Office of Teaching and Learning 2022 Assessment Report



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FROM THE DIRECTOR

It is a pleasure to share this annual assessment report. Following eleven years as a faculty member, I arrived at the University of Denver in summer of 2022. I remember the dread many of my faculty colleagues felt about annual assessment. At times, I felt it too. However, when I realized that assessment is simply a process for understanding how well students are mastering the concepts and skills I am passionate about, a switch flipped. From that point on, I viewed assessment as an opportunity to highlight student accomplishments and make data-informed decisions for the future. After numerous meetings with DU faculty and staff, I have experienced the thoughtful and meaningful work occurring in various disciplines and departments across campus. Thus, I am pleased to affirm that academic assessment is alive and well at the University of Denver.

The following report reflects a collection of work that was completed during difficult times—as faculty, staff, and students worked through the second year of a pandemic that deeply altered higher education. This report highlights the incredible work of many people in ensuring that the University of Denver continues to strive toward its high standards of teaching and learning.

As we look to the future, I am confident we will lean into outcomes assessment in ways that are creative and meaningful to the faculty and staff who help us fulfill our mission. When we make explicit what success looks like in our programs, we are better able to reflect on whether our experiences match our expectations. And when we use our data sources and narratives to reflect on teaching and learning, we can improve our practices. I am committed to processes that improve equity and growth, as we reflect on the various practices and beliefs that inform the University of Denver experience.

It is clear that DU faculty and staff are committed to meaningful assessment. I look forward to this next year of working together to do the best we can do for student learning.



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

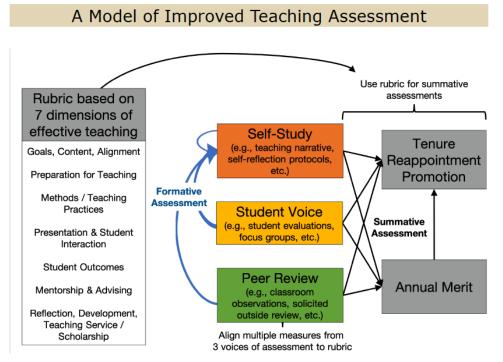
Office of Teaching and Learning Assessment Report 2022

INTRODUCTION

The educational programs at the University of Denver give students of varying backgrounds the opportunity to fulfill the University's mission of contributing to a sustainable common good. Assessment work revealed that students from increasingly diverse contexts pursued their academic dreams in new and exciting ways, as faculty and staff continued to provide multiple modalities for engagement through the pandemic. Such creative engagement has led to discoveries that will shape the future of higher education. To continue the good work that has already started, we must share an understanding of where assessment fits within faculty thriving, develop a common understanding of what meaningful assessment looks like, and learn the best possible ways to reflect on teaching and learning.

ASSESSMENT AND THE TEACHING QUALITY FRAMEWORK

One way to think about how assessment fits into faculty thriving is to consider the Teaching Quality Framework (TQF). Developed at the University of Colorado-Boulder, the TQF attempts to facilitate richer evaluation of teaching. Among its key insights is the conviction that faculty-led assessment should be "grassroots" work that leads to improvements in teaching by being formative. Rather than fear-based or punitive,



assessment work should be a part of faculty growth. In the context of course- and program-level assessment, this means faculty should be able to use assessment results to improve teaching and learning practices through reflection on multiple assessment measures, while recognizing that growth is not a fixed point, but a process of becoming the type of teachers and researches we hope to be (University of Colorado–Boulder).

COMMON UNDERSTANDINGS

To fully grasp what meaningful assessment looks like, we need a shared understanding of terms and processes. To that end, the following pages include language about assessment and the processes we engage at the University of Denver.

Sometimes described as a "reinforcing cycle," assessment is the ongoing systematic process of understanding and improving student learning (Massa and Kasimatis). The infinity loop image (right) from the 2023 Provost Conference highlights one way assessment feeds into faculty thriving. By engaging in assessment work, faculty gain insights about their vocation. When activated,



those insights lead to better opportunities for faculty practice and student learning. The cycle repeats itself as part of a culture of continuous reflection. Part of each faculty member's critical work, assessment generally entails three key components:

- 1. Faculty members articulate what they believe student success looks like in their program. This includes specific, measurable, and attainable outcomes for courses and programs that directly relate to student learning and quality pedagogy.
- 2. Faculty members gather quality artifacts and data from the curriculum that provide evidence of student learning. Artifacts should be gathered from direct sources of engagement that show student progress toward mastery of learning outcomes.
- 3. Faculty members analyze, reflect upon, and report on the gathered evidence. In return, assessment officers and administrators respond with helpful feedback and changes for how best to highlight successes for accreditation, budget allocation, marketing, and recruiting. (Suskie)

These three components are equally valuable in the cycle of ongoing assessment, whether they are applied at the course or program level. Though program-level assessment is the primary focus of this report, course-level work always informs program goals.

OUTCOMES DEVELOPMENT

The first two components of the assessment process above are important program guides. In order to describe successful student learning, programs must maintain clearly defined and aligned course and program outcomes. Likewise, if faculty and staff want to know how well students are mastering stated outcomes, they must gather clear data related to student learning and analyze it against normed benchmarks. The ensuing analysis and dialogue should then inform decisions about future program goals.

OUTCOMES DEVELOPMENT

Review and Revise

Faculty review the assessment information and make informed decisions about the future of the program.

Collect and Assess Faculty collect and assess data submitted by students. The data should be directly related to the outcomes and show student mastery of learning.



Design and Align

Faculty design clear, specific, and attainable learning outcomes in alignment with the mission and goals of the program and institution.

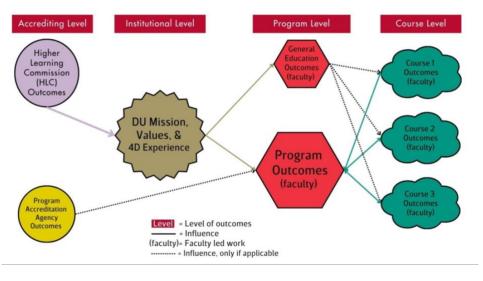
Developing outcomes is a reinforcing cycle of clarification toward teaching and learning growth. The graphic below highlights the cyclical process of outcomes development.

The following points are best practices for outcomes assessment:

- Faculty should write learning outcomes that reflect the mission and goals of the course, program, and institution. Outcomes should be clear, concise, actionable, and measurable; and grounded in good pedagogical and disciplinary standards.
- Outcomes should be assessed by a measure of student learning. In most cases, direct measures are preferable. Direct measures are assignments, projects, exams, and other artifacts of student learning drawn directly from student engagement in courses or cocurricular experiences. However, indirect measures can be helpful in assessing student growth through a program. Indirect measures include interviews and surveys that offer insights into student opinions about how learning has occurred. All types of measures should be aligned with outcomes in clear and measurable ways.
- Rubrics, norms, or other standards help check teaching and learning against a benchmark. Benchmarks give programs the opportunity to check both individual points of teaching and learning, as well as longitudinal program growth.
- Once the student has submitted an artifact, the faculty member should analyze the data to assess what student learning has occurred.
- Following this process, faculty and academic leaders should review the information to make informed decisions about how outcomes and measures should be continued or revised.

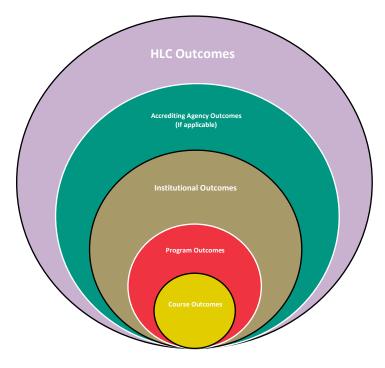
For outcomes to be assessed meaningfully, they should align across the curriculum. Alignment maps show the relationship between various elements of a program. One way to visualize alignment is to connect outcomes across course, program, and institution, and accreditation levels. The assessment map (right) depicts alignment from Higher Learning Commission outcomes to student learning in individual courses. For example, in the

OUTCOMES ASSESSMENT ALIGNMENT



engineering program, each course should align with the specific program outcomes, institutional goals, and accrediting agency's outcomes.

Faculty drive this work, as they seek to understand the teaching and learning at the various levels of assessment. At each level, faculty can reflect on teaching and learning through multiple types of direct and indirect assessment.



Another way to visualize this concept is a concentric circle. In the circular figure (left), outcomes fit within the next level of accountability. Like nesting dolls, each outcome is aligned to the next to provide alignment from accrediting-agency outcomes to course-level outcomes. This type of alignment allows for multiple ways to assess student learning and growth.

THE ASSESSMENT CYCLE

THE ASSESSMENT CYCLE

01 Submit

Faculty submit annual assessment reports that include data and reflections on teaching and learning at the course and program levels

02 Comment

Academic leaders offer feedback designed to help create opportunities for reflection

03 Collaborate

Faculty may work with academic leaders to interpret and reflect on the feedback and data in order to begin the process of discernment

04 Discern

Faculty discern if decisions must be made regarding any changes for the coming year and how to communicate program successes

05 Implement

Faculty implement the decisions that are made regarding from the discernment process

06 Review

Faculty and Administrators review the curriculum and program in order to submit the next annual assessment report



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.

 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 used since 2018. Created to align with certain portions of the Higher Learning Commission (HLC) accreditation guidelines, the rubric offers feedback to guide program assessment coordinators.

RUBRIC FOR FACULTY REFLECTION

In 2018, the Director created a Rubric for Faculty Reflection to help departments improve assessment approaches. The following rubric identifies ways to meet Higher Learning Commission (HLC) accreditation guidelines and enact promising practices recommended by the National Institute for Learning Outcomes Assessment (NILOA).

	Entry Point	Emerging	Robust	
	Rating = 1	Rating = 2	Rating = 3	
Continuous Improvement	No changes occurred.	1 or more change(s) occurred. Loose connection explained how data informed programmatic change(s).	1 or more change(s) occurred. Clear connection explained how data informed programmatic change(s).	
Dialogue	No dialogue about	Some dialogue about	Routine dialogue about	
	assessment occurred at	assessment occurred during	assessment occurred during	
	any meetings.	at least 1 meeting.	the majority of meetings.	
Data	No data collected, analyzed and/or interpreted.	At least 1 data source collected, analyzed and/or interpreted.	2 or more data sources collected, analyzed and interpreted. Data sources include indirect and direct measures.	

In the next academic year, a new rubric will enhance the way feedback is delivered. The new rubric will align with three sets of criteria to help us consider our work.

Rubric for Faculty Reflection About Assessment						
Code	Name	Description	No Evidence	Entry	Emerging	Enhancing
D.1	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
D.2	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
D.3	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
D.4	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

Proposed Rubric for 2022–2023 Faculty Reflection About Assessment

These four new categories will align with specific sets of guidelines:

- Current HLC guidelines (See Appendix C: *Criteria for Accreditation Policies*) help us consider teaching and learning at the national level, thus bringing us into conversation with peer institutions.
- The National Institute for Learning Outcomes Assessment (NILOA) Transparency Framework (see graphic below and Appendix D) helps us think about ways our questions about teaching and learning are clear and available to all stakeholders (i.e., faculty, staff, and students). It also offers checkpoints for assessment work.

The NILOA framework consists of six elements:

- Student learning outcomes that are specific and measurable
- Assessment plans that are descriptive, downloadable, and easily define measures
- Easily accessible assessment resources, such as webinars and handouts
- Current assessment activities that are clearly defined
- Assessment Student Plans Learning Outcomes Descriptive
 Defines measure Statements tines measu • Easily downloaded Use of Student COMMON TO ALL Learning Evidence Assessment Clearly worded Resources Targeted to audience • Provides examples Prominently posted Updated regularly Easily downloaded Describes improvement · Receptive to Defines next steps feedback Evidence of Current Student Learning Assessment Interpreted results Activities Contextualized to institution Defines activitie esented graphically Disseminated
- Evidence of student
 Evidence of student
 S P A R E
 Iearning that uses
 interpreted results,
 contextualization for the specific institution, and are easily accessible and
 disseminated
- Use of student learning evidence that is targeted to the specific audience with examples, describes improvement, and defines the next steps.
- The reporting structure of the university.

The goal of this feedback is to strengthen ways in which faculty reflect on how they are engaged in assessment processes. Additionally, using this rubric will allow the Director of Academic

Assessment to gather longitudinal data on how each program is growing in their assessment work.

- **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.

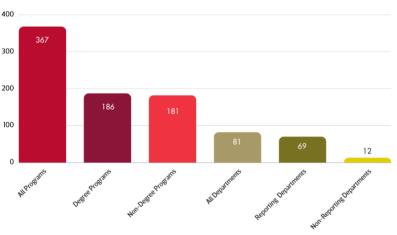
STRUCTURE OF THE UNIVERSITY AND ITS ASSESSMENT REPORTS

The assessment cycle exists within the larger structure of the University of Denver. The University is comprised of eleven colleges offering degree programs in numerous categories. In addition to degree-granting programs, the colleges also offer minors and certificates that support student learning. DU is accredited by the Higher Learning Commission. Various programs—such as Engineering, Psychology, and Education—are also accredited by outside agencies.

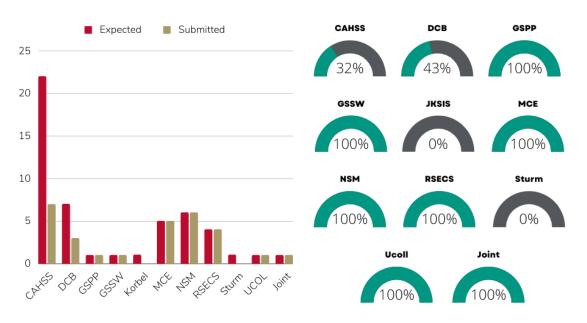
Program numbers for the 2021–2022 academic year are indicated in the figure to the right.

The numbers to notice are the number of degree programs and reporting units. Degree programs award bachelor, master, or doctorate degrees. Reporting departments are departments that house degree-granting programs.

UNIVERSITY DATA



REPORTS BY COLLEGE

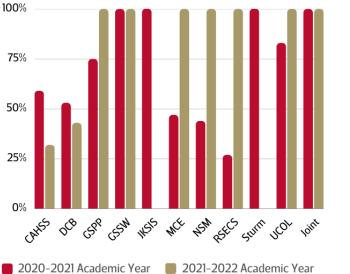


This graphic shows both the number of expected and submitted reports as well as the percentage of submitted reports by each college for the 2021-2022 academic year.

For the 2020–2021 academic year, there was a general upward trend in the percentage of programs submitting reports from the previous year. It is important to remember that these reports were submitted during a year in which many programs saw significant difficulties due to the COVID-19 pandemic. The graphic below shows the reporting information for this past year from each college. The two colleges with no report—Sturm and JKSIS—have both been involved in assessment work, as discussed later. However, for various reasons, not every college submitted an executive report for 2021–2022.

The bar graph (right) shows the comparison between 2020–2021 and 2021–2022 reporting for each college, and the total percentage of reports for each year. Note the increased percentage of reports submitted by college from 61% in 2020– 2021 to 70% in 2021–2022.

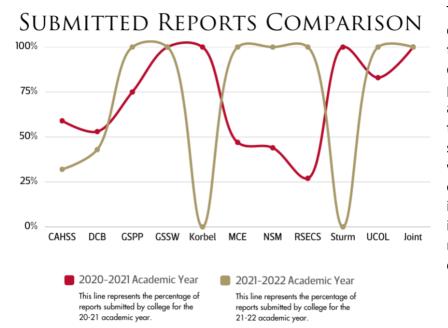
SUBMITTED REPORTS COMPARISON



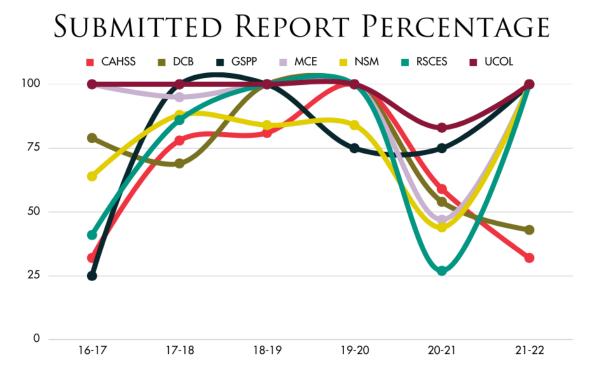
2020-2021 Academic Year This line represents the percentage of reports submitted by college for the 20-21 academic year.

2021-2022 Academic Year This line represents the percentage of reports submitted by college for the 21-22 academic year. 61% Total Percentage 20-21

Total Percentage 21-22



The line graph (left) shows the change in reporting between the last two years in a different way. Some colleges, particularly those with outside accreditors, are only expected to submit an executive summary of their assessment work. Thus, they only submit one report. However, it is important to recognize improvement in submission rates to reflect growing levels of involvement.



GSSW, Korbel, Sturm, and the Joint PhD program are not inlcuded in this graph because they have submitted an executive summary. Their data is either 100% or 0%.

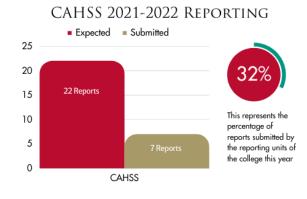
In addition to the comparison of the last two years, the next graphic (above) shows submission data rates for the past five years across programs with reports beyond an executive summary. The figure shows a rebound in report submission from the two most intense years of the pandemic. In 2020–2021, reporting significantly dropped from previous levels. However, 2021–2022 report submissions have begun to return to pre-pandemic levels.

REPORT SNAPSHOTS BY COLLEGE

The following snapshots highlight some of the good assessment work happening at the program level. While there were many reports to choose from, the snapshots below reveal ideas, patterns, and informed decision making that could be helpful for all units.

College of Arts, Humanities, and Social Sciences (CAHSS)

The College of Arts, Humanities, and Social Sciences is one of DU's largest colleges in terms of programs and units. It hosts approximately 54 degree-granting programs, in addition to numerous certificates and minors. These programs are spread 22 reporting units.



In the past year, CAHSS saw a decrease in submitted reports. However, the reports that were submitted offered examples of quality work in progress.

REVISING OUTCOMES

The Anthropology Department has begun the work of redesigning their program outcomes and assessment alignment map. As stated by assessment director Alejandro Cerón, Associate Professor and Chair, "the work of developing new outcomes that more closely align with the goals of our program is the work we must complete this year."

This conversation resulted from the unit's work assessing their Bachelor and Master of Arts programs. In previous years, the program has altered the ways in which capstone projects and First-Year Seminars helped students succeed. However, results also showed a need to adjust the language of their outcomes to reflect the type of curriculum students were engaging (Cerón, *Anthropology Assessment*). While this work will last well into the next academic year, it is a result of assessments completed in the previous year's work and the ongoing process of improving student learning.

Another department involved in significant work is the Center for World Languages and Cultures (CWLC). Led by Virginie Cassidy, Director and Teaching Associate Professor, the CWLC is implementing a new vision for the first-year language experience. Through Cassidy's leadership, the CWLC has already begun important work on new student learning outcomes and developing a common assessment. These new outcomes will be aligned with ACTFL standards, the most recognized language standards in North America. The goal for first-year students is to attain novice high proficiency by the end of their first-year sequence (Cassidy).

USING DATA TO MAKE INFORMED DECISIONS

Political Science Professor and Chair Joshua Wilson and his assessment team are doing a great job of thinking about how to improve interrater reliability in the scoring of their capstone papers. The Political Science department developed a scoring rubric for the capstone and asked all faculty to use it. The rubric is based on three important program outcomes: analytical argumentation, evidence, and clarity. The rubric has proved a valuable tool to assess student learning in a course that is taught by varied faculty. One piece of information gleaned from their data analysis is how offering more capstone sections during the past year may have helped students master important aspects of the outcomes because of a smaller teacher to student ratio. The ability to offer multiple capstone sections focused on the same assignment is partially due to the ability to check scoring across multiple raters. The program also discovered a need to improve instruction around the analytical argumentation outcome based on findings across sections (Wilson).

College of Natural Sciences and Mathematics (NSM)



The College of Natural Science and Mathematics is a diverse college with several programs, including Biology, Geography and the Environment, Mathematics, and Physics and Astronomy. These programs are all involved in important assessment work.

CREATING PROGRAM ALIGNMENT THROUGH THE USE OF ALIGNMENT MAPS

Faculty in the Biological Sciences **Professional Science Master's** (PSM) program have worked to align their formative and summative assessments in various courses with program outcomes. One remarkable aspect of the PSM program is their use of an alignment map. Program leaders developed a levels map, which highlights where in courses an outcome is introduced, reinforced, and mastered. This type of map helps faculty and assessment leaders document where an outcome occurs throughout the curriculum, as well how the outcome functions within a course.

	Intended Student Learning Outcomes				
Course Requirements	SLO1: Demonstrate advanced disciplinary knowledge	SLO2: Apply and integrate interdisciplinar y concepts and information	SLO3: Demonstrate professional communicatio n skills	SLO4: Demonstrate an ability to interpret, evaluate and discuss	SLO5: Engaged in scholarly inquiry; demonstrate ability to analyze, critique, and integrate
BIOL4212 Adv. Molec Biology (3 cr)	I				
BIOL4211 Adv. Cell Biology (3 cr)	I				
BIOL4085 Accel Biostatistics (2 cr)	I				
BIOL4310 Foundations Literature (4 cr)	I	I	I		
BIOL4991 Indep Study (1 cr)- BIOL4980 Internship Biomed Sci (2 cr)	I, A	I, A	I, A	I, A	I
BIOL4870 Medical Ethics (4 cr)		I		I, A	
BIOL4231 Responsible Conduct Research (1 cr)				I	
BIOL4155 Leadership Science (1 cr)			I, A	Ι	
BIOL4880 Capstone Biomedical Sciences (4 cr)			I	I	I
Elective course(s)	I	I			
Non-course requirements					
Capstone project proposal	I, A	I, A	I, A	I, A	I, A
Written and Oral capstone presentation	M, A	M, A	M, A	M, A	M, A

PSM CURRICULUM ALIGNMENT

evidence collected

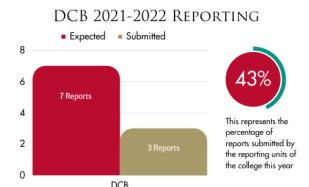
For example, if an outcome is introduced in a course, there is probably only a small amount of attention given to the outcome, such as textbook chapter, a lecture, or short formative assignment. However, if the outcome is mastered in a course, there should be significant attention and some sort of summative assessment to show student mastery. The PSM map is captured in the table above.

Daniels College of Business (DCB)

Daniels College of Business is home to a significant number of programs, which range from multiple bachelor's degrees to an Executive Doctorate.

UPDATING ASSIGNMENTS

This past year, the International Business Program, an interdisciplinary major, worked to improve student intercultural competency



through a reflection model designed by their team. Assessment coordinator and Associate Professor of Finance Tracy Xu led efforts to improve the student responses through their projects. A significant finding from the program's assessment work is how working together across disciplines in a capstone project can help students integrate their learning. Professor Donald Mayor helped redesign the project and develop the rubric to help assess the work. As Dr. Xu writes:

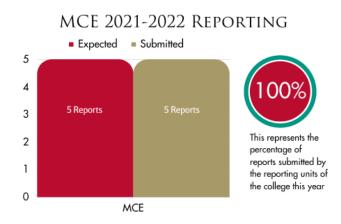
This year marked a "milestone" in the assessment of International Business program. Based on prior assessment, we discovered the challenges of assessing a key student learning outcome of the program, cross-cultural communication proficiency. First, although students have learned the cross-cultural content across different courses in various stages of the program, there were no opportunities for students to integrate and synthesize prior learning and apply to real world international business settings. Second, we lack wellsuited instruments to assess how well our students have met this learning goal. We carefully reexamined the curriculum and gathered the feedback from faculty and decided to redesign the capstone course to address these challenges. The new cross-cultural content and assignment were developed to enhance students' learning and ensure the valid measurement for assessment. What's more, the important ethics elements, including Integrative Social Contracts Theory and the Daniels Principles, were incorporated to expand students' horizon in the cross-cultural business environment. A special thank you to Professor Donald Mayor for his excellent work! The newly designed capstone course elevated the curriculum and strengthened the program. We are very glad to be able to efficiently utilize the assessment results, make improvements on both the course and program level, and successfully close the loop.

This highlights the process of review and revision that is essential to meaningful assessment. By taking time to look at previous work and consider it in light of present challenges, the faculty increased the alignment of student capstone projects with the college's mission and university values.

USING DATA TO MAKE INFORMED DECISIONS

The Business Information Analytics Program, led by Teaching Associate Professor Scott Toney, worked diligently to assess their courses. A highlight from their work was the amount of data analyzed. Throughout the year, they downloaded and reviewed reports from their courses to consider Program Learning Outcome 1: Students will manage data in a business environment using the appropriate tools and techniques that allow the data to be used in the analytic

process to support decision-making. The data revealed students were performing relatively well toward this outcome. Still, the faculty suggested training instructors in cross-disciplinary ways as one of their future considerations. They feel that doing so will improve overall student performance and help faculty support one another as they learn new course materials. (Toney)



Morgridge College of Education (MCE)

CREATING PROGRAM ALIGNMENT THROUGH THE USE OF ALIGNMENT MAPS

Morgridge College of Education maintains several programs accredited by outside agencies. In their ongoing work of assessment, these programs have focused on how to improve student learning through reflection on their program outcomes, in alignment with their stated mission. For example, Professor of

Education in the Counseling Psychology PhD Maria Riva and her team decided which assessments are important for each outcome.

The faculty developed outcomes and an assessment map (below) that highlights when and how outcomes data will be analyzed. The team thoughtfully identified indicators of student learning. With both direct and indirect evidence, each assessment is associated with a course or activity and has a timeframe that fits within a larger outline of data. (Riva)

Section 2: Da n this section, des	/ E.K. COLIEGE OF EDUCATION ta & Findings cribe how the SLOs were measured, what you found, and villected to examine the SLOs identified in the introduction			demic year.
Data Type	Brief Description	Associated Courses / Activities	Timeframe Collected (e.g., fall, winter, spring, summer)	How Analyzed? (e.g., rubric, qualitative summary, average scores, feedback from supervisors)
Course Grades	Curriculum has been aligned with APA Discipline Specific and Profession-Wide Competencies.	Select Courses	Fall, Winter, Spring	Percentage of pass / fail APA Knowledge Areas and Competencies summarized at the academic year level.
Comprehensive Exam	Students will be required to answer six questions. Each area will be graded on a five-point scale ranging from: 1 (no competence demonstrated in this area), 2 (insufficient demonstration of competence in this area), 3 (ininimum competence demonstrated in this area), 4 (competence demonstrated in this area), 5 (exceeds competency expectations in this area).	NA	Winter (second or third year)	Ratings of pass with honors, pass, conditional pass, fail
Practicum Evaluation of Student Performance	Student self-evaluation and field supervisors evaluate student performance in 11 areas; each area including various competencies.	CNP 4752 Counseling Practicum: Advanced I	Fall, Winter, and Spring	Mean ratings for each area by term and practicum I or II

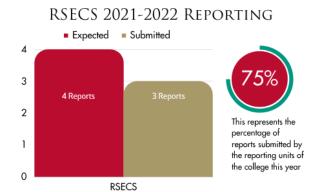
		CNP 4753 Counseling Practicum: Advanced II		
Internship Evaluation of Student Performance	Field supervisors evaluate student performance in		Fall, Winter, and Spring	
Annual Student Review	Students are assessed annually according to the three "aims" of the program and given feedback from faculty via a formal letter.	NA	Spring	Number of students meeting expectations for each aim
Student Survey	Students completed a survey that includes items related to APA profession-wide competencies on which student self-assess (this is part of the annual student review).		Fall	Mean ratings by competency and year in program
Alumni Survey	Sent to alumni two and five years post-graduation to obtain feedback on APA Profession-Wide Competencies, employment settings, licensure, and post-graduation research and scholarship.	NA	Winter	Mean ratings by area and competency, distribution of employment settings and types of research / scholarship
Pre-Doctoral Research Project	Students are required to a research project prior to proposing the dissertation.	NA	First two years	Rubric and pass/fail rates
Dissertation Proposal	Students complete and defend a dissertation proposal.	NA	Completed by October 1 (prior to internship)	Pass / fail rates

4

Each program in MCE has such a plan and indicators of student success. Using these plans, programs can determine gaps in student learning as well as where in the curriculum there may need to be changes. For example, in the Curriculum & Instruction Programs, one of the things Maria Salazar, Associate Dean for Faculty Affairs and Development, and her team noticed was the need to update their rubrics to ensure alignment between the comprehensive exam and the doctoral proposal oral defense and dissertation defense. One part of future program work is to ensure these rubrics and assessments align with Doctoral Applied Competencies. This alignment ensures that what is assessed for each student lines up with program mission and goals, as well as outside accreditation norms. (Salazar)

Daniel Felix Ritchie School of Engineering and Computer Science (RSECS)

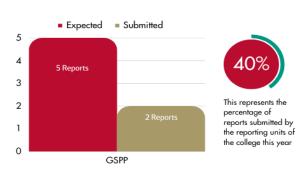
The Richie School of Engineering and Computer Science is home to four reporting units and twenty degree-granting programs. Engineering programs completed a significant amount of work this past year, as they prepared for a visit from the ABET accreditation team.



REVISING OUTCOMES

The engineering program spent time aligning

internal outcomes with ABET outcomes, so their courses and experiences aligned with the outside accrediting agency's requirements. Additionally, the graduate program revised the ENME 4950 course, so students can reflect on their learning and be assessed on their mastery of standards specific to the discipline. For students who struggle, programs offer tutoring and other programs to help. Additionally, the college worked with the Office of Diversity, Equity and Inclusion (DEI) to build assignments that assess student capacity for global learning and interaction with diverse groups.



GSPP 2021-2022 Reporting

The Graduate School of Professional Psychology (GSPP)

GSPP is home to four master's and one PhD program. This past year, two masters' programs submitted assessment reports: forensic psychology and sport and performance psychology.

COLLECTING CLEAR DATA

Each year, core faculty collect data from students through signature assignments designed to help students demonstrate mastery of each of the program outcomes. Through both assignments and observations by faculty and supervisors, the core faculty rate each student annually on their progress. After collecting and analyzing the data, faculty share the quantitative data with students to inform progress and ways of improvement. At the end of the assessment cycle, faculty meet for a yearly retreat to reflect on student learning and the program. From this retreat, decisions are made to determine the best course forward. (*Master of Arts in Sport & Performance Psychology Assessment Report*)

Executive Summaries

Four colleges and the Joint DU Iliff PhD program were asked to provide an executive summary of their work for the past year. Among these colleges and one program, three submitted reports. Those who did not submit a report met with the Director of Academic Assessment to discuss their plans.

EXECUTIVE SUMMARIES 2021-2022 REPORTING



STURM COLLEGE OF LAW (STURM)

Sturm College of Law is working to revise their learning outcomes, considering developments in Bar Association Accreditation. Roberto Corrada, Chair in Modern Learning, and a faculty committee have already dedicated time to considering how outcomes should be interpreted and revised. Their reflective work is giving shape to innovations in law education.

KORBEL SCHOOL OF INTERNATIONAL STUDIES (KORBEL)

The Korbel School of International Studies is continuing work on revising their assessment plan, considering curricular and personnel changes that occurred this past year. Associate Dean Lewis Griffith met with the Director of Academic Assessment to develop a plan for improving assessment in the college. This work should be completed in the next year with updated reporting.

UNIVERSITY COLLEGE (UCOL)

University College continues to do excellent work with the data they glean from various sources related to their programs. Bobbie Kite, Associate Dean for Academic Operations and Affairs, and Chelsie Ruge, Director of Learning Experience Design, work with an excellent team developing innovative assessment processes. One of the strong points of University College's assessment is development of numerous dashboards and digital visualizations to track outcomes related to various programs. One of the challenges they are working on is how best to engage beginning students in some of the basic skills necessary for success in college. Their work on their introductory courses will yield positive improvement in student learning and retention. (Kite and Ruge)

UNIVERSITY OF DENVER / ILIFF SCHOOL OF THEOLOGY JOINT PHD IN THE STUDY OF RELIGION (JOINT)

The Joint DU and Iliff PhD program worked to improve student learning and skills for teaching in diversity, equity, inclusion, and justice. Specifically, they worked on their outcome related to growing in knowledge and understanding of voices from underrepresented groups in the study of religion. The faculty revised a required course to help them both understand the issues in this area and grow in their ability to teach in ways that encourage engagement with underrepresented groups.

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 a few points worth considering:

1. Ensure that your program has clear, measurable, and actionable learning outcomes.

Student learning outcomes (SLOs) are the way in which we state how we know students are successful in learning. One way to write a good outcome is to ask the following questions regarding how students should be by the end of your program or course:

- What do you want students to be able to do?
- How can students demonstrate the knowledge the program or course intended them to learn?
- What does success look like for students in your program or course?

By considering how a student would show their mastery of program or course goals, one can more easily write student learning outcomes that are measurable. Even if you have outcomes, they should be regularly revisited to ensure that student learning is centered in our programs. The Indiana University Purdue University Indianapolis (IUPUI) Center for Teaching and Learning has an excellent resource for writing learning outcomes ("Writing and Assessing Student Learning Outcomes").

2. Use Canvas, DU's learning management system (LMS), for your program and courses.

Import learning outcomes into each course or co-curricular offerings in your program. By doing so, you will be able to assess these outcomes after they are attached to assessments. Canvas is a powerful tool for improving student learning. Having course content connected to student learning outcomes is a great way to acquire useful data for assessment. If you need help with Canvas, work with professionals in the Office of Teaching and Learning.

3. Align outcomes with courses and co-curricular offerings.

One of the important factors in assessment is ensuring that outcomes match what is taught in all program offerings. To accomplish this, program faculty should consider the types of experiences a student has throughout the program and how those introduce, reinforce, or help students master the learning outcomes. Outcomes that are not aligned with offerings may highlight that the outcome is not necessary, needs to be revised, or that there needs to be a specific offering that relates to the outcome.

4. Update assessed assignments to guarantee what is assessed is the student mastery of learning outcomes.

Assignments that do not actually assess student learning of outcomes should be updated or replaced to align with what is expected of student mastery in a course or program. Whether it is a multiple-choice exam, performance, or research paper, it is essential that what is being asked of a student will help them show their attainment of the material taught or skill that is supposed to be learned. Using high-impact teaching practices (HIPs) as defined by the American Association of Colleges and Universities ("High-Impact Practices") can provide students with opportunities to demonstrate mastery of learning outcomes through engaged and authentic learning.

5. Consider how students from diverse communities are affected by your program assessment.

As the University strives for more diversity, equity, and inclusion, it is essential to consider the ways in which learning outcomes can be mastered by different students. 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 mastering outcomes gives a more complete picture of student learning 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.

6. Collect clear and aligned data for your assessment and analyze it well.

Assessment sometimes falters because of one of two problems: either there is no data associated with a narrative or no narrative associated with data. Data alone is not assessment; nor is a narrative based on feelings and hunches. Collect clearly aligned data that supports understanding about student learning in the program. This can occur in several ways, but working with the Director of Academic Assessment, Student Affairs, or the Office of Institutional Research can ensure helpful data is gathered. Then, analyze that data through the lens of how we can support student learning and mastery of this outcome.

7. 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.

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.

APPENDIX A: 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 as a result 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.

Educational Program (Same as federal definition)

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)."

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:

STUDENT LEARNING OUTCOMES (SLOS)

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.

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. Ultimately, the foundation for an assessment plan is to collect summative assessment data and this type of data can standalone. Formative assessment data, however, can contribute to a comprehensive assessment plan by enabling faculty to identify particular points in a program to assess learning (i.e., entry into a program, before or after an internship experience, impact of specific courses, etc.) and monitor the progress being made towards achieving learning outcomes.

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)

KEY TQF PRINCIPLES:

• Grassroots (faculty-level) selection, refinement, and adoption of new assessment practices is important to improve teaching and teaching assessment.

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- 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.

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 B: 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 C: 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, postbaccalaureate, 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.
 - 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.
 - 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.

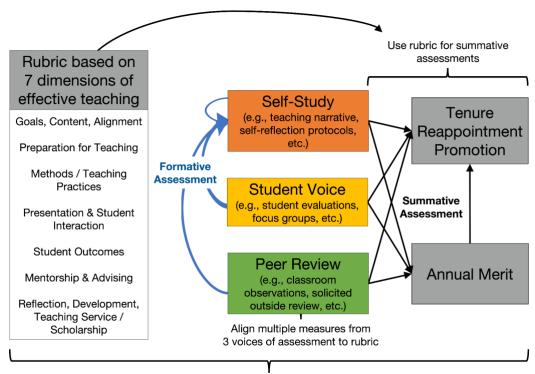
4.C. The institution pursues educational improvement through goals and strategies that improve retention, persistence and completion rates in its degree and certificate programs.

- 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 D: 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")



Improved Evaluation System

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