitchell) and the Clinical Psychology PsyD (Choi)programs revealed strengths, such as student retention and successful application of student feedback at practicum sites, but also areas for growth. In both programs, one of the issues was an inadequate method of collecting data for evaluation of student performance. Both programs, through separate processes decided to update the way they collected and analyzed data in the coming year. As part of this process both programs also will look at the way rubrics and exams are tied to APA competencies

Morgridge College of Education has responded to student need by developing an online EdD program. The college faculty and staff have worked dilligently to ensure the infastructure is available to stupport student learning.

Offering an Online Program in Response to Student Needs

Informed by student surveys revealing a desire for flexible learning and faculty discussions highlighting the need for increased program accessibility, the Curriculum and Instruction program at Morgridge College of Education is diligently implementing an online EdD program. This initiative aligns with the college's goals of expanding program offerings and promoting educational equity. To ensure its success, the program is actively developing online curriculum, establishing a robust technology infrastructure, crafting targeted recruitment strategies, and investing in faculty training for online instruction. This comprehensive approach positions the online EdD program to meet student needs and contribute to the program's long-term sustainability and growth (Holland, *Curriculum and Instruction (2023)*).

Sharing Student Successes

Sometimes it is assumed that any follow up with assessment is synonymous with means something wrong will be found and need to be changed. While there is room for improvement many times, there is just as often opportunity to share good news. This is just as much a part of diligence as is following up on a plan of action for change. This past year, several programs had significant student successes to share. For example, the Teacher Education Program in Morgridge College of Education found that over 90% of apprentice teachers were satisfied with the program, with a majority feeling the field experience strongly aligned with their expectations (Holland, *Teacher Education Program (2023)*).

Sharing stories and statistics highlighting student and faculty successes is an important part of a program's assessment report.

Similarly, Sturm College of Law celebrated a strong bar passage rate, consistently exceeding the state average for graduates taking the Colorado bar exam. Notably, in 2022, SCOL graduates achieved a 78% pass rate compared to the state average of 74% (Wiersema).

In the Ritchie School of Engineering and Computer Science, the Mechanical and Materials Engineering Master programs highlighted the continuing progress of their thesis and non-thesis students toward the program learning outcomes. In the context of the thesis students, all 5 students scored at least 3 out of 4 on the learning outcomes of technical skills, written communication, oral communication, and research capabilities (Yi).

Assessment Recommendations

There are many positives to highlight about assessment work at the University of Denver. Likewise, there are several ways assessment could be improved to create more robust findings and solidify data-informed decisions. Here are three recommendations for improved assessment work across the campus:

1. *Clearly align outcomes and assessments so that the data you collect and interpret is helpful.*

We have outcomes for our students' learning. That is why we got into teaching. We all also assess our students' learning in one way or another, whether that be through tests, papers, or projects. However, we don't always make our outcomes clear to students and we don't always clearly align our assessments with outcomes. Thus, it is important to engage in some reflection about the types of assessments we use in our course to see if they are telling us important information about student learning related to our stated learning outcomes. There are numerous ways to ensure our assessments are aligned with our outcomes and the Director of Academic Assessment is available to assist you with this process. Just as important as ensuring that assessments are aligned with outcomes is the process of collecting and interpreting the data in a meaningful manner. There are a number means available to programs through DU's IT department in conjunction with the Office of Teaching and learning for collecting and reporting on student learning data. Work with the Office of Teaching and Learning staff to see what tools would best fit your programs needs for collecting data in a way that will result in meaningful reports that can then be analyzed for future decisions.

2. *Use the results of assessment work to enact ways of improving student learning.*

The greatest failure of assessment is to simply check off the work without enacting anything as result of analysis. While there may be no changes immediately necessary because of one's assessment work, there is always space to use assessment results to highlight successes. However, when results show that a change is necessary, it is imperative for student success that one acts upon the recommendations. Make sure to share assessment findings with the correct audience and follow-up on suggested work. The process of "closing the loop" is essential to ensure assessment is more than just a check-box activity.

3. *Finally, keep thinking reflecting on issues related to inclusion and equity in assessment*.

As the University strives for more diversity, equity, and inclusion, it is essential to consider the ways in which students of diverse identities encounter our programs. One helpful way to improve this area is by considering how Universal Design for Learning (UDL) can improve the accessibility of learning by all types of students (*UDL Guidelines*). Also, consider using disaggregated data in your analysis of student

learning outcomes. Looking at how diverse populations are demonstrating learning gives a more holistic picture of student performance by different categories and offers opportunities for more specific suggestions for improvement. There are numerous resources for thinking about how to center equity for all students through assessment. A good place to start is Montenegro and Jankowski's *A New Decade for Assessment: Embedding Equity into Assessment Praxis.* Work with the Office of Teaching and Learning professionals to consider what options are implementable for your program.

CONCLUSION

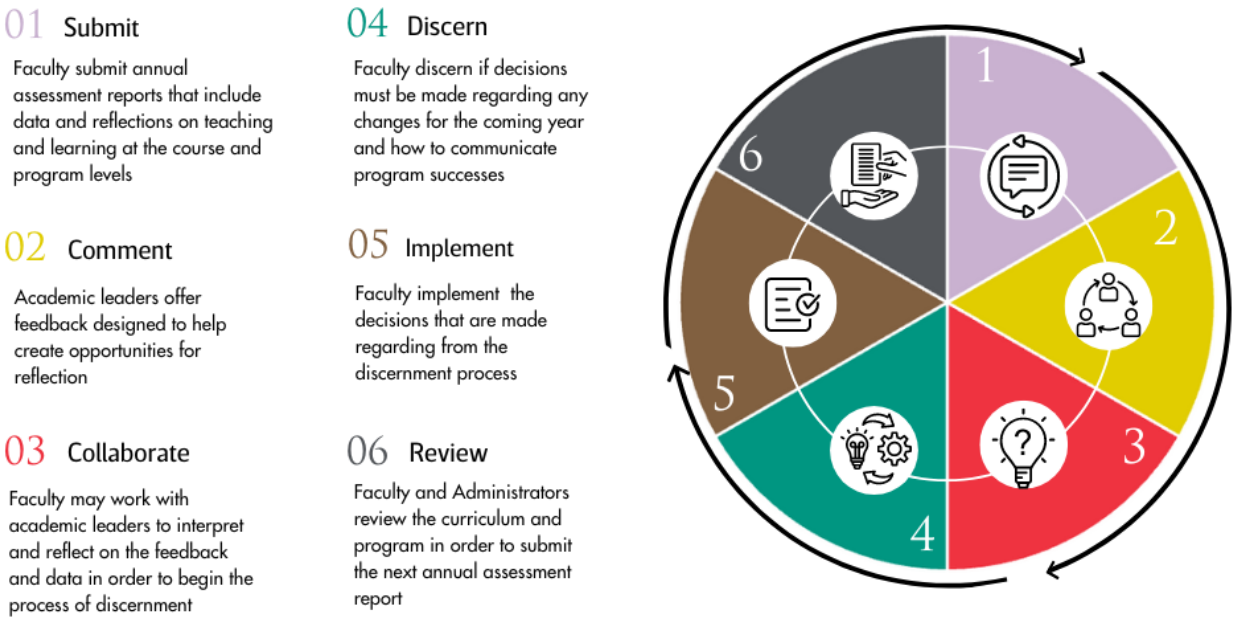
Faculty assessment work is a vital way to critically reflect on the practices that help us fulfill the University's mission of contributing to the common good. As Stephen Brookfield has written, critical reflection contributes to "the sustained and intentional process of identifying and checking the accuracy and validity of our teaching assumptions." Together, our work becomes an infinity loop, continually informing teaching and learning, and instigating further critical reflection.

As faculty engage in meaningful assessment, we are better able to define what thriving looks like in all aspects of our common work. When we continue to define that success, our practices can grow toward their potential. This is one way assessment contributes to faculty thriving in each career stage, the programs they serve, and students.

This can be attributed to the great effort by associate deans and faculty who work diligently to ensure that assessment work is not only ongoing but is recorded in meaningful ways throughout the year.

APPENDIX A: THE ASSESSMENT CYCLE

The program assessment cycle at the University of Denver is aligned with the academic calendar, involving a significant number of faculty and staff who work to ensure the process focuses on improving student learning. The process is outlined as a six-step cycle below. At each step, faculty lead assessment work for reflecting on teaching and learning at the course and program level.



The six steps of the cycle begin with submission of the assessment report by program assessment coordinators.

1. **Submit**. During the past two years, the Office of Teaching and Learning has requested that reports be submitted through the Qualtrics survey platform. In their reports, assessment leaders share evidence and narratives regarding program work for the previous year. Reports are submitted with a cover letter from an academic supervisor, usually a department chair or associate dean.

2. **Comment.** Following submission, the Director of Academic Assessment and appropriate academic leaders offer constructive feedback for directions program leaders may take going forward. One way the Director of Academic Assessment offers feedback is by using a rubric to score each report on assessment qualities. The graphic below is the rubric designed to offer feedback. The rubric was created to align with criteria of the Higher Learning Commission (HLC) accreditation guidelines, the rubric offers feedback to guide program assessment coordinators.

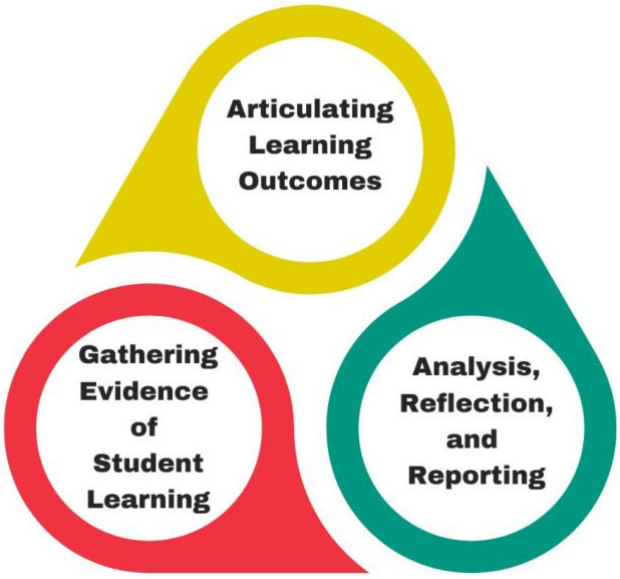
3. **Collaborate**. Through various formalized meetings and consultations, faculty work with academic leaders, including the Director of Academic Assessment, to interpret the feedback and data from the assessment report to discern the future of the program. This phase helps participants interpret and consider the various data points helpful to improving the program.

4. **Discern**. The discernment phase invites faculty and staff to devote time and effort to deciding how to proceed with findings from the collaboration stage. In this phase, participants make data-informed decisions about next steps for the program. For example, one program may decide to share narratives of student success in promotional materials. Another program may make curricular changes based on their findings. Curricular changes range from updating an assignment, changing a learning outcome, or rearranging course offerings. Each of these might require new processes or resources. In all cases, the significant work of assessment must take place for programs to decide how best to proceed.

5. **Implement**. After discerning the best next steps, each program should develop an implementation plan. For some, this will require working through university-related committees and councils. Others will need financial resources or assistance from departments to enact their goals. Whatever decisions are made, implementation is critical to track. "Closing the loop" is the process of tracking how assessment results are employed to improve student learning. Even as plans change, having an initial vision of how the discernment will be put into action is important for meaningful assessment growth.

6. **Review**. Finally, as the next assessment report comes due, each program should review the previous report to check how their implementation has occurred. The review phase allows participants the opportunity to reflect on how decisions have affected student learning and the program's future.

APPENDIX B: THREE KEY COMPONENTS OF EFFECT ASSESSMENT



Academic assessment is done in a variety of ways. However, for it to truly be effective and meet its three main purposes, assessment should encompass these three key components: articulating learning outcomes, gathering evidence of student learning, and engaging in analysis, reflection, and reporting.

Articulating Learning Outcomes:

Articulating learning outcomes is the foundation of effective assessment. It involves clearly defining what students should know, understand, and be able to do upon completion of a course or program. These outcomes serve as benchmarks for measuring student progress and ensuring alignment with the overall learning goals of the program. Faculty members clearly define and articulate their expectations for student success within their respective courses and programs. These outcomes are specific, measurable, and attainable, ensuring a clear alignment with student learning objectives and quality pedagogical practices. For example, for a writing course, faculty members might define learning outcomes such as the ability to construct well-organized arguments, effectively support claims with evidence, and use proper grammar and style. For a biology course, faculty members might define learning outcomes such as the ability to identify and classify organisms, explain the processes of photosynthesis and cellular respiration, and apply biological concepts to real-world scenarios.

Gathering Evidence of Student Learning:

Gathering evidence of student learning is the process of collecting data that demonstrates whether students have achieved the defined learning outcomes. This evidence can take various forms, such as essays, lab reports, presentations, portfolios, and performance assessments. Faculty members collect high-quality artifacts and data from the curriculum that demonstrate student progress towards achieving the established learning outcomes. These artifacts are sourced directly from student engagement activities, providing tangible evidence of their mastery of the learning material. For example, in a writing course, faculty members might collect artifacts such as essays, research papers, and peer reviews to assess student writing skills and argumentation abilities. In a biology course, faculty members might collect artifacts such as lab reports, concept maps, and presentations to assess student understanding of biological concepts and their ability to apply them.

Analysis, Reflection, and Reporting:

Analysis, reflection, and reporting are integral to the assessment process. Faculty members carefully examine the collected evidence, drawing meaningful conclusions about student learning patterns, strengths, and areas for improvement. They then share these insights through reports and discussions, informing their own teaching practices, program curriculum development, and institutional decision-making. Faculty members meticulously analyze and reflect upon the gathered evidence, drawing meaningful conclusions about student learning. This reflective process informs their reporting on assessment findings, which in turn guides assessment officers and administrators in providing constructive feedback and identifying potential areas for improvement. Additionally, assessment findings inform accreditation processes, budget allocation strategies, marketing initiatives, and recruitment efforts. For example, after analyzing student essays, faculty members might identify areas where students struggle with argumentation or evidence usage. This information can inform future teaching strategies and provide targeted support for students. In Biology, by analyzing student performance on lab reports, faculty members might recognize a need for additional hands-on learning experiences or clearer explanations of complex concepts. This feedback can inform curriculum revisions and improve student engagement.

While program-level assessment is the primary focus of this report, course-level assessment plays an integral role in shaping program goals. The insights gained from course-level assessment inform and refine the broader program-level learning outcomes, ensuring a cohesive and effective assessment framework across all levels.

APPENDIX C: RUBRIC FOR FACULTY REFLECTION ABOUT ASSESSMENT

The Director of Academic Assessment returns annual assessment reports with feedback based on the following rubric. This feedback is designed to foster a conversation about assessment work in the program and not as a "grade" for the report.

Criterion	Description	No Evidence	Entry	Emerging	Enhancing
Data	The faculty of the program collected meaningful data throughout the year that was clearly aligned with the specific outcomes being assessed	No evidence of data collected or presented for the purpose of analyzing student learning	Evidence that data related to student learning was collected	Evidence that data was collected and analyzed	A clear narrative of how multiple people engaged in collecting and analyzing more than one piece of data related to student learning
Dialogue	The faculty of the program engaged in meaningful dialogue about assessment	No evidence in the report the program engaged in meaningful dialogue during the year regarding any assessment measures	Evidence of one meaningful conversation related to assessment measures in the past year	More than one meaningful discussion about student learning as it relates to the program outcomes	A clear narrative of how multiple people engaged in multiple meaningful discussions about student learning
Discernment	The faculty of the program reported how their assessment work helped inform decisions about the future of the program	No indication the faculty made any decisions based on their assessment process	Evidence of the year's assessment work informing programmatic decisions	More than one piece of evidence of how the assessment work informed programmatic decisions	A clear narrative of how multiple people were involved in making informed programmatic decisions in alignment with their mission and values
Diligence	The faculty reported a plan for implementing changes that will be made regarding student learning	No evidence of a plan to implement decisions from the discernment step in the assessment work	A reported outline for implementing a programmatic decision in the next year	A clear plan for implementing programmatic decisions with an accountability structure to ensure implementation	A clear narrative for implementing programmatic decisions with clear accountability structure involving multiple people to ensure implementation

Appendix D: Glossary of Key Assessment Terms

This glossary was developed using the Carleton College *Short Glossary of Assessment Terms*, *NILOA Glossary*, and the *National Art Standards Assessment Glossary*.

Accreditation

Accreditation is the establishment of the status, legitimacy, or appropriateness of an institution or program of study by an organization delegated to make decisions, on behalf of the higher education sector, about the status, legitimacy or appropriateness of an institution or program of study. The primary accrediting body for the University of Denver is the Higher Learning Commission. However, certain programs within the university also have outside accrediting bodies.

Artifact

An object produced to indicate mastery of a skill or component of knowledge. It is often stored for future use.

Assessment

A systematic process for understanding and improving student learning. The ongoing process engages faculty, staff, and students at multiple points to ensure that evidence is analyzed in alignment with institutional, program, and course-level goals and outcomes in order to improve student learning and inform curricular and pedagogical decisions. ("NILOA Glossary")

The ***process*** of collecting and analyzing data for the purpose of evaluation. The assessment of student learning involves describing, collecting, recording, scoring, and interpreting information about performance. A complete assessment of student learning should include measures with a variety of formats as developmentally appropriate. Assessments and the tests they use are usually classified by how the data are used—either formative, benchmark or interim, and summative.

Authentic Assessment

Assessment strategies that require students to directly reveal their ability to think critically and apply and synthesize their knowledge.

Benchmarking

Benchmarking is a process that enables comparison of inputs, processes, or outputs between institutions (or parts of institutions) or within a single institution over time. A benchmark statement provides a reference point against which outcomes can be measured and refers to a particular specification of program characteristics and indicative standards.

Capstone

A culminating experience required of students nearing the end of a program. In the course, a student is required to create a project that integrates and applies what they've learned. The project might be a research paper, performance, portfolio, or artwork exhibition. Capstones can be offered in departmental programs and in general education as well.

Datum (Data)

Raw facts and figures submitted or by or for you for the purpose of analyzing by or for you into information. In common usage, however, the terms “data” and “information” are often used synonymously. Therefore, for assessment purposes, data will be the base facts and figures and information will be the analyzed data.

Direct Measures

Direct measures require students to demonstrate their knowledge and skills. They provide tangible, visible, and self-explanatory evidence of what students have and have not learned because of a course, program, or activity.

Evaluation

Evaluation includes both qualitative and quantitative descriptions of student behavior, plus value judgments concerning the desirability of that behavior. Using collected information (assessments) to make informed decisions about continued instruction, programs, and activities.

Formative Assessment

Formative assessments are measures which help shape students throughout a program. They are the types of measures faculty can use to give feedback and modify learning.

Formative assessment is often done at the beginning or during a program, thus providing the opportunity for immediate evidence for student learning in a particular course or at a particular point in a program. Classroom assessment is one of the most common formative assessment techniques. The purpose of this technique is to improve quality of student learning, leading to feedback in the developmental progression of learning. This can also lead to curricular modifications when specific courses have not met the student learning outcomes. Classroom assessment can also provide important program information when multiple sections of a course are taught because it enables programs to examine if the learning goals and objectives are met in all sections of the course. It also can improve instructional quality by engaging the faculty in the design and practice of the course goals and objectives and the course impact on the program.

High-Impact Practices (HIPs)

High-impact practices are educational opportunities that have been widely tested and shown to improve student success, especially among historically underserved students. Founding director of the National Survey of Student Engagement (NSSE), George Kuh found that these practices benefit students by connecting learning to life, fostering quality interaction between faculty and students, increasing the likelihood that students will experience diversity through contact with people different from themselves, and helping students understand themselves in relation to others in light of the larger world.

Kuh initially identified ten high-impact practices and later added e-portfolios. The list includes, first-year seminars, learning communities, common intellectual experiences, undergraduate research, capstone courses, diversity/global learning, collaboration, e-portfolios, writing intensive courses, service-learning, and internships. (Kuh)

Higher Learning Commission (HLC)

An institutional accreditor recognized by the U.S. Department of Education. HLC accredits degree-granting institutions of higher education in the United States. The University of Denver is currently accredited by HLC.

Indirect Measures

Assessments that measure opinions or thoughts about student or alumni knowledge, skills, attitudes, learning experiences, perception of services received, or employers' opinions. While these types of measures are important and necessary, they do not measure student performance directly. They supplement direct measures of learning by providing information about how and why learning is occurring

Information

Content conveyed or represented by a particular arrangement or sequence of facts and figures.

Institution

Institution is shorthand for institution of higher education, which is an educational institution that has students graduating at bachelor-degree level or above.

Interdisciplinary

Interdisciplinary refers to research or study that integrates concepts from different disciplines, resulting in a synthesized or coordinated coherent whole.

Joint Degree

A joint degree is a single degree awarded by more than one higher-education institution.

Outcome (also known as Learning Outcomes or Learning Objectives)

What you want students to know and understand after they complete a learning experience, usually a culminating activity, product, or performance that can be measured. There are different levels of outcomes:

Course Learning Outcomes (CLOs)

> These outcomes are connected to student learning at the course level. These are measured throughout a particular course offering.

Program Learning Outcomes (PLOs)

> These outcomes are connected to student performance during a major or general education program. These are usually measured through course and co-curricular experiences throughout a program.

Institutional Learning Outcomes (ILOs)

> These outcomes are connected to student performance during their entire time at the institution. At the University of Denver, these outcomes are found in the 4D experience. These outcomes are usually measured through larger initiatives in various programs.

PORTFOLIO

A systematic and organized collection of student work that exhibits the direct evidence of a student's efforts, achievements, and progress over a period of time. The collection may involve the student in the selection of its contents, and should include information about the performance criteria, the rubric or criteria for judging merit, and evidence of student self-reflection or evaluation. It should include representative work, providing a documentation of the students' performance and a basis for evaluation of the student's progress. Portfolios may include a variety of demonstrations of learning and have been gathered in the form of a physical collection of materials, videos, CD-ROMs, reflective journals, etc.

PROGRAM (EDUCATIONAL, ACADEMIC)

A legally authorized postsecondary program of organized instruction or study that:

> *Leads to an academic, professional, or vocational degree, or certificate, or other recognized educational credential, or is a comprehensive transition and postsecondary program, as described in 34 CFR part 668, subpart O; and*
>
> *May, in lieu of credit hours or clock hours as a measure of student learning, utilize direct assessment of student learning, or recognize the direct assessment of student learning by others, if such assessment is consistent with the accreditation of the institution or program utilizing the results of the assessment and with the provisions of 34 CFR § 668.10.*

HLC does not consider that an institution provides an educational program if the institution does not provide instruction itself (including a course of independent study) but merely gives credit for one or more of the following: Instruction provided by other institutions or schools; examinations or direct assessments provided by agencies or organizations; or other accomplishments such as "life experience." "Educational program" is synonymous with HLC's use of the terms "academic offering(s)" and "academic program(s)."

(Note that this is the same as the Federal definition.)

RUBRIC

In general, a rubric is a scoring guide used in subjective assessments. A rubric implies that a rule defining the criteria of an assessment system is followed in evaluation. A rubric can be an explicit description of performance characteristics corresponding to a point on a rating scale. A scoring rubric makes explicit expected qualities of performance on a rating scale or the definition of a single scoring point on a scale.

Self-Assessment

A process in which a student engages in a systematic review of a performance, self-assessment is usually employed for the purpose of improving future performance. It may involve comparison with a standard, established criteria; or it may involve critiquing one's own work or may be a simple description of the performance. Reflection, self-evaluation, metacognition, are related terms.

Summative Assessments

Summative assessments are measures that occur near the end of a unit, course, or program and seek to assess student mastery of an outcome.

Summative assessment is comprehensive in nature, provides accountability and is used to check the level of learning at the end of the program. For example, if upon completion of a program students will have the knowledge to pass an accreditation test, taking the test would be summative in nature since it is based on the cumulative learning experience. Program goals and objectives often reflect the cumulative nature of the learning that takes place in a program. Thus, the program would conduct summative assessment at the end of the program to ensure students have met the program goals and objectives. Attention should be given to using various methods and measures in order to have a comprehensive plan.

Teaching Quality Framework (TQF)

The Teaching Quality Framework engages faculty leaders, departments, and administrators, and provides a structure to identify (or co-create), refine, and implement improved teaching assessment practices. It is an opt-in model, with departments choosing to become leaders in this process. This strategy empowers the community to voluntarily engage with new ways of assessing teaching and to adopt an evidence-based framework for teaching assessment. (University of Colorado Boulder)

VALUE Rubrics

VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success. (“VALUE Rubrics”)

APPENDIX E: A HANDOUT FOR WRITING LEARNING OUTCOMES

Writing Learning Outcomes ABCD Method

A	B	C	D
Audience	Behavior	Condition	Degree

Audience: Who are the learners?

Behavior: What will the learners be able to think, know, or do?

Condition: Under what circumstances/context will the learning be demonstrated?

Degree: How well or how much must the learning be performed?

An Example

Condition **Audience**

By the end of unit of Dumas, students

Behavior

will use narrative criticism to write a paper about the character development

Degree

of one of the main characters in one of his stories.

S.M.A.R.T Outcomes are…

Specific: They have explicit targets for skills and knowledge.

Measurable: The targets are not vague but are clear and demonstrable.

Actionable: The targets are something students can do.

Reasonable: The targets are appropriate to the level or degree

Write the Main Components of Your Learning Outcome

Audience _____

Behavior _____

Condition _____

Degree _____

Write Your Learning Outcome

Bloom's Level of Thinking	Action Verbs Using Bloom's and Fink's Taxonomies Fink's Domains of Learning					
	Foundational Knowledge	Human Dimension	Caring	Application	Integration	Learning How to Learn
Create	Conduct, Compile, Predict, Animate, Develop, Align, Perform, Discuss, Exhibit	Advocate, Propose, Produce, Initiate, Invent, Instruct, Decide, Collaborate, Role play	Generate, Improve, Restructure, Coordinate, Combine, Synthesize, Cultivate, Theorize, Commit	Design, Develop, Create, Combine, Produce, Organize, Pledge, Propose, Form	Construct, Predict, Modify, Assemble, Adapt, Display, Integrate, Participate, Manage	Set Goals, Plan, Experiment, Dramatize, Structure, Campaign, Reflect
Evaluate	Rate, Validate, Estimate, Measure, Prove, Select, Appraise, Support, Critique, Reflect	Evaluate, Give Feedback, Clarify, Resolve, Setup, Determine, Support, Advocate, Exemplify	Assess, Judge, Diagnose, Balance, Adapt, Reconcile, Value, Recommend, Promote	Critique, Justify, Contrast, Amend, Reframe, Respond, Review, Defend, Decide	Conclude, Associate, Test, Check, Compare, Determine, Grade, Modify	Justify, Predict, Resolve, Formulate, Measure, Determine, Verify, Internalize
Analyze	Identify, Contrast, Illustrate, Calibrate, Classify, Organize, Choose, Delay, Identify	Characterize, Distinguish, Analyze, Categorize, Collaborate, Illustrate, Mediate, Detail, Discover	Explore, Correlate, Demonstrate, Associate, Dispense, Configure, Empathize, Practice, Assemble	Outline, Deduce, Compare and Contrast, Handle, Infer, Map out, Report, Examine, Investigate, Survey	Question, Relate, Formulate, Tabulate, Graph, Dismantle, Link, Integrate, Comply	Self-Assess, Self-Regulate, Frame questions, Categorize, Arrange, Diagram, Scrutinize, Map, Categorize
Apply	Prepare, Explore, Give Example, Discuss, Process, Act, Consult, Realize, Share	Demonstrate, Modify, Discover, Promote, Guide, Display, Associate, Cooperate, Specify, Support	Demonstrate, Illustrate, Identify, Filter, Transfer, Express, Initiate, Share	Operate, Calculate, Solve, Hypothesize, Obtain, Design, Propose, Persevere, Invite	Personalize, Compare, Combine, Concept map, Graph, Synthesize, Recommend, Acknowledge, Integrate	Modify, Deconstruct, Inquire, Compose, Practice, Sketch, Exemplify, Utilize, Show
Understand	Explain, Paraphrase, Restate, Organize, Annotate, Collect, Accept, Illustrate, Adhere	Represent, Compare, Translate, Infer, Mix, Record, Make, Note, Discriminate, Express, Interact	Discuss, Elaborate, Interpret, Respond, Combine, Display, Agree With, Value, Renew interest	Summarize, Provide Examples, Adapt, Use, Maintain, Develop, Show, Suggest, Express	Extend, Associate, Convert, Plot, Draw Assemble, Restate, Connect, Visualize	Describe, Interpret, Translate, Diagram, Balance, Grasp, Participate, Review, Comply
Remember	Define, Name, Indicate, List, Identify, Collect, Choose, Ask, Follow, Comply with	Specify, Recognize, Label, Follow, React, Map, Listen, Accept, Seek	Quote, Recognize, Recall, Read, Copy, Mimic, Recollect, Adhere, Attend	Enumerate, State, Reproduce, Replicate, Sequence, Browse, Read, Explore, Imagine	Indicate, Recite, Blend, Merge, Imitate, Exercise, Collect, Trace, Follow, Describe	Recall, Monitor, Self-Monitor, Write, Underline, Search, Recite, Listen

APPENDIX F: ASSESSMENT EVIDENCE

DIRECT MEASURES

Direct measures require students to demonstrate their knowledge and skills. They provide tangible, visible, and self-explanatory evidence of what students have and have not learned as a result of a course, program, or activity.

1. *Authentic:* Based on examining genuine or real examples of students' work. Work that closely reflects goals and objectives for learning. Authentic assessment reveals something about the standards that are at the heart of a subject; asking students to use judgment and innovation as they "do" and explore the subject.

2. *Embedded:* Program, general education, or institutional assessments that are embedded into course work. In other words, they are course assessments that do double duty, providing information not only on what students have learned in the course but also on their progress in achieving program or organizational goals. Because embedded assessment instruments are typically designed by faculty and staff, they match up well with local learning goals. They therefore yield information that faculty and staff value and are likely used to improve teaching and learning.

3. *Portfolios Assessment:* Performance assessments in which student work is systematically collected and reviewed for evidence of student learning. In addition to examples of their work, most portfolios include reflective statements prepared by students. Portfolios are assessed for evidence of student achievement with respect to established student learning outcomes and standards.

INDIRECT MEASURES:

Indirect measures encompass assessments that measure opinions or thoughts about student or alumni knowledge, skills, attitudes, learning experiences, perception of services received, or employers' opinions. While these types of measures are important and necessary, they do not measure student performance directly. They supplement direct measures of learning by providing information about how and why learning is occurring.

1. *Focus Groups:* A group selected for its relevance to an evaluation that is engaged by a trained facilitator in a series of discussions designed for sharing insights, ideas, and observations on a topic of concern to the evaluation.

2. *Interviews:* Researchers ask one or more participants general, open-ended questions and record their answers.

3. *Questionnaires:* Forms used in a survey design that study participants complete and return to the researcher. Participants mark answers to questions and may supply basic, personal, or demographic information about themselves.

4. *Surveys:* A method of collecting information from people about their characteristics, behaviors, attitudes, or perceptions. Surveys most often take the form of questionnaires or structured interviews. General definition: an attempt to estimate the opinions, characteristics, or behaviors of a particular population by investigation of a representative sample.

APPENDIX G: HLC CRITERION 3 AND 4

The following criterion is the current standard related to education programs and assessment.

CRITERION 3. TEACHING AND LEARNING: QUALITY, RESOURCES, AND SUPPORT

The institution provides quality education, wherever and however its offerings are delivered.
Core Components

3.A. The rigor of the institution's academic offerings is appropriate to higher education.

1. Courses and programs are current and require levels of student performance appropriate to the credential awarded.
2. The institution articulates and differentiates learning goals for its undergraduate, graduate, post-baccalaureate, post-graduate and certificate programs.
3. The institution's program quality and learning goals are consistent across all modes of delivery and all locations (on the main campus, at additional locations, by distance delivery, as dual credit, through contractual or consortial arrangements, or any other modality).

3.B. The institution offers programs that engage students in collecting, analyzing and communicating information; in mastering modes of intellectual inquiry or creative work; and in developing skills adaptable to changing environments.

1. The general education program is appropriate to the mission, educational offerings and degree levels of the institution. The institution articulates the purposes, content and intended learning outcomes of its undergraduate general education requirements.
2. The program of general education is grounded in a philosophy or framework developed by the institution or adopted from an established framework. It imparts broad knowledge and intellectual concepts to students and develops skills and attitudes that the institution believes every college-educated person should possess.
3. The education offered by the institution recognizes the human and cultural diversity and provides students with growth opportunities and lifelong skills to live and work in a multicultural world.
4. The faculty and students contribute to scholarship, creative work and the discovery of knowledge to the extent appropriate to their offerings and the institution's mission.

3.C. The institution has the faculty and staff needed for effective, high-quality programs and student services.

1. The institution strives to ensure that the overall composition of its faculty and staff reflects human diversity as appropriate within its mission and for the constituencies it serves.
2. The institution has sufficient numbers and continuity of faculty members to carry out both the classroom and the non-classroom roles of faculty, including oversight of the curriculum and expectations for student performance, assessment of student learning, and establishment of academic credentials for instructional staff.
3. All instructors are appropriately qualified, including those in dual credit, contractual and consortial offerings.
4. Instructors are evaluated regularly in accordance with established institutional policies and procedures.
5. The institution has processes and resources for assuring that instructors are current in their disciplines and adept in their teaching roles; it supports their professional development.
6. Instructors are accessible for student inquiry.
7. Staff members providing student support services, such as tutoring, financial aid advising, academic advising and cocurricular activities, are appropriately qualified, trained and supported in their professional development.

3.D. The institution provides support for student learning and resources for effective teaching.

1. The institution provides student support services suited to the needs of its student populations.
2. The institution provides for learning support and preparatory instruction to address the academic needs of its students. It has a process for directing entering students to courses and programs for which the students are adequately prepared.
3. The institution provides academic advising suited to its offerings and the needs of its students.
4. The institution provides to students and instructors the infrastructure and resources necessary to support effective teaching and learning (technological infrastructure, scientific laboratories, libraries, performance spaces, clinical practice sites and museum collections, as appropriate to the institution's offerings).

CRITERION 4. TEACHING AND LEARNING: EVALUATION AND IMPROVEMENT

The institution demonstrates responsibility for the quality of its educational programs, learning environments, and support services, and it evaluates their effectiveness for student learning through processes designed to promote continuous improvement.

Core Components

4.A. The institution ensures the quality of its educational offerings.

1. The institution maintains a practice of regular program reviews and acts upon the findings.
2. The institution evaluates all the credit that it transcripts, including what it awards for experiential learning or other forms of prior learning, or relies on the evaluation of responsible third parties.
3. The institution has policies that ensure the quality of the credit it accepts in transfer.
4. The institution maintains and exercises authority over the prerequisites for courses, rigor of courses, expectations for student learning, access to learning resources, and faculty qualifications for all its programs, including dual credit programs. It ensures that its dual credit courses or programs for high school students are equivalent in learning outcomes and levels of achievement to its higher education curriculum.
5. The institution maintains specialized accreditation for its programs as appropriate to its educational purposes.
6. The institution evaluates the success of its graduates. The institution ensures that the credentials it represents as preparation for advanced study or employment accomplish these purposes. For all programs, the institution looks to indicators it deems appropriate to its mission.

4.B. The institution engages in ongoing assessment of student learning as part of its commitment to the educational outcomes of its students.

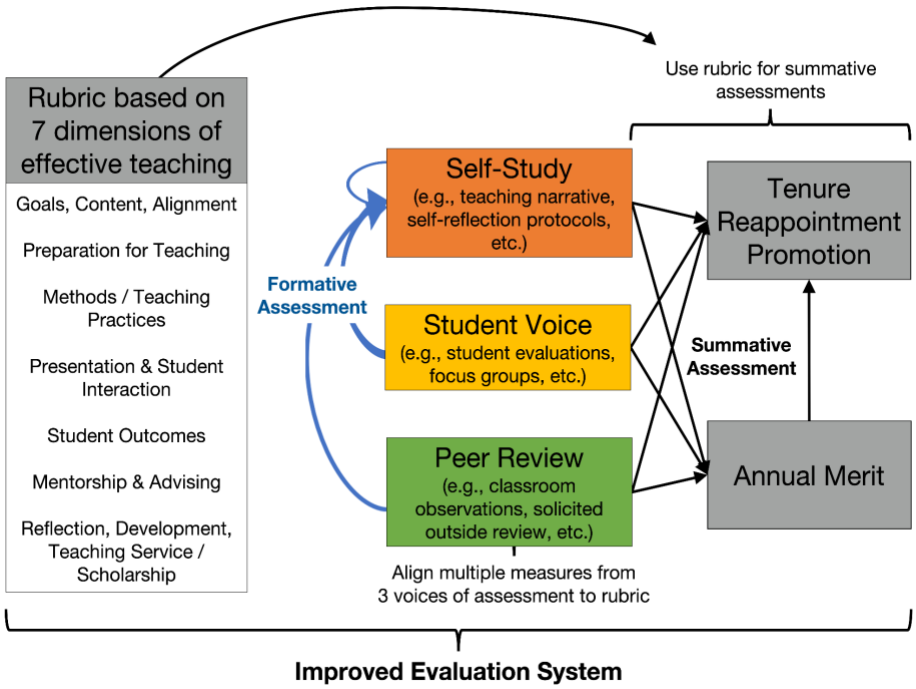
1. The institution has effective processes for assessment of student learning and for achievement of learning goals in academic and cocurricular offerings.
2. The institution uses the information gained from assessment to improve student learning.
3. The institution's processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty, instructional and other relevant staff members.

4.C. The institution pursues educational improvement through goals and strategies that improve retention, persistence and completion rates in its degree and certificate programs.

1. The institution has defined goals for student retention, persistence and completion that are ambitious, attainable and appropriate to its mission, student populations and educational offerings.
2. The institution collects and analyzes information on student retention, persistence and completion of its programs.
3. The institution uses information on student retention, persistence and completion of programs to make improvements as warranted by the data.
4. The institution's processes and methodologies for collecting and analyzing information on student retention, persistence and completion of programs reflect good practice. (Institutions are not required to use IPEDS definitions in their determination of persistence or completion rates. Institutions are encouraged to choose measures that are suitable to their student populations, but institutions are accountable for the validity of their measures.)

APPENDIX H: THE TEACHING QUALITY FRAMEWORK (TQF)

The Teaching Quality Framework addresses the question: How might assessment of student learning efforts be made more visible? One approach adopted by many campuses is to share relevant information about student learning on the institutional website.



Just as making student learning outcomes more transparent is a work in progress, so is this Framework. The Framework is not a checklist to be followed, but rather a guide to suggest priorities and possibilities with an eye toward communicating meaningful information about student learning that will be useful to various audiences in an online format. An institutional website that is transparent conveys information about student learning in a clear and coherent manner to a target audience. The Transparency Framework provides guideposts to consider in online communication. ("Transparency Framework")

Key TQF principles:

- Grassroots (faculty-level) selection, refinement, and adoption of new assessment practices is important to improve teaching and teaching assessment.
- Effective teaching assessment should be multidimensional and incorporate 3 "voices" (data sources) of assessment: the instructor/self, student voice, and peer review.
- Assessment should drive improvements to teaching by being formative.

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