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OFFICE OF
TEACHING & LEARNING

1864

ASSESSMENT REPORT

JUNE 2020

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2020 ASSESSMENT REPORT

WELCOME FROM THE DIRECTOR OF ACADEMIC ASSESSMENT

This report summarizes metrics that highlight the processes and the impacts of program assessment initiatives I have led between October 2016 and March 2020. In my role, I provide leadership, direction, and advice for building and sustaining a robust culture of continuous improvement that supports processes for curricular renewal, academic innovation, and organizational transformation. Of significance, I steward initiatives to help DU satisfy accreditation guidelines for assessment and continuous improvement.

This work is possible with the leadership of Dr. Jennifer Karas, Vice Provost for Academic Affairs; Dr. Kate Willink, Vice Provost for Faculty Affairs; Dr. Leslie Cramblet Alvarez, Director of the Office of Teaching and Learning (OTL); Tia Quinlan-Wilder, Faculty Scholar of Assessment; deans and associate deans; department chairs; OTL colleagues; and our dedicated group of Assessment Fellows, a homegrown cadre of faculty and staff members who have attended trainings to serve as consultants and share their assessment expertise in service of improving student learning at DU.

I invite you to join our communal endeavor to critically transform the culture of teaching, learning, and assessment at DU. The hope is for DU to continue evolving into a vibrant and inclusive space for all DU community members to learn, grow, and thrive.

Christina

Dr. Christina H. Paguyo
Director of Academic Assessment

DU IMPACT 2025

SUPPORTED STRATEGIC INITIATIVES

Transformative Direction One
Strategic Initiative 2: Enhancing and Expanding our Learning Environment

Transformative Direction Two
Strategic Initiative 2: Supporting Research, Scholarship and Creative Expression
Strategic Initiative 4: Knowledge Bridges

Transformative Direction Four
Strategic Initiative 2: A Community of Diversity, Equity and Inclusive Excellence

WELCOME FROM THE
FACULTY SCHOLAR OF ASSESSMENT

Though I've been working on assessment and assurance of learning within my unit and my college for many years, I have increasingly engaged in DU's efforts at the university level, and I was thrilled to accept the inaugural Faculty Scholar of Assessment position this year. I'm part of the faculty in the Department of Marketing in the Daniels College of Business (DCB), and I was recently appointed Director for Assurance of Learning in DCB. My work in assessment began as a service activity that grew from my passion for delivering high quality learning experiences for our students.

My primary focus, and probably my biggest challenge, has been making assessment more meaningful and informative for faculty to design and strengthen curricula. While most faculty want to deliver the best for our students, assessment is often seen as separate from good teaching. My goal is to help faculty use assessment that inspires positive change, document continuous improvements and their outcomes, and celebrate their progress – in other words, value their teaching and assessment efforts. Christina and I, along with our growing group of Assessment Fellows at DU, are working diligently and collaboratively to create this cultural transformation. I look forward to connecting with the DU community and creating great synergies, innovative approaches, and efficient processes to ensure quality student learning.

Tia M. Quinlan-Wilder

Tia Quinlan-Wilder, Daniels College of Business (DCB)
Associate Teaching Professor in Marketing
Director for Assurance of Learning (DCB)
Faculty Scholar of Assessment

Assessment Fellows

Many thanks to the following faculty and staff members who go above and beyond in their leadership and service roles as Assessment Fellows. These individuals serve as consultants who provide feedback on program assessment reports, contribute to the development and delivery of assessment trainings, and help strengthen the culture of teaching, learning, and assessment at DU.

Sarah Catanzarite, MA, Adjunct Faculty, Office of Internationalization

Adrienne Gonzales, PhD, Director, Center for the World Languages & Cultures

John Hill, PhD, Director, Environmental Policy and Management Degree and Security Management

Laura Sponsler, PhD, Clinical Assistant Professor, Higher Education Program and Resident Scholar - Teaching and Professional Faculty

Annette Stott, PhD, Professor, Art History, Director of DU/Iliff Joint PhD in the Study of Religion

Randy Wagner, PhD, JD, Director, Strategic Initiatives and Socio-Legal Studies, Sturm College of Law

Rachel Walsh, PhD, Head of Languages, Literatures, & Cultures, Associate Professor of Italian

FAST FACTS
PROGRAM ASSESSMENT

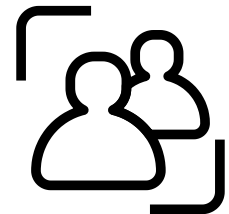## INCREASED PARTICIPATION OF INDIVIDUALS

63% Increase

In the percentage of individuals who contributed to program assessment reports from 2017 to 2019.

INCREASED PARTICIPATION OF PROGRAMS

32% Increase

In the average rate of program assessment report submissions from 2017 to 2019.

CLOSING THE LOOP: CONTINUOUS IMPROVEMENT

15% Increase

In the percentage of units that engaged in meaningful continuous improvements in 2019.

OVERVIEW

The Director of Academic Assessment is engaged in four areas to embed assessment throughout the cadence of academic activities at DU. Taken together, these areas help DU meet our mission of creating an intellectually engaged and vibrant community of students, staff, and faculty.

I. Curricular Renewal and Academic Innovation (50%)

Direction, leadership, and advice for the Office of Teaching and Learning (OTL), offices of deans, faculty, academic. administrators, and others involved in the design, development, assessment, and evaluation of academic programs to meet accreditation guidelines.

II. Organizational Transformation (30%)

Direction, leadership, and advice for curricular and co-curricular units about conducting evaluations, logic models, and self-study activities for organizational transformation.

III. Research and Grant Writing (10%)

Consultations for faculty and staff about writing successful grant proposals and conducting research about teaching and learning that incorporate assessments, evaluations, and/or logic models.

IV. National Trends and Best Practices (10%)

On the leading edge about national trends and promising practices necessary to lead OTL efforts regarding assessment, evaluation, and accreditation. Member of elite team of peer reviewers in the Higher Learning Commission (HLC) Peer Corps for institutions within the 19-state North Central region.

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 Rating = 1	Emerging Rating = 2	Robust 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 assessment occurred at any meetings.	Some dialogue about assessment occurred during at least 1 meeting.	Routine dialogue about assessment occurred during 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.

For assessment conducted during the 2017-18 and 2018-19 academic years, the Director and Assessment Fellows used this rubric to provide feedback for program assessment reports. There is no feedback according to the rubric for the 2016-17 academic year because the rubric was not created until 2018.

Meaningful Continuous Improvement
Also known as "closing the loop" in assessment, meaningful continuous improvement invites departments to make programmatic changes informed by data. Just as doctors deliver treatments in consultation with medical data from and about patients, meaningful continuous improvement occurs when faculty make curricular changes based on assessment data from and about students.

Dialogue
Dialogue helps departments explore how their curriculum meets the intentions, aspirations, and goals that animated their program into fruition. In fact, faculty who engage in dialogue about student learning often reflect more deeply about their teaching and curricula. Dialogue is evident when faculty schedule time to discuss assessment, and conversations can be documented through meeting minutes and email messages.

Data
Similarly to how meteorologists use barometers to gauge air pressure, faculty use data to make interpretations about student learning. Data such as portfolios, presentations, tests, surveys, and interviews are helpful ways to gauge how and what students are learning so curricula can be adjusted accordingly.
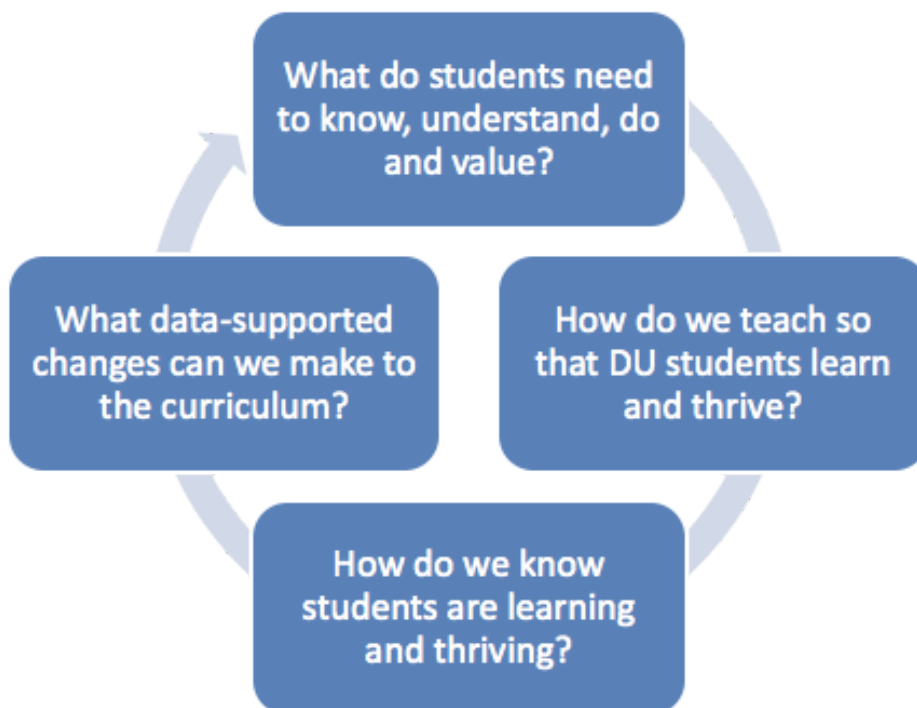
To increase contributions to assessment reports from a broader representation of the DU community, we piloted this process for the 2018-2019 school year:

(1) faculty shared a working draft of the report with their department chair;

(2) department chairs wrote a cover letter that highlights two things to celebrate, two opportunities to improve, and ideas for improvement; and,

(3) associate deans reviewed cover letters to inform their summary statements in support of program review.

This practice has increased participation by 63%—from N=138 faculty to N=225 faculty—and helps unit-level administrative leadership understand how faculty conduct assessment and faculty closest to curricular practices engage and reflect upon continually improving student learning.

Revising the process to engage more faculty, particularly professors in leadership positions, has created entry points for more engagement in the continuous cycle of student learning.

Figure 1. Continuous Cycle of Student Learning (Paguyo, 2019)

What do students need to know, understand, do and value?

What data-supported changes can we make to the curriculum?

How do we teach so that DU students learn and thrive?

How do we know students are learning and thriving?

In another example of increase in participation, the figure below documents the rate of program assessment reports submissions by unit: College of Arts, Humanities and Social Sciences (CAHSS), College of Natural Sciences and Mathematics (CNSM), Daniels College of Business (DCB), Graduate School of Professional Psychology (GSPP), Sturm College of Law (JD LAW), Morgridge College of Education (MCE), Ritchie School of Engineering and Computer Science (RSECS), and University College (UCOL). While the JD program in the Law School and UCOL have consistently submitted reports at 100% rates, most units increased their submission rates over time.

**Figure 2. Submission Rates of Program Assessment Reports (N=138) by Year**
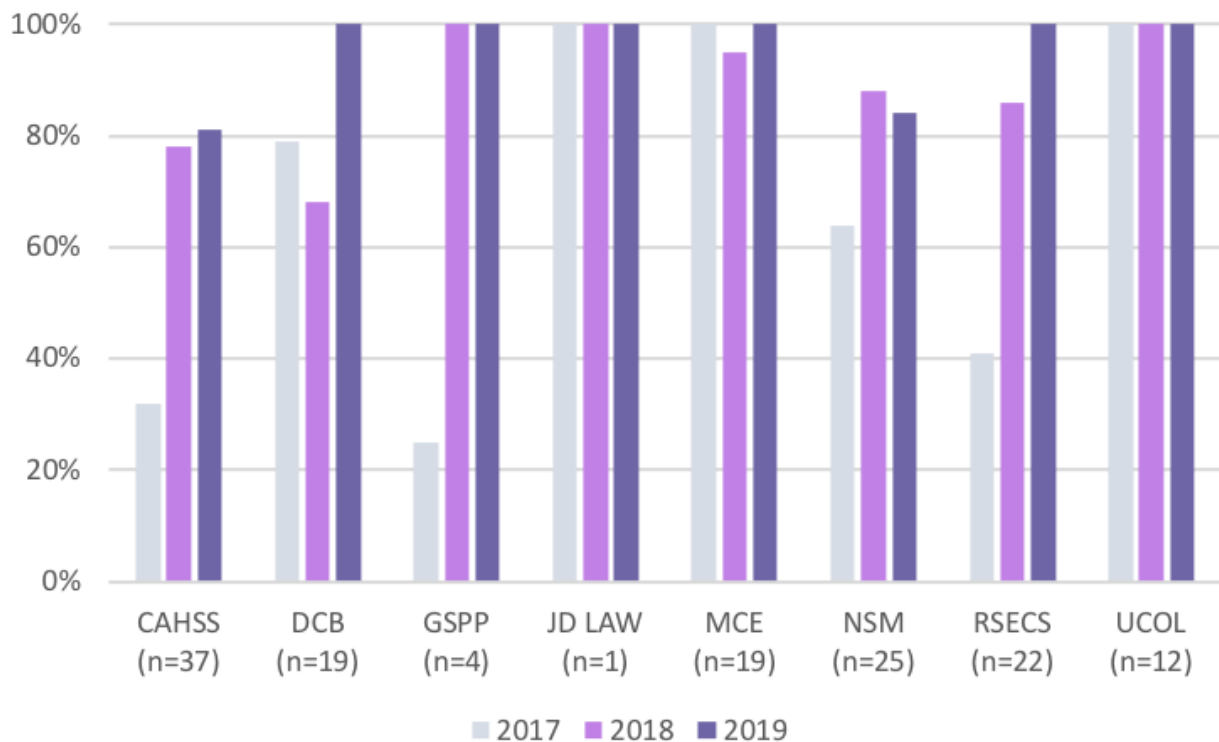
Academic units that were exempt from consistently submitting program assessment reports in 2017, 2018, and 2019 are absent from this analysis. A list of these units is available in the appendix.

The figure below summarizes the percentage of DU academic programs (N=138) with robust ratings in 2018 and 2019 in accordance with the Rubric for Faculty Reflection. Since the rubric was created in 2018, no rubric data exists for 2017.

Figure 3. Percentage of DU Academic Programs (N=138) with Robust Ratings
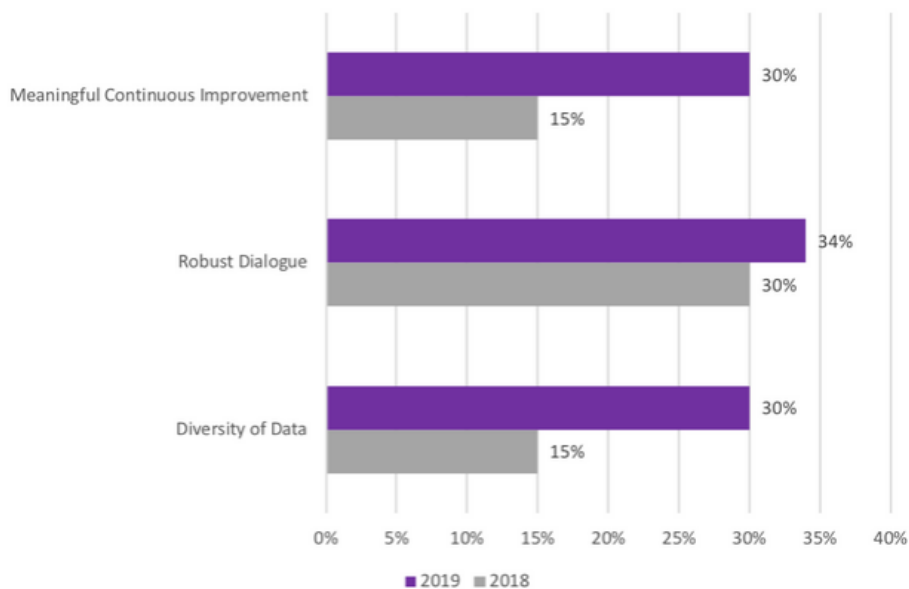
Meaningful Continuous Improvement

- The percentage of programs that engaged in meaningful continuous improvement or "closed the loop" doubled from 15% in 2018 to 30% in 2019. This increase suggests that departments used assessment data to make curricular changes and strengthen opportunities for students to learn.

Dialogue

- The percentage of programs that participated in robust dialogue increased nominally, so making faculty discussions an explicit dimension of student learning will be valuable for the future. Ongoing faculty conversations about student learning tend to kindle opportunities for improving the curricula.

Data

- The percentage of programs that collected, analyzed, and interpreted a diversity of data doubled from 2018 to 2019. The importance of harnessing a broad range of data—such as papers, exams, surveys, and focus groups—helps faculty understand how students are learning and what students are experiencing in their academic disciplines.

To clarify, this page highlights programs with ratings of 3 (robust).
The majority of programs yielded ratings of 2 (emerging), which means that while many units are making progress on assessment, there is substantial potential for growth.

The following figure depicts each unit's average rubric score regarding dialogue. Here is what the scores mean:

- 1 = No evidence is available to suggest dialogue about assessment occurred

- 2 = Some evidence is available to suggest dialogue about assessment occurred during at least 1 faculty/staff meeting in the last year

- 3 = Clear evidence is available to show dialogue about assessment occurred during the majority of faculty/staff meetings in the last year

- Since the rubric was created in 2018, no rubric data exists for 2017.

Figure 4. Rubric Scores for Robust Dialogue
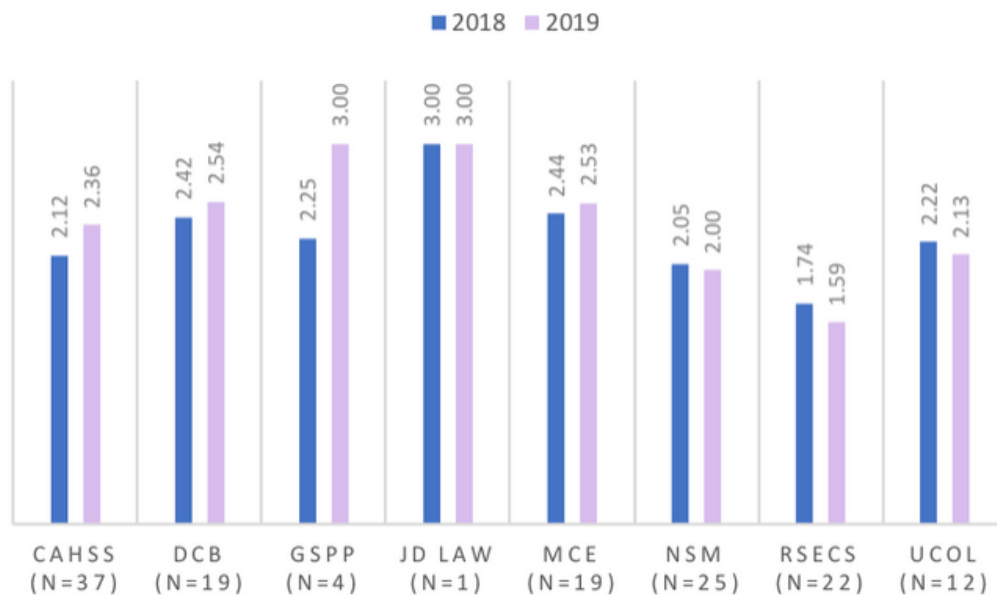
Higher ratings suggest that departments actively dialogued about assessment. Units such as DCB, JD LAW, and MCE maintained consistently high ratings in both 2018 and 2019, while GSPP boosted its scores considerably in one year.

Average scores of 2.5 or below represent a growing edge for academic units to engage in dialogue about student learning and assessment. Dialogue is an important tool to help faculty generate and enact ideas that strengthen their pedagogical practices and curricula.

Thematic Findings
- Some departments organize their time so reflections about student learning are discussed at every meeting, while other departments dedicate a portion of their annual retreats to discuss assessment.
- Many departments seek help with designing meetings for productive dialogue; creating inclusive and efficient decision-making processes; and documenting administrative decisions to create departmental memory, regardless of shifts in personnel.

The following figure depicts each unit's average rubric score regarding diversity of data. Here is what the scores mean:

- 1 = No data were collected, analyzed, or interpreted

- 2 = At least one (1) data source was collected, analyzed, and/or interpreted

- 3 = Two (2) or more data sources were collected, analyzed, and interpreted. Data sources included direct and indirect measurements.

- Since the rubric was created in 2018, no rubric data exists for 2017.

Figure 5. Rubric Scores for Diversity of Data
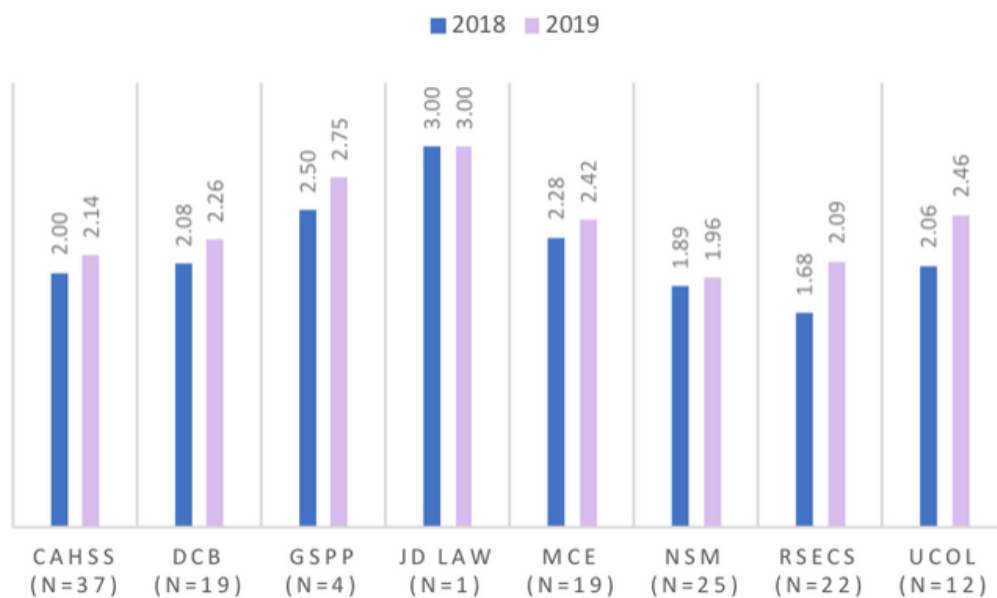
Higher ratings suggest that departments use a heterogeneity of data that include direct and indirect measures of learning. Direct measures of learning are student deliverables that faculty can typically assess with a rubric, such as papers, exams, presentations, and portfolios. Indirect measures of learning help us understand experiences and attitudes of students through tools like surveys, interviews, and focus groups.

Thematic Findings
- Some departments use assignments already embedded in courses to measure student learning, while other departments assess students via 0-credit activities that are required.
- Many departments voiced how indirect measures, such as focus groups, interviews, and surveys, illuminate student experiences in ways that complement direct measures.
- Many departments struggle with data collection since there is no central platform that accumulates, analyzes, and creates reports for faculty.

The following figure depicts each unit's average rubric score regarding meaningful continuous improvement. Here is what the scores mean:

- 1 = No curricular changes occurred

- 2 = One or more change(s) occurred with a loose connection explaining how data informed curricular changes

- 3 = One or more change(s) occurred with a clear connection explaining how data informed curricular changes

- Since the rubric was created in 2018, no rubric data exists for 2017.

Figure 6. Rubric Scores for Meaningful Continuous Improvement
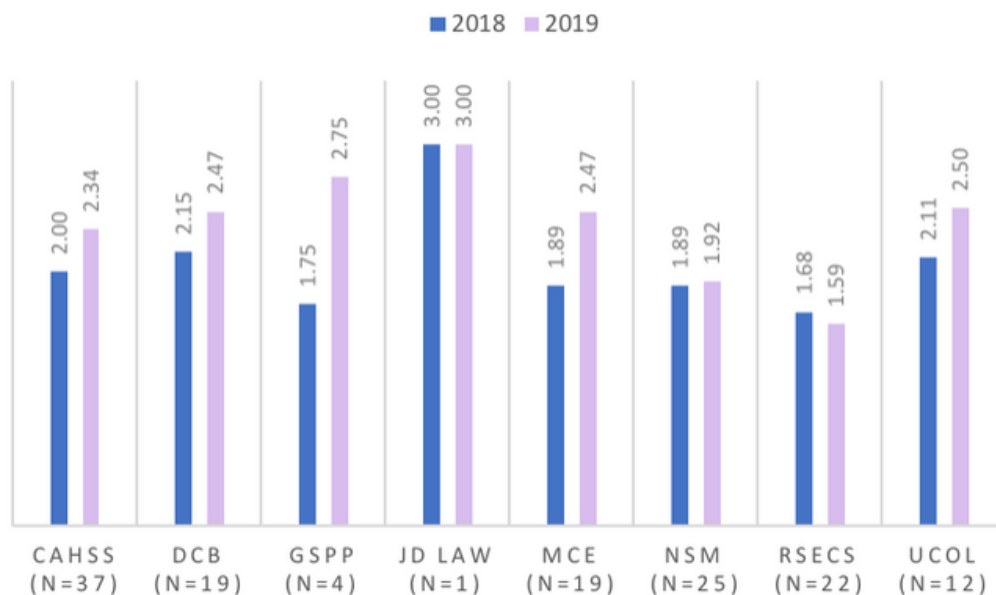
Higher ratings suggest that departments used data to support, inform, and drive curricular changes. Nearly every unit increased its ability to "close the loop" from 2018 to 2019, suggesting that most departments used assessment data to make decisions about programmatic changes. While NSM and RSECS maintained relatively similar ratings in 2018 and 2019, all other units increased in their scores, and JD Law sustained robust ratings. Although these percentages appear promising, ample opportunity exists for academic units to make curricular changes that are supported by data.

Thematic Findings
- Some units used data to make interpretations and decisions to inform curricular changes in the 2018-19 academic year, followed by ongoing assessment of the new changes during the 2019-20 year to reflect on the impacts of their new pivots.
- Some units did not actively engage in continuous improvements because they opted to accumulate more data, refine their assessment processes, or experienced organizational transitions. These are legitimate reasons for not closing the loop as long as continuous improvements are enacted in the future.

CONTINUOUS IMPROVEMENTS

Purpose

- This section highlights exemplars of continuous improvements from every unit that submitted program assessment reports consistently in 2017, 2018, and 2019.

- These examples showcase a diversity of assessment practices across the undergraduate and graduate levels; departments guided by specialized accreditation bodies and others that engage in meaningful assessment without oversight from accreditation beyond HLC; continuous improvements for curricular and co-curricular dimensions of students' academic experiences; and a heterogeneity of data used to support continuous improvement efforts.

Takeaways

- Each page summarizes "takeaways" for faculty to consider in their approaches to program assessment. While aspirational, these recommendations are intended to kindle ingenuity about how departments can engage in thoughtful reflection of their curricula.

- More examples of meaningful continuous improvements submitted in 2019 are in the appendix.

CONTINUOUS IMPROVEMENTS

The Italian undergraduate program in the College of Arts, Humanities and Social Sciences and the Mechanical Engineering undergraduate program in the Ritchie School of Engineering and Computer Science exemplify robust continuous improvements.

CAHSS: Italian (BA)

- Seniors complete a 4-part Italian exit assessment housed on the Canvas learning management system by April of their graduation year. This allows for collection of data in listening and reading comprehension, speaking and writing, the four Student Learning Outcomes (SLOs) already in existence. Faculty recently added a new SLO regarding culture, which is also assessed through the speaking and writing submission on Canvas. In 2019, all students were proficient or above on all criteria, so the focus of continuous improvement was more process-oriented. These included modifications to the assessment speaking and writing prompts to invite more optimal submissions from students; and updating the prompt for the writing portion to increase alignment with strategic initiatives in their academic unit.

RSECS: Mechanical Engineering (BS)

- Faculty take a comprehensive approach to measuring each SLO in accordance with ABET, which is the specialized accreditation body for engineering programs. To test concept knowledge, the department uses the pass rate of a nationally normed instrument called the Fundamentals of Engineering (FE) exam. Several years ago, FE exam scores were lower than the national norm, so faculty responded with co-curricular changes to aid students in understanding the format, timing, and content of the FE exam, and in some years offering a reimbursement reward for passing. As a result, FE exam scores increased.

Takeaways
- Even when assessment results seem positive, ongoing reflections are still encouraged by streamlining assessment processes and further increasing alignment with strategic initiatives at the departmental and/or institutional levels.
- Using national frameworks, such as accreditation bodies, allows departments to maintain a pulse on trends and contexts affecting their fields.

CONTINUOUS IMPROVEMENTS

The Juris Doctor program in the Sturm College of Law, the DU/Iliff Joint Doctoral Program (JDP) in the Study of Religion, and the International Disaster Program in the Graduate School of Professional Psychology designed and enacted rich continuous improvements.

LAW: Juris Doctor (JD)

- To meet American Bar Association (ABA) accreditation guidelines, JD faculty use (1) data from the Law School Survey of Student Engagement (LSSSE); (2) passage rates for the Bar Exam; and (3) employment placement rates and employer feedback. From these sources, faculty learned that JD students sought more holistic professional and personal support, so they approved the co-curricular Career and Professional Development requirement, launched the professional part-time JD program, revamped orientation, enhanced collaborations with the Externship Program, and founded a wellness initiative.

CAHSS: JDP in the Study of Religion (PhD)

- The JDP completed the first iteration of its assessment plan to measure all SLOs by revising a comprehensive exam. In addition to using the exam as a source for measuring students' original and substantial contribution to the study of religion, dissertation committees engaged in substantive discussions through a rubric developed and used by the department.

GSPP: International Disaster (MA)

- New assessment data were collected through self-reflection components in exit interviews and a nationally normed instrument to measure intercultural competency. Faculty moved a statistics course to the first year of instruction and created smaller class sizes to improve student performance. Assessment yielded useful information about the power of peer-led reflection exercises and the need to improve instruction about disclosure of personal information.

Takeaways
- Surveys, interviews, and nationally normed instruments are great sources to examine student learning and experiences.
- Departments that engage in the process of creating and using a rubric can empower faculty to gain ownership of the curricula.

CONTINUOUS IMPROVEMENTS

The Hospitality undergraduate program and the Marketing MS graduate program in the Daniels College of Business demonstrated great agility with closing the loop and meeting Association to Advance Collegiate Schools of Business (AACSB) accreditation guidelines.

DCB: Hospitality (BS/BA)

- This department uses professional certification exams, other exams, individual case and project work and a pre-/post-course survey assessing cultural intelligence and empathy. Faculty successfully evaluated all seven SLOs last year to identify growing edges among students. Numeracy was the single largest area of concern among Fritz Knoebel School of Hospitality students who enroll in DCB through a secondary admission process. A Canvas course container for a co-curricular program was built to assist students with foundational study skills and math knowledge. Going forward, this program will be mandatory for those coming through secondary admission and voluntary for all other first-year students.

DCB: Marketing (MS)

- The MS in Marketing was redesigned several years ago, with careful planning for measuring SLOs. Data collection for the MS mostly relies on a zero-credit course offered each quarter for students in their last quarter. It includes a comprehensive exam to test content knowledge of the required marketing courses, a mock interview, a survey, and a case write-up. Faculty used this data to create an individual tutorial that enhances mastery of marketing research techniques, add an exam to increase rigor in Consumer Behavior, and add new digital content in the Integrated Marketing Communication course.

Takeaways
- While assessment findings can help faculty design activities for all students, this information can be particularly illuminating for students with the greatest potential to benefit from tailored and customized support.
- Faculty can use assessment data to understand what disciplinary content areas are missing and where in the curricula such topics can be amplified.

CONTINUOUS IMPROVEMENTS

The Chemistry and Physics undergraduate programs in the College of Natural Sciences & Mathematics used creative assessment approaches to improve the student experience.

NSM: Chemistry (BS/BA)

- The laboratory experience in the Chemistry undergraduate curriculum is essential; it is where students receive hands-on and visual experiences to explore what is learned in the classroom. Over the past few years, assessment processes identified opportunities to improve the laboratory experience by offering Graduate Teaching Assistant (GTA) training. Faculty launched GTA trainings that covered content regarding specific chemistry laboratories, GTA evaluation, and clarification of laboratory norms including sanctions for underperforming GTAs. Since Chemistry faculty piloted GTA training in the 2019-20 academic year, ongoing assessment will be conducted this year to determine the efficacy of the GTA training.

NSM: Physics (BS/BA)

- Physics majors provide their own examples of how they meet one or more SLOs by uploading assignments and reflections in personal portfolios. Although this form of assessment is difficult to numerically measure, faculty gained insightful perspectives. For example, students typically cite Intermediate Lab as a class they dislike, but students also frequently used artifacts from this course to demonstrate how they achieved multiple SLOs. The degree to which students liked a course did not correlate with the degree to which students learned. Experiences with coding in Mathematica, Python, and interacting with peers to communicate research findings were also frequently used to populate students' portfolios.

Takeaways
- Faculty can use assessment findings to strengthen the infrastructure of students' academic journeys through multiple touch points, including labs, classes, and co-curricular activities.
- Portfolios can help students synthesize their learning experiences across a diversity of classes. Physics and the Higher Education program in the Morgridge College of Education are examples of departments using portfolios for program assessment.

CONTINUOUS IMPROVEMENTS

The Higher Education and Curriculum & Instruction graduate programs in the Morgridge College of Education exemplify robust continuous improvements.

MCE: Higher Education (MEd, EdD, PhD)

- In the past few years, the department has made progress with its apprenticeship model within the PhD student experience. Most of the program's courses now include a doctoral student serving as a teaching apprentice to grow their repertoire of pedagogical skills. Measurements of student attitudes have revealed resulting growth in content knowledge, syllabus and curriculum development, and classroom management. Additionally, the research apprentice model pairs doctoral students with faculty members to advance the design and implementation of research projects. This has resulted in doctoral students engaging meaningfully in data collection and analysis, conference presentations, and publications. Finally, the department reports that standardized attendance and participation policies and independent study forms and experiences were developed during the last year, which contributes to a more consistent and systematic approach to teaching and learning.

MCE: Curriculum & Instruction (MEd, EdD, PhD)

- During the 2018-19 academic year, the department worked through its first phase of a backwards design assessment process: identifying core dispositions, knowledge, and skills. Results from the backwards design will contribute to core SLOs for Curriculum and Instruction (C&I) that will be implemented across the three C&I programs: Master's, Ed.D, and Ph.D. These SLOs are intended to provide a rigorous and cohesive educational foundation for C&I students. The faculty plan to move forward during the next academic year to design curriculum that is anchored to the SLOs and related performance assessments.

Takeaways
- Assessment can help faculty strategize ways for graduate students to build their curriculum vitarum with research, teaching, and leadership activities.
- Departments that engage in purposeful design can create a cohesive curricula that intertwines meaningful assessment with content. In this way, assessment is already baked into classes as a foundation instead of an after-thought.

CONTINUOUS IMPROVEMENTS

The Arts & Culture and Security Management programs in University College use both direct and indirect data to align their curricula with externally-facing constituents, including employers and federal guidelines.

UCOL: Arts & Culture (MA)

- This department used a variety of data to inform important curriculum changes during the past year. These included signature assignments, enrollment reports, student and faculty feedback, and the content and structure of competitive programs. The team wished to cover several topics in more depth, specifically operational legal issues and effective methods of assessing and improving organizational vibrancy. They were also concerned about the program's structural alignment with the future job responsibilities of graduates. These concerns led to the development of two new core courses and repositioning of existing courses to support two new concentrations.

UCOL: Security Management (MS)

- The faculty report continued development of assessment processes during the last year, specifically due to inclusion of improved data sources like signature assignments linked to concentration outcomes. This has enhanced the faculty's ability to assess the outcomes, since there is reduced reliance on anecdotal sources like conversations, emails, and course evaluations. One resulting assessment–driven change was the redevelopment of the capstone seminar. This course was a long-standing and wide-spread concern identified in many previous assessment reports. It was improved to emphasize reflection and practical application of prior graduate learning, transforming it into an authentic, practical, and applied advanced graduate seminar experience. Future focus will be on use of data to reduce redundancies and increase alignment with FEMA's principles and requirements.

Takeaways
- Departments can remain abreast of national contexts by seeking information from external constituents, including employers, national organizations, and peer aspirants or direct competitors. This dimension of assessment can add value for programs to remain relevant and viable.
- Additional examples of continuous improvements are available in the Appendix.

COMMON CURRICULUM

The common curriculum at DU provides students with a well-rounded education. This section contains a map that aligns areas of inquiry with general education student learning outcomes; description and findings from the most recent assessment process; and recommendations.

I. Alignment Map

	AREAS OF INQUIRY	
	The Natural & Physical World	**Society & Culture**
First Year Seminar	Students who successfully complete the FSEM will be able to: • Engage in critical inquiry in the examination of concepts, texts, or artifacts, and • Effectively communicate the results of such inquiry	
First-Year Writing & Rhetoric	• Demonstrate the ability to compose for a variety of rhetorical situations • Demonstrate the ability to write within multiple research traditions	
Foreign Language	• Demonstrate basic proficiency in a language of choice in the following skills: writing, speaking, listening, and reading • Demonstrate proficiency in learning about a culture associated with a language of choice	
Ways of Knowing - Analytical Inquiry	• Apply formal reasoning, mathematics, or computational science approaches to problem solving • Understand and communicate connections between different areas of logic, mathematics, or computational science, or their relevance to other disciplines	• Demonstrate the ability to create in written, oral, or any other performance medium or interpret texts, ideas, or cultural artifacts • Identify and analyze the connections between texts, ideas, or cultural artifacts and the human experience
Ways of Knowing - Scientific Inquiry	• Apply knowledge of scientific practice to evaluate evidence for scientific claims. • Demonstrate an understanding of science as an iterative process of knowledge generation with inherent strengths and limitations. • Demonstrate skills for using and interpreting qualitative and quantitative information.	• Describe basic principles of human functioning and conduct in social and cultural contexts • Describe and explain how social scientific methods are used to understand the underlying principles of human functioning
Advanced Seminar	• Demonstrate the ability to integrate and apply context from multiple perspectives to an appropriate intellectual topic or issue • Write effectively, providing appropriate evidence and reasoning for assertions	

II. Common Curriculum Assessment

- Each individual instructor whose class contributes to the Common Curriculum is an assessor. The faculty member selects at least one assignment toward the end of the quarter that provides students an opportunity to demonstrate learning related to the common curriculum learning outcomes designated for that component of the curriculum.

- The faculty member uses a common rubric, developed by a common curriculum committee or working group to assess learning related to the outcomes.

- The faculty member reports the number of students assessed and the number who meet or exceed expectations on each outcome. The faculty member provides a brief reflection on the results of the assessment. The faculty member indicates projected changes to their course based on the results.

COMMON CURRICULUM

II. Common Curriculum Assessment, continued

- The preceding approach to assessment is used in First-Year Seminar; Analytic Inquiry – Society and Culture; Scientific Inquiry – Society and Culture; and Scientific Inquiry – Natural and Physical World.

- Assessment for Analytical Inquiry: Natural and Physical World and the foreign language requirement do not use a common rubric and rely on individual instructors for their expertise and interpretations.

- The Writing and Advanced Seminar components are led and assessed by the Executive Director of the Writing Program who reports assessment results in a separate document.

III. Findings

Common curriculum assessment was last conducted during the 2017-18 academic year. For each area of inquiry, individual professors who teach classes for common curriculum submitted their assessment ratings to the Director of Academic Assessment who then synthesized the data into the summaries below.

- **First-Year Seminar (FSEM)**: The average score in each section of the rubric yielded a small range, from 2.67 to 2.74. According to the FSEM rubric, these averages suggest that students are performing at "milestone" levels, which mean they are on a developmental trajectory, somewhere beyond novice, but not quite expert.

- **Analytical Inquiry: Society and Culture (AI-SC)**: During the Spring 2018 quarter, instructors of 39 classes that fulfill the AI-SC requirement received invitations to submit common curriculum data. Of these 39 classes, there was a 49% response rate where a total of 397 student artifacts were assessed from a variety disciplines. Unfortunately, since the reported data are inaccurate––where some professors used frequencies instead of percentages––the data are not as useful and meaningful as reflections.

- **Analytical Inquiry: Natural and Physical World (AI-NPW)**: 72% of 39 students met or exceeded expectations.

- **Scientific Inquiry: Society & Culture (SI-SC)**: No information is available due to technical glitches that lost data.

COMMON CURRICULUM

III. Findings, continued

- **Scientific Inquiry: Natural and Physical World (SI-NPW):** Students who met or exceeded expectations ranged from 51%-100%, depending upon the quarter, the class, the assignment, and the objective.

- **Foreign Language (FOLA)**: Most FOLA programs rated 75%-98% of their students proficient in areas spanning reading, writing, listening, and cultural understanding. The only exception to these statistics is the Latin program that rated 17%-75% of students as proficient in these areas.

IV. Recommendations

- As noted in General Education Review & Inquiry (GERI) documents, common curriculum at DU has been in transition and is now undergoing reconciliation. Subsequently, recommendations for common curriculum assessment grow from a need to balance our commitment to continuous improvement with the fiscal realities of COVID-19.

- We propose a pilot initiative to assess common curriculum until revisions to general education are finalized. The first pilot can take place during the Winter 2021 quarter and will be designed to help faculty create a rubric and one assignment in alignment with common curriculum student learning outcomes. Based upon what we learn from the FSEM pilot, we will offer version 2.0 of the pilot for the remaining sections of common curriculum during the Summer 2021 session for faculty who teach classes in Analytic Inquiry, Scientific Inquiry, and FOLA. This information can be used to inform the Reconciliation of GERI committee on their deliberations.

- Beyond pilot initiatives, here are promising practices to consider for long-term common curriculum assessment: first, harness expertise from staff members, particularly the Director of Academic Assessment, to inform Reconciliation of GERI deliberations so that general education is designed to address content, delivery, and assessment simultaneously; second, once GERI provides recommendations, form an ad hoc task force comprised of faculty and staff members that will oversee the implementation of general education assessment; and third, require ongoing professional development for faculty who teach common curriculum courses so the institution develops fluency in common curriculum assessment.

CONCLUSION

The findings from institutional data about assessment, combined with the Director of Academic Assessment's expertise as a member of the HLC Peer Corps, inform the following recommendations.

NEXT STEPS FOR FACULTY

I. Develop Fluency in Grammar of Assessment

- Attend trainings and workshops about assessment, particularly Assessment Salons in the summer of 2020

- Schedule design-thinking consultations with the Director of Academic Assessment and Faculty Scholar of Assessment to create stronger alignment between the DU mission, the program mission, student learning outcomes, curricular design, course design, and assessment

- Improve assessment practices by engaging in all phases of assessment: reflect on student learning outcomes, collect data, analyze data, interpret data, propose changes, implement changes, and measure effects of changes

II. Expand Bandwidth

- Distribute assessment responsibilities, expertise, leadership, and ownership across the department so multiple professors within one department develop fluency in assessment

- Distribute assessment responsibilities, expertise, leadership, and ownership across the institution so Deans, Associate Deans, and Department Chairs develop fluency in assessment

III. Include Assessment in GERI

- Seek expertise from the Director of Academic Assessment to advise the Reconciliation of General Education Review and Inquiry (GERI) committee in developing robust common curriculum assessment practices that model exemplary assessment across DU

NEXT STEPS FOR ASSESSMENT LEADERSHIP

I. Build Assessment into #OneDU Infrastructure

- Disseminate and promote findings from this report for stakeholders, including Associate Deans Council and the Academic Planning Committee in Faculty Senate, to collaboratively strategize next steps about engaging in assessment during COVID-19

- Use assessment as a tool for curricular renewal and organizational transformation by baking assessment into already-existing institutional processes and timelines, such as proposals submitted to Undergraduate Council and Graduate Council, and grant proposals submitted to Impact 2025

- Explore how administrative leadership, including the Chancellor and the Provost, can champion assessment efforts

II. Expand Bandwidth

- Continue distributing assessment expertise, leadership, and ownership through the Faculty Scholar of Assessment, Assessment Fellows, and the IRISE Postdoctoral Fellow

- Formalize partnerships with academic programs for graduate students to gain experience to conduct interviews and focus groups that support program assessment and evaluation

III. Streamline Assessment Processes

- Collaborate with the Assessment Groupware committee and Institutional Research & Analysis to explore tools for making assessment data collection, analysis, interpretation, and reporting easily available to and accessible by faculty and staff; the utility of Canvas for this process can be explored.

IV. Promote Assessment

- Explore opportunities for awarding individuals, teams, or departments for engaging in robust assessment activities

- Incentives can include counting assessment activities toward appointment, tenure, and promotion guidelines; or using program assessment to inform Scholarship of Teaching and Learning; or offering professional development stipends

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ASSESSMENT REPORT APPENDIX

JUNE 2020

- GLOSSARY
- RESOURCES
- ASSESSMENT FELLOWS
- EXEMPTIONS FROM REPORTS
- CONTINUOUS IMPROVEMENT NARRATIVES

Assessment is a participatory, iterative process for the collection and analysis of evidence about the achievement of outcomes for the purposes of continuous improvement (adapted from the Higher Learning Commission and Case Western Reserve University).

Student learning outcomes (SLOs) are statements that articulate what students will know, value, and do at strategic time points: 1) completion of a course for course-level SLOs, or 2) completion of a degree for program-level SLOs, or 3) completion of general education courses for institution-level SLOs. Some professional organizations may refer to these with different terms, such as objectives, indicators, abilities, or competencies (adapted from Case Western Reserve University and NILOA, 2020).

Direct assessments are measures of learning based on student performance or demonstrations of the learning itself. Scoring performance on exams, papers, portfolios, presentations or the execution of lab skills exemplify direct assessment of learning (adapted from NILOA, 2020).

Indirect assessments use perceptions, reflections or secondary evidence to make inferences about student learning. Surveys, self-reflections, interviews, focus groups, and admissions to graduate schools are all indirect evidence of learning (adapted from Carnegie Mellon University Eberly Center for Teaching Excellence & Educational Innovation).

Formative assessment is a process designed to give ongoing feedback over the course of an intervention. Faculty can use formative assessment to make changes midstream and in situ rather than for making final decisions (Allen, 2004).

Summative assessment is comprehensive measure of achievement at the end of an instructional unit or course of study that is used for evaluation and decision-making purposes (adapted from Case Western Reserve University and NILOA, 2020).

Rubrics are tools that describe the performance expectations for an assignment or piece of work. VALUE rubrics exemplify tools developed by teams of faculty experts from postsecondary educational institutions across the country (adapted from AAC&U).

Allen, M.J. (2004). *Assessing academic programs in higher education*. Bolton, MA: Anker Publishing Company, Inc.

Association of American Colleges and Universities (AAC&U). (2009). *VALUE rubrics*. Retrieved from https://www.aacu.org/value-rubrics.

Bresciani, M. J. (2006). *Outcomes-based academic and co-curricular program review: A compilation of institutional good practices*. Sterling, VA: Stylus.

Bolton, MA: Anker. Maki, P. L. (2010). *Assessing for learning: Building a sustainable commitment across the institution*. (2nd ed.). Sterling, VA: Stylus.

Carnegie Mellon University Eberly Center for Teaching Excellence & Educational Innovation. (2020). *Common assessment terms*. Retrieved from https://www.cmu.edu/teaching/assessment/basics/glossary.html

Case Western Reserve University. (2020). *Assessment Glossary.* Retrieved from https://case.edu/assessment/about/assessment-glossary.

Melguizo, T., & Coates, H. (2017). The value of assessing higher education student learning outcomes. *AERA Open, 3*(3), 1-2.

National Institute for Learning Outcomes Assessment (NILOA). (2020). *Assessment Glossary.* Retrieved from https://www.learningoutcomesassessment.org/browse-by/new-to-assessment/.

Paguyo, C.H. (2019). *Creating a robust culture of assessment at the University of Denver.* Invited presentation in Morgridge College of Education, University of Denver.

Suskie, L. (2009). *Assessing student learning: A common sense guide* (2nd ed.). San Francisco, CA: Jossey-Bass.

Walvoord, B. E. (2010). *Assessment clear and simple: A practical guide for institutions, departments, and general education.* (2nd ed.). San Francisco, CA: Jossey-Bass.

Unit	Name
College of Arts, Humanities, and Social Sciences (CAHSS)	Frederique Chevillot, Maha Foster, Chad Leahy, Mitch Ohriner, Emily Sposeto, Annette Stott*, Rachel Walsh
Daniels College of Business (DCB)	Tia Quinlan-Wilder*, Kellie Keeling, Jenn Light
Graduate School of Professional Psychology (GSPP)	Brian Gearity
Internationalization (INTZ)	Sarah Catanzarite*, Adrienne Gonzales, David Parker
Morgridge College of Education (MCE)	Elizabeth Anderson, Robyn Pitts, Laura Sponsler*, Mary Stansbury
Natural Sciences and Mathematics (NSM)	Barbekka Hurtt, Brian Majestic, Paul Sutton
Ritchie School of Engineering and Computer Science (RSECS)	Ron DeLyser, Jeffrey Edgington
Sturm College of Law (Law)	Randy Wagner*
University College (UCOL)	Allison Friederichs, John Hill*, Arianna Nowakowski

Asterisks (*) indicate AFs went above and beyond their Assessment Fellows responsibilities and took on additional leadership roles. These individuals serve as consultants who provide feedback on program assessment reports, contribute to the development and delivery of assessment trainings, and help strengthen the culture of teaching, learning, and assessment at DU.

The Graduate School of Social Work (GSSW), Josef Korbel School of International Studies (Korbel), and graduate programs in the Sturm College of Law (Law) did not submit 2018-19 program assessment reports for legitimate reasons.

GSSW attains specialized accreditation through the Council on Social Work Education (CSWE) and conducts rigorous assessment that exceeds HLC guidelines; in fact, CSWE has positioned assessment practices in GSSW as a national exemplar.

At the time reports were due, Korbel was in the midst of a conducting a complete review and restructure of its degree programs; with focus on these activities, the Director of Academic Assessment and Korbel agreed to temporarily suspend assessment activities until the restructure of Korbel becomes finalized.

Law attains specialized accreditation through the American Bar Association (ABA) and recently focused on re-accreditation efforts for the Juris Doctor degree. After successfully attaining ABA accreditation in 2019, Law will work actively with the Director of Academic Assessment to ensure its graduate programs meet HLC guidelines for assessment.

College of Arts, Humanities and Social Sciences

Art History (MA)
Assessment data analyzed this year were master's research papers (MRPs) to support a learning outcome for conducting research and presenting it in writing. Facultyhad expressed concern over low performance in mechanics of writing and style last year, so this year a variety of changes were made, including discussions about types of writing assignments, a writing workshop for students with the Writing Center, and enhanced focus on research papers in classes. This resulted. in significant improvement in scores for writing on the MRP rubric this year. Faculty also noted the success of previously initiated MRP workshops, designed to move students through their proposal stage more quickly but which have also helped support the same learning outcome because of increased connections with faculty.

Economics (BA)
This year the faculty had the most success in measuring and making changes for learning outcomes related to students building competence using technical (mathematical) tools for economic analysis and learning microeconomic theory. One course was redesigned to support improved use of such tools and a new text was chosen for another course to introduce more modern theory. A third course maps with several important learning outcomes but provides challenges for gathering data, something the faculty is currently reconsidering.

French & Francophone Studies (BA)
The French department improved data collection this year by uploading students' oral and written artifacts into Portfolio. Faculty have been encouraged to share this task in the future to improve division of labor. The group evaluated written papers in several different courses this year, and found some disagreement in what constitutes a good paper. They plan to hold a mini-pedagogy workshop to address best practices for how they are teaching students this skill. They are also discussing the potential for inclusive excellence and critical thinking rubrics, as well as quarterly student self-assessments.

Gender and Women's Studies (BA)
This year the program's assessment efforts centered on analysis of a senior capstone paper to examine four learning outcomes. Because students pick a topic of their own interest, the assignment does not work perfectly to measure each student learning outcome, though most students did write about each of the four areas of interest and were measured as proficient. Findings were similar to previous years and faculty felt that overall they represented the strengths of the program. Weaknesses were noted for SLOs #4 and #5 which cover the major categories of analysis and debates within the field. Suggestions for improvement include measuring #4 in an assignment in the feminist theory class and revising capstone paper criteria to gain improvements for #5. This department also requires a portfolio of its students, and is interested in

reexamining the role it might play in future assessment efforts.

German (BA)

The program improved its ability to objectively measure language proficiency by starting to administer the STAMP4S exam, an external tool that tests reading, writing, listening, and speaking skills. This type of exam is planning for all languages, but German was the first to implement it. Only two students were graduating this year, so the sample size is too small to make many inferences, but a far larger number will take the exam in the coming year. The results of the exam will be a focal area of discussion among faculty. There are several important structural changes that will impact language learning at the university, and these will necessarily result in assessment process changes in the next few years.

History (BA)

Our department collected, as usual, the final capstone projects of the seniors in order to assess the student learning outcomes. In a general sense, the aggregate data of the assessment of Senior Thesis papers in 2019 indicates three main findings: Some of the remarkable scores (4 out of 4) have declined since last year; the scores for interpreting primary source data, formulating an argument, and engaging with published scholarship have increased bringing us up to the standards of 2016; the declining scores from this year, however, are not dramatic ones but from 4 to 3 on a 4 point scale. Our department discussed assessment findings and determined that last year's class was exceptionally strong and with each category where there was a decline in scores of 4 (out of 4), evaluating the students in terms of who received either a 3 or 4 (so meeting or exceeding expectations) led to assessment results that were comparable to last year. As part of continuous improvements, we will look to other forms of student writing for assessment but we have yet to plan for this or to discuss it in great detail. Overall, the department is satisfied with the senior capstone thesis as the basis for assessment, as it is the culmination of their undergraduate work in history. We recognize, however, that we could do more to assess shorter papers earlier in the student's academic career, in order to trace improvement over time.

Italian (BA)

Seniors complete a 4-part Italian exit assessment housed on the Canvas learning management system by April of their graduation year. This allows for collection of data in listening and reading comprehension, speaking and writing, the four Student Learning Outcomes (SLOs) already in existence. Faculty recently added a new SLO regarding culture, which is also assessed through the speaking and writing submission on Canvas. In 2019, all students were proficient or above on all criteria, so the focus of continuous improvement was more process-oriented. These included modifications to the assessment speaking and writing prompts to invite more optimal submissions from students; and updating the prompt for the writing portion to increase alignment with strategic initiatives in their academic unit.

JDP in the Study of Religion (PhD)
The JDP completed the first iteration of its assessment plan to measure all SLOs by revising a comprehensive exam. In addition to using the exam as a source for measuring students' original and substantial contribution to the study of religion, dissertation committees engaged in substantive discussions through a rubric developed and used by the department.

Political Science (BA)
This program collected meaningful data on the proficiency of its graduating seniors in writing a research paper within their Capstone Seminar. For this year, a revised rubric was designed to reduce the number of categories assessed, making it easier to use but still allowing analysis of all of the learning outcomes. Most students were at least proficient in all three categories, though analytical argumentation was the lowest scoring. Students in the "overload" group scored lower in all three. For next year, the department will reduce the capstone course cap to 18 with three sections instead of two to allow for a better learning experience, hopefully with more rigorous feedback. This should also help the department to avoid "overloads" that must sign up for an alternate course and complete the assessment without explicit instruction. The department chair notes that staffing undergraduate courses with temporary faculty has limited further progress on the learning outcomes.

Psychology (BA/BS)
The department collects data on knowledge of psychology via a multiple-choice exam administered in the introductory course and to all graduating seniors. Faculty have an instrument to collect student ratings of learning experiences, and students generally agree that learning outcomes are being met, but they report that they have been unable to assess critically thinking and communication learning outcomes. Energy has been focused on growing the number of offerings, including 2000-level electives and 3000-level specialized courses, that align with student request to improve career readiness.

Daniels College of Business

Business Analytics (BS/BA)
There is a collaborative approach for assessment in this department, where faculty contribute ideas about their courses while also collecting student data. A Board of Advisors is available to provide input to curricular changes. In the capstone course, both a capstone exam and an exit survey provide information about those about to graduate. Assessment was a regular topic at faculty meetings, especially as it pertains to Python and Project Management initiatives. Some changes to courses this year include balancing the use of Excel VBA and Python and increasing the rigor of basic programming courses to improve performance in database ones. Plans include closely integrating R throughout the 3200 course and addressing low outliers on the capstone exam.

Business Core (BS/BA)

This program has a thorough process in place to collect and analyze data for its technical knowledge learning outcome. This year, undergraduates majoring in a business discipline took two different exams with content from 10 different required business core courses, and faculty analyzed the results. Many analyzed exam content by topic to determine areas of weakness for students, and offered ideas to improve teaching and student retention. Among the changes implemented across these courses were adoption of new open source texts in the introductory analytics course; expanding practice sets, quizzing, and the course long project in statistics; ensuring coverage of business law and ethics by all faculty teaching the legal studies course; and deepening the coverage of capital budgeting and time value of money concepts in finance.

Finance (BS/BA)

The Reiman School of Finance has used its assessment results over the past couple of years to make a variety of curricular changes. These include more experiential course material where students deal with actual data and examine real world problems. Goals for coursework and deliverables are to offer students tangible and meaningful technical and soft skills. Sometimes this takes the form of work with a live client and for others it might be creating artifacts that provide authentic assessment measurements, such as investment memoranda. Faculty have noted some discomfort among students and faculty alike, since the changes often entail heightened ambiguity, such as a lack of a strict rubric. But the consensus remains that this helps prepare students for the dynamic environments which they are likely to encounter in their careers.

Hospitality (BS/BA)

This department uses professional certification exams, other exams, individual case and project work and a pre-/post-course survey assessing cultural intelligence and empathy. Faculty successfully evaluated all seven SLOs last year to identify growing edges among students. Numeracy was the single largest area of concern among Fritz Knoebel School of Hospitality students who enroll in DCB through a secondary admission process. A Canvas course container for a co-curricular program was built to assist students with foundational study skills and math knowledge. Going forward, this program will be mandatory for those coming through secondary admission and voluntary for all other first-year students.

Management (BS/BA)

This department is making great strides in its assessment efforts. It has newly formed an Assurance of Learning committee to improve division of labor for these tasks. It is also working through implementation of "Learning Mastery" tools in the Canvas LMS to assess SLOs.

Through identified assignments, all instructors will use a consistent rubric to indicate levels of proficiency on select assignments. This tool will streamline data collection and analysis, allowing faculty to focus more on interpretation of the findings in the future. Faculty are also interested in developing indirect measures for assessment next year.

Marketing (MS)
The MS in Marketing was redesigned several years ago, with careful planning for measuring SLOs. Data collection for the MS mostly relies on a zero-credit course offered each quarter for students in their last quarter. It includes a comprehensive exam to test content knowledge of the required marketing courses, a mock interview, a survey, and a case write-up. Faculty used this data to create an individual tutorial that enhances mastery of marketing research techniques, add an exam to increase rigor in Consumer Behavior, and add new digital content in the Integrated Marketing Communication course.

Master of Business Administration (MBA)
The faculty teaching in this program have developed a very robust process for program assessment. It includes measurements such as exams, oral and written reports, self-reports, and evaluations from Corporate Host Partners. For the learning outcome measuring students' ability to deliver real world outcomes, performance was generally good but not sufficient since some student groups did not reach the goal. Group and individual gaps were even identified early in the course of the project, but not enough intervention occurred, indicating an area for improvement. In several courses, exam scores measuring content knowledge have been improved this year by slowing the pace of new material and deepening the exploration of fewer topics. The program continues to report positive results from pre- and post-test of Thunderbird's Global Mindset Inventory used to measure its global competency objective. Additionally, faculty reported substantial improvements in presentations this year, credited to additional more practice time, more consistent use of the rubric across the curriculum, and more workshop content on presentations.

Graduate School of Professional Psychology

Forensic Psychology (MA)
Over the past year, this program has worked to revise assessment methods in an effort to improve data collection and meet future development needs. Data collection now encompasses coursework, field placement (practicum), and peer review. A particular focus in the last year at the program level was to uncover threats to licensure pathways for master's level clinicians and possible solutions. New steps here include holding weekly meetings of the Master's Licensure Task Force, developing a GTA position whose responsibilities include tracking changes to state licensure requirements, and reviewing and revising the curriculum. The goal for curriculum is to reflect

the needs of students and the state of the art in the field, including compatibility with licensure requirements in Colorado and elsewhere.

International Disaster Psychology (MA)
New assessment data were collected through self-reflection components in exit interviews and a nationally normed instrument to measure intercultural competency. Faculty moved a statistics course to the first year of instruction and created smaller class sizes to improve student performance. Assessment yielded useful information about the power of peer-led reflection exercises and the need to improve instruction about disclosure of personal information.

Sports and Performance Psychology (MA)
This program uses a variety of measurements, including faculty evaluations of students on core competencies, peer evaluations of students, student evaluations of faculty, exit interviews for second year students, and new for this year, a mid-year program evaluation. A change from last year that will be continued is peer evaluations across cohorts. Planned changes for next year include a co-curricular "community hour" (an optional workshop or discussion), new diversity reflective practice in the portfolio, and revised instruction for peer evaluations, requiring useful comments for one strength and one area for growth. Faculty intend also to work on measures to encourage persistence among underrepresented populations.

Sturm College of Law

Juris Doctor (JD)
To meet American Bar Association (ABA) accreditation guidelines, JD faculty use (1) data from the Law School Survey of Student Engagement (LSSSE); (2) passage rates for the Bar Exam; and (3) employment placement rates and employer feedback. From these sources, faculty learned that JD students sought more holistic professional and personal support, so they approved the co-curricular Career and Professional Development requirement, launched the professional part-time JD program, revamped orientation, enhanced collaborations with the Externship Program, and founded a wellness initiative.

Morgridge College of Education

Curriculum & Instruction (MEd, EdD, PhD)
During the 2018-19 academic year, the department worked through its first phase of a backwards design assessment process: identifying core dispositions, knowledge, and skills. Results from the backwards design will contribute to core SLOs for Curriculum and Instruction (C&I) that will be implemented across the three C&I programs: Master's, Ed.D, and Ph.D. These SLOs are intended to provide a rigorous and cohesive educational foundation for C&I students. The faculty plan to move forward during the next academic year to design curriculum that is anchored to the SLOs and related performance assessments.

Early Childhood Special Education (MA)
Important changes for the program this year included a resequencing of required coursework. Two assessment courses were moved to the beginning of the degree program so that students might use acquired skills for their later field placements. Another was the alignment of the students' practicum log with the licensure and professional organization standards, which has improved student awareness of those standards. Assessment data included grades from several courses that used practice logs, video uploads, posters, reflections, and the Praxis exam. The only learning outcome where all students were not proficient was the practice of childhood development assessments, and additional support for struggling students is being developed.

Educational Leadership and Policy Studies (PhD)
This year the program revised the SLOs along with the ELPS Department values to improve their alignment. Based on these, they piloted a new assessment measurement, an exam that asked students to provide evidence of their own learning related to both learning outcomes and application to their chosen professional contexts. Faculty report that students were successful in developing examples related to LOs but struggled more with broadening the narrative to the professional domain. International students were weakest with the transformative leader SLO and the application of learning through course projects, so faculty is developing an action plan to improve performance among international students. Students are now also required to create a new original work that contains tangible evidence of how they moved their learning and research to action, which includes a panel presentation that is similar to the Doctoral defense.

Higher Education (MEd, EdD, PhD)
In the past few years, the department has made progress with its apprenticeship model within the PhD student experience. Most of the program's courses now include a doctoral student serving as a teaching apprentice to grow their repertoire of pedagogical skills. Measurements of student attitudes have revealed resulting growth in content knowledge, syllabus and curriculum development, and classroom management. Additionally, the research apprentice model pairs doctoral students with faculty members to advance the design and implementation of research projects. This has resulted in doctoral students engaging meaningfully in data collection and analysis, conference presentations, and publications. Finally, the department reports that standardized attendance and participation policies and independent study forms and experiences were developed during the last year, which contributes to a more consistent and systematic approach to teaching and learning.

Research Methods and Statistics (MA)
Faculty collected data from two sources this year: from interviews with master's and doctoral students who had completed their practicum to assess ethics issues, and with an annual student survey that includes

professional development, student self-rated competencies, and student SLO reflections. The interviews suggested that doctoral students were more likely to identify ethics issues than master's students, so faculty recommend an ethics-based workshop or reflection during the practicum. The program is also prioritizing the creation of a project management space in Canvas to provide additional curricular support resources. In 2018, the curriculum was modified to add a required course on factor analysis along with substantial revision of the item response theory course to improve the SLO pertaining to creation and evaluation quantitative and qualitative instruments/protocols using psychometric models and conceptual approaches and faculty are monitoring expected changes in the self-report measures for it.

Natural Sciences and Mathematics

Chemistry (BS/BA)
The laboratory experience in the Chemistry undergraduate curriculum is essential; it is where students receive a hands-on and visual experience to explore what is learned in the classroom. Over the past few years, the student experience in the laboratory was being compromised and affecting student learning. The assessment process within the department identified GTA issues that were contributing, so faculty instituted enhanced training for them specific to a chemistry laboratory, improved GTA evaluation, and clarification of laboratory norms including sanctions for underperforming GTAs.

Molecular and Cellular Biophysics (PhD)
Faculty gather data in the form of Annual Progress Reports for each grad student in the program. These are discussed by the MCBP Steering Committee for possible program changes, as well as the faculty thesis committees and graduate students to encourage the evaluation of the relative progress of students. This year the Steering Committee decided to change the Fall quarter BIOP 4210 course to be fully independent from the Fall Grad Colloquium to enhance literature discussion. Additionally, the peer review rubric used for presentations in the Grad Colloquium was re-designed the rubric to allow for more defined feedback. This helped to engage the audience in these presentations and enforce a level of responsibility among the student presenters. Feedback is also expected to strengthen research talks when graduate students attend and present at international research conferences.

Physics (BS/BA)
The Physics department has taking a novel approach to assessment, deeply engaging students with their learning outcomes by requiring them to provide their own examples of how they met one or more. Students are asked to upload assignments they find most appropriate to personal portfolios and reflect on these learning experiences. Though the results are more difficult to summarize in this form, faculty were still able to discover some important ideas about the program. One of the most demanding courses, Intermediate Lab, that students

do not always like was frequently cited as one that delivered results for multiple learning outcomes, as were experiences with coding in Mathematica or Python. Additionally students found interactions with the community very meaningful, particularly when they communicated the results of their own research.

Ritchie School of Engineering and Computer Science

Mechanical Engineering (BS)
Faculty take a comprehensive approach to measuring each SLO in accordance with ABET, which is the specialized accreditation body for engineering programs. To test concept knowledge, the department uses the pass rate of a nationally normed instrument called the Fundamentals of Engineering (FE) exam. Several years ago, FE exam scores were lower than the national norm, so faculty responded with co-curricular changes to aid students in understanding the format, timing, and content of the FE exam, and in some years offering a reimbursement reward for passing. As a result, FE exam scores increased.

University College

Arts & Culture (MA)
This department used a variety of data to inform important curriculum changes during the past year. These included signature assignments, enrollment reports, student and faculty feedback, and the content and structure of competitive programs. The team wished to cover several topics in more depth, specifically operational legal issues and effective methods of assessing and improving organizational vibrancy. They were also concerned about the program's structural alignment with the future job responsibilities of graduates. These concerns led to the development of two new core courses and repositioning of existing courses to support two new concentrations.

Communication Management (MA)
The new director of the program used a series of interviews with former and present faculty this year to evaluate potential issues that should be addressed. The findings indicated a need to standardize the teaching approach in the Communication and Society course, making content uniformly more applied than hypothetical. The revision of the course was completed the same year. Additional changes were implemented in the Experiential Learning in Communication course. The faculty also relaunched a modified teaching effectiveness survey and the results highlighted issues with faculty effectiveness using technology and faculty bench strength that they addressed with a tech workshop and adjunct hiring. Future plans include advancing the use of rubrics across the curriculum, looking at assessment possibilities for the Portfolio Capstone, and adding focus groups to collect indirect assessment data from students.

Environmental Policy and Management (MS)
This program uses a wide variety of information sources to support changes to the program. Signature assignments in concentration courses are a primary source of data, but faculty also rely on anecdotal information from students, recruiters, and advisors to improve understanding of student performance and improvement opportunities. This year most students were proficient on the three learning outcomes measured, and those few that were not were offered additional support. Courses are being redesigned to intentionally incorporate assessment processes, and in particular to focus attention on application and mastery of concepts rather than cursory learning. The recent redesign of the capstone seminar emphasizes reflection and practical application which should be beneficial to students' careers.

Security Management (MS)
The faculty report continued development of assessment processes during the last year, specifically due to inclusion of improved data sources like signature assignments linked to concentration outcomes. This has enhanced the faculty's ability to assess the outcomes, since there is reduced reliance on anecdotal sources like conversations, emails, and course evaluations. One resulting assessment–driven change was the redevelopment of the capstone seminar. This course was a long-standing and wide-spread concern identified in many previous assessment reports. It was improved to emphasize reflection and practical application of prior graduate learning, transforming it into an authentic, practical, and applied advanced graduate seminar experience. Future focus will be on use of data to reduce redundancies and increase alignment with FEMA's principles and requirements.