

# Student Learning Assessment in Higher Education Institutions: A Literature Review Report

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## Introduction and Background

With a rapid change in the higher education landscape in recent years, such as technological advancements and the COVID-19 pivot to remote, online, and hybrid education, it has become increasingly important to revisit our understandings and practices about students' learning and the assessment of and for learning.

Assessment plays a significant role in students' learning in higher education. Assessment practices not only guide what students learn, but also make visible how they learn, and why they learn. Institutional policies and practice guidelines on assessment can have large influences on the quality of student learning (Boud, 2020). These guidelines can impact the way faculty view and approach their assessment tasks and, as a result, design and facilitate student learning experiences. Flores et al. (2020) noted that students can use assessments as a guide to improve their learning, achievement, and development if they understand, connect with, and recognize the value of their learning.

Higher education institutions (HEIs) across the globe are facing pressures and challenges to review, (re)develop, and (re)implement academic policies, regulations, guidelines, and standards that meet evolving expectations of students' learning and assessment. In March 2023, a group of leaders at the University of Calgary came together to discuss and identify pressing issues related to the assessment of student learning and potential actions to be taken. One of the key recommendations from the group was to develop a set of principles to guide student learning assessment practices at the University of Calgary.

In view of this recommendation, a small working group was created (authors) to learn more about how assessment principles and practices for student learning in higher education settings are conceptualized, developed, and shared. We began by conducting an [environmental scan](#) of websites for the Canadian U15 universities. This scan provided a high-level understanding of what assessment principles for student learning are in place at leading research universities in Canada, and how and where these principles are communicated on their respective websites.

Four of the U15 institutions clearly communicated principles for the assessment of student learning, and outcomes from the environmental scan found common themes including (Arshad, 2023, p. 10-11):

- *Assessment reflects high academic standards.*
- *Course instructors are primarily responsible for the assessment of student learning in academic courses.*
- *Assessment practices provide provisions for the accommodation of student needs.*
- *Resources are available to support course instructors in developing expertise in student assessment, and to assess student learning in meaningful ways.*
- *Student assessments are intentionally designed and aligned with learning outcomes.*
- *Assessment strategies provide equitable opportunities for students to demonstrate their learning.*
- *Criteria, methods, and expectations for assessment are clearly communicated to students.*
- *Assessment practices emphasize the importance of feedback, progressive learning and practice, and both formative and summative assessment practices.*

Gaps identified included that these institutional principles included little emphasis on current and relevant issues related to the use of generative artificial intelligence (AI), student/educator well-being and mental health, Indigenous ways of knowing, equity, diversity, inclusion and accessibility, graduate student assessment practices, and multiple instructional modalities (e.g., online/blended learning).

## Purpose

This work aims to present a comprehensive review of the literature to identify the current and dominant trends, discourses, and directions related to student assessment practices that may assist with the development of assessment principles for student learning at UCalgary. These assessment principles can serve as a foundation for setting the direction for advancing and improving learning opportunities and outcomes for students, educators, and staff across multiple organizational levels.

In this report, we outline the parameters and processes utilized to conduct the literature review and present and discuss findings in detail. This literature review, along with the environmental scan, will offer valuable insights and guidelines for developing principles for the assessment of student learning at UCalgary. The following questions guided the literature review:

- How is assessment of student learning conceptualized and approached in higher education?
- What purpose(s) assessment of student learning serve in higher education?
- What are the trends and discourses on student assessment practices in higher education?

## Earlier Review

We began by reading the literature review conducted by [Lindstorm and Taylor \(2016\)](#). This review offered an elaborated list of guiding principles for assessment of student learning that drew on relevant research and scholarship published between 2000 to 2015. Lindstorm and Taylor (2016) noted that the assessment principles, when developed and adopted at the institutional level, aid in the development of course design, advancement of teaching practice, and enhancing formative assessment.

The following assessment principles were identified (Lindstorm & Taylor, 2016, p. 10):

- *Focus assessment on student learning.*
- *Design assessment strategies that are authentic in that they reflect the work in the discipline.*
- *Capitalize on student self-assessment and peer-assessment.*
- *Foster assessment practices that enhance self-regulated learning.*
- *Engage in conversations between students and instructors about assessment processes that foster a learning partnership and evolves based on student need.*
- *Conceptualize formative assessment practice as a 'feed-forward' approach which is action-oriented and used to improve student learning.*
- *Align assessment with instructional strategies and learning outcomes.*
- *Develop assessment processes and tasks that are sensitive to cultural and individual diversity.*
- *Utilize assessment data to inform future teaching and learning plans.*
- *Implement an institution-wide grade scaling system.*
- *Invest in professional development for faculty and teaching assistants around assessment.*
- *Strive to create a culture of assessment that entrenches assessment in policy frameworks, guides change processes, and increases overall organizational sustainability around supporting student learning.*

We consider Lindstorm and Taylor's (2016) literature review and recommended principles of great importance as it provided a foundation for developing university-wide principles of assessment for student learning at UCalgary. We have largely based our literature review on Lindstorm and Taylor's (2016) important work and recommend reading it along with our review for a fuller understanding of the assessment literature.

## Our Objectives

We set the following two objectives:

1. To update the earlier review (Lindstorm & Taylor, 2016) by examining the assessment of student learning literature from 2016 to the present, identifying the:
  - assessment approaches and conceptualization,
  - purpose(s) assessment may serve, and

- trends and discourses on student assessment practices.
2. To conduct a comprehensive review of the literature using the rigorous systematic review process.

## Review Methodology

Our methodological approach is based on the systematic conceptual review of literature (Kennedy, 2007). Kennedy (2007) notes that a systematic conceptual review helps in developing new insights about the phenomenon or issue of interest. The phenomenon of interest for this review is “assessing student learning in higher education settings.” Our review will focus on identifying broader trends, frameworks, and discourses on assessment practices of student learning that may guide and inform the development and adoption of assessment principles for HEIs.

We used a two-stage search of relevant studies, restricting the search to sources published in English between January 2016 and January 2024. After filtration and manual search additions, we included 34 publications that met the inclusion criteria.

## Inclusion Criteria

To be included in the review, the publication had to offer conceptual insights and guidelines about the practices and frameworks of the assessment of student learning in the higher education landscape. We used the following inclusion criteria to guide the search process:

- The publication offers insights and guidelines about the practices and frameworks for assessing student learning.
- The publication informs the policy development and future directions of student assessment practices.
- The publication is situated in the higher education setting.

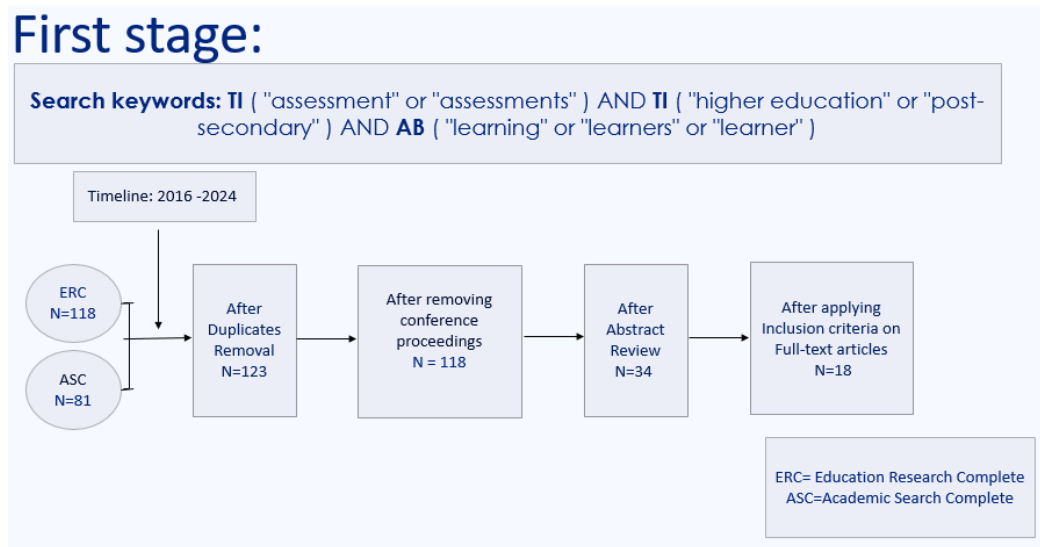
## First Stage: Database Search

In the first stage, we searched for the relevant studies in the following two databases: Academic Search Complete (ASC) and Education Research Complete (ERC). The database searches specified a year range from 2016 to 2024. The following search string was used in the databases:

***TI (“assessment” or “assessments”) AND TI (“higher education” or “post-secondary”) AND AB (“learning” or “learners” or “learner”)***

We intentionally kept the string broad enough to ensure that the most relevant studies would be identified. The string returned a total of 199 studies, indicating that a broad search string successfully captured a wide range of published research studies. After removing the duplicates in the two databases, we were left with 123 studies. We also removed the conference proceedings, leaving 118 articles published in academic journals. We reviewed the abstracts of these 118 articles and identified 34 articles that were relevant to our research questions. We

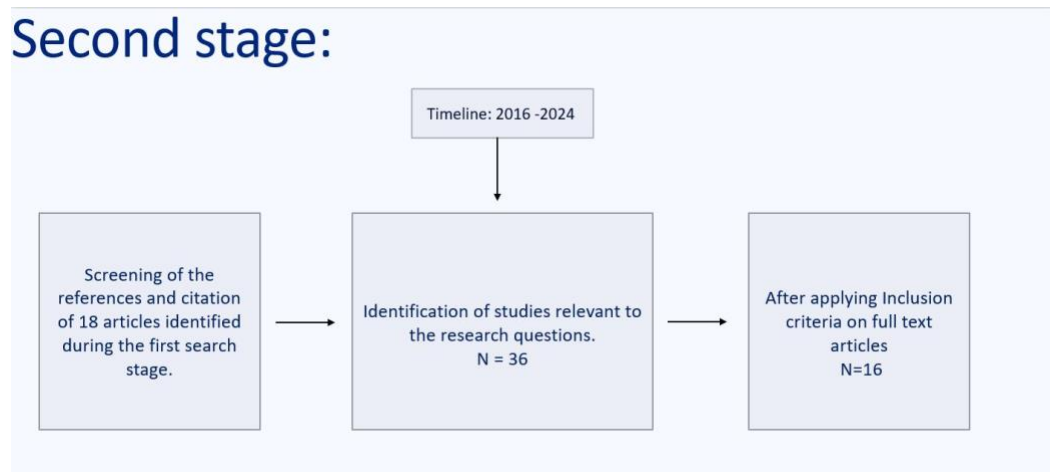
read the full text of these 34 articles to determine if they met the inclusion criteria. The full-text review left us with 18 articles to further review and analyze. The overview of our search process during the first stage is summarized in the flow chart given in Figure 1.



**Figure 1.** Database search

### Second Stage: References and Citations Search

The second stage involved the manual search of relevant studies by carefully screening the references and citations of the 18 articles identified in the first stage. Our objective with the manual search was to identify relevant studies that might not have appeared in the database search as we used a broader string. This manual search resulted in 36 studies. Upon applying the inclusion criteria, we were left with 16 studies to further review and analyze. The overview of our search process during the second stage is summarized in the flow chart in Figure 2.



**Figure 2.** References and citations search

At the conclusion of our two-staged search process, we had a total of 34 studies (18 + 16) that met the inclusion criteria and that were carefully reviewed and analyzed to answer our research questions.

## Findings

We organized our findings around our research questions: conceptualization and approaches for assessing student learning, purpose(s) of assessing student learning, and trends and discourses on assessing student learning practices in higher education. For each question, the findings are synthesized and presented in the form of guidelines and principles.

### Conceptualization and Approaches of Assessment

A wide range of summative and formative assessment approaches are used to guide and facilitate teaching and learning processes at HEIs. Scholars and practitioners actively debate and discuss fundamental questions on assessment conceptualization and practice, such as why we need to assess student learning in higher education, what makes the assessment of student learning meaningful, fair, and relevant, what are optimal practices to design and facilitate the assessment of student learning, and what are the challenges.

Student assessment is a multifaceted practice and is understood and approached in diverse ways. Ibarra-Saiz et al. (2021) noted that our ways of understanding and approaching student assessment have been evolving over time. Traditionally, the assessment of student learning has focused on technical and summative processes used to evaluate and certify students. In recent years, approaches such as assessment for learning, assessment as learning and empowerment, and learning-oriented assessments have emerged on the horizon and have enabled a new direction and vision for the future of assessment in higher education.

Our review of 34 publications offered valuable insight into the current landscape of student assessment approaches and conceptualizations in higher education. Table 1 presents the important guidelines and principles that emerged from this review.

**Table 1.** Guidelines and principles about the student assessment approaches and conceptualizations in higher education.

<b>Assessment Approaches and Conceptualizations</b>	<b>Key References</b>
<b><i>Assessment as a learning practice</i></b>	
The primary focus of assessment is to enable learning, creating such assessment conditions and mechanisms that student learning is valued and prioritized.	Ibarra-Saiz et al., 2021; Memarian & Doleck, 2023
Assessment should align with defined learning outcomes and be situated across phases of the learning cycle in a given course or program.	Boud, 2020; Heil & Dirk, 2023; Tan et al., 2022

<p>Assessment engages students in authentic learning experiences, where they may develop and practice real-life skills and engage in learning experiences that are meaningful and relevant to the field, discipline, and/or profession.</p> <p>Assessment, when focused on learning, is not only corrective but promotes scaffolding and opportunities for frequent and continuous feedback.</p>	<p>Boud, 2020; Ibarra-Sáiz et al., 2020; McMorran et al., 2017</p> <p>Medland, 2016; Memarian &amp; Doleck, 2023; Williams, 2023</p>
<hr/> <p><b><i>Assessment as a collaborative and empowering practice</i></b></p> <hr/>	
<p>Collaborative processes need to be such that all interested groups, such as faculty, students, program leaders, professional associations, and accreditation agencies, work closely to make assessment decisions.</p> <p>Assessment should be an empowering endeavor when students have an active and decisive role and responsibility throughout the process.</p> <p>Assessment should empower students to engage in learning activities that are challenging, reflective, and transversal.</p> <p>Collaborative assessments, in various forms, have been shown to improve student performance as well as reduce exam anxiety among students.</p>	<p>Alabidi et al., 2023; Hortigüela-Alcalá et al., 2019; Efu, 2019; Ibarra-Saiz et al., 2021</p> <p>Boud, 2020; Ibarra-Saiz et al., 2021</p> <p>Hortigüela-Alcalá et al., 2019; Ibarra-Saiz et al., 2021; Manis et al., 2022</p> <p>Efu, 2019; Jones et al., 2021; Lister et al., 2023</p>
<hr/> <p><b><i>Assessment as an equitable practice</i></b></p> <hr/>	
<p>It is important to rethink the understanding of academic rigor in assessment using an equity and social justice lens. The idea of academic rigor, in a traditional sense, preserves inequitable systems and promotes oppression-privilege duality.</p> <p>Equity in assessment requires flexible and holistic practices that invite students to be co-collaborators in assessing learning and offer valuable opportunities for deep and mutually rewarding conversations.</p> <p>Equitable assessment is an ongoing and transformational process that values each</p>	<p>Elkhoury et al., 2023</p> <p>Ibarra-Sáiz et al., 2020; Jankowski &amp; Baker, 2023; Montenegro, 2021</p> <p>Gleeson &amp; Fletcher, 2022</p>

student as a whole person with unique identity, story, and history.

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***Assessment as a sustainable practice***

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Assessment is sustainable when it not only serves the immediate learning needs of the students in a given course but also equips them with dispositions and skills to guide their learning into the future.	Boud, 2020; Memarian & Doleck, 2023; Tan et al., 2022
Sustainable assessment enables students to self-regulate and self-assess by making evaluative judgments about their learning practices.	Boud & Soler, 2016; Joughin et al., 2017; Dison & Padayachee, 2022; Elkhoury et al., 2023
Sustainable assessment enables students to engage in meta-learning processes by consistently reflecting on how they learn what they learn.	Boud & Soler, 2016
To encourage sustainable assessment practice, it is essential that faculty/instructors are enabled, funded, and supported by HEIs to effectively manage their time, workload, and well-being.	Dison & Padayachee, 2022; Elkhoury et al., 2023

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### Purpose(s) of Assessment

There are several purposes of assessment studied and outlined in the literature. Jankowski et al. (2023) argue that it is important that we focus on the theoretical foundations of assessment and actively interrogate how the “why” of assessment informs and intersects with the “how” and “doing” of assessment. In other words, it is the exploration and understandings of the purpose of assessment that guide the multiple mechanisms, frameworks, practices, and doing of assessment that we witness and experience in the higher education context.

It is evident from the literature that the purpose and role of assessment has expanded over the years. Hooda et al. (2022) noted that the role of assessment has “widened as it is not only students-centered but also covers curriculum design, teachers’ instructions, and administrators’ settings. Assessment helps in improving the performance of students learning and acts as a key factor in their future attainment” (p. 1-2). Similarly, Elkhoury et al. (2023) stated that while the “primary purpose of assessment is to improve student learning” (p. 3), it also assists in measuring student learning, informing teaching practice, and preparing students to become life-long learners.

Table 2 summarizes a few guidelines and principles for the purpose(s) of assessment that emerged from our review of 34 publications.



**Table 2:** Guidelines and principles for the purpose(s) of assessment

<b>Purpose(s) of Assessment</b>	<b>Key References</b>
Assessment serves to motivate and engage students in learning. It should present an appropriate challenge for students instead of threat.	Jones et al., 2021; Hooda et al., 2022; Memarian & Doleck, 2023
Assessment provides the opportunity for various forms of feedback: self-reflection, teacher-to-student, student-to-student, and student-to teacher.	Boud, 2020; Elkhoury et al., 2023; Winstone & Boud, 2022
Assessment generates feedback on teaching and learning practices which enables the faculty to make necessary changes and adjustments to their instructional strategies and approaches.	Elkhoury et al., 2023; Hooda et al., 2022
Assessment assists in measuring student performance, generating grades, and awarding credentials and certifications.	Boud, 2020; Hooda et al., 2022; Memarian & Doleck, 2023; Winstone & Boud, 2022
Assessment helps students and faculty in gauging and monitoring students' progress and attainment of learning goals in a course.	Alabidi et al., 2023; Ibarra-Saiz et al., 2021; López-Pastor & Sicilia-Camacho, 2017; Weleschuk et al., 2019
Assessment prepares students to develop capacity and ability to adequately judge their own work and of others.	Boud, 2020; Ibarra-Saiz et al., 2021; Bourke, 2018
Assessment facilitates administrative and curricular purposes related to meeting standards and benchmarks set by professional and academic accrediting bodies.	Braun, 2019; Ibarra-Saiz et al., 2021; Manis et al., 2022

### Trends and Discourses on Assessment Practice

Since 2016, assessment practices have continued to evolve and modify to meet various teaching and learning needs in higher education. The global (COVID-19) pandemic, in particular, presented challenges and opportunities that required students, instructors, and program leaders to reimagine learning and the assessment of learning. This created new opportunities to engage in dialogues around assessment, leading to trends and discourses that became prevalent in recent years. Our review of the literature identified several major discourses and trends. We have organized these across seven themes: the rise of authentic assessment; engaging students as partners in assessment; utilizing online and digital assessment; rethinking feedback; student wellbeing, mental health, and assessment; generative AI, academic integrity, and assessment; and inclusion, social justice, and assessment.

Table 3 outlines a few guidelines and principles emerging from the major trends and discourses of assessment practices as identified in the 34 publications we reviewed.

**Table 3:** Guidelines and principles emerging from trends and discourses on assessment practice.

Trends and Discourses on Assessment Practice	Key References
<b><i>Rise of Authentic Assessment</i></b>	
Authentic assessments, focusing on processes and scenarios based on real-life contexts, are becoming more prevalent than traditional assessments such as tests and exams.	Boud, 2020; Williams, 2023
Authentic assessment is process-related and can take diverse forms as per the professional and academic requirements of different disciplines and fields. A few examples may include creating podcasts, analyzing case studies, developing portfolios, and discussing critical incident accounts.	Boud, 2020; Dison & Padayachee, 2022; Heil & Dirk, 2023; Ylonen et al., 2018
Authentic assessment is reported to be successful in fostering active engagement, confidence, and self-efficacy among students.	Boud, 2020; Dison & Padayachee, 2022; Moorhouse et al., 2023
With rapidly changing labor and workplace realities, authentic assessment provides valuable opportunities to develop employability skills for now and the future.	Dison & Padayachee, 2022; Tan et al., 2022
<b><i>Engaging Students as Partners in Assessment</i></b>	
Multiple opportunities are provided to students to make decisions and take ownership of their learning journey throughout the course.	Curtis & Anderson, 2021; Ibarra-Saiz et al., 2021
Students are whole human beings with vast experiences and multiple identities. They should be enabled to bring their unique selves to co-shape and co-design assessments for learning.	Boud, 2020; Ibarra-Saiz et al., 2021
It is important to engage students as partners in all stages of the learning and assessment cycle to truly maximize the	Curtis & Anderson, 2021; Ibarra-Saiz et al., 2021; Jankowski & Baker, 2023; Manis et al., 2022; Jankowski & Baker, 2023

<p>impact of student-faculty partnerships in assessment.</p> <p>Student-faculty partnerships in assessment design should be mutually rewarding. Assessment should be manageable and effective for faculty and empowering, engaging, and valuable for students.</p>	<p>Boud, 2020; Curtis &amp; Anderson, 2021; Ibarra-Saiz et al., 2021 Efu, 2019; Jankowski &amp; Baker, 2023</p>
<hr/> <p><b><i>Utilizing Online and Digital Assessment</i></b></p> <hr/>	
<p>Online assessments are most effective when it is transparent, communicated clearly, and based on authentic, real-life tasks.</p> <p>When designing online and digital assessment tasks, elements such as the learning context, students' needs, and pedagogical goals should be thoroughly considered.</p> <p>Peer assessment is an integral component of online and digital assessment. Students should be provided detailed guidelines on how to use rubrics to provide useful feedback for peer learning and support.</p>	<p>Heil &amp; Dirk, 2023; Hooda et al., 2022; Weleschuk et al., 2019</p> <p>Jurāne-Brēmāne, 2023; Weleschuk et al., 2019</p> <p>Heil &amp; Dirk, 2023; Jurāne-Brēmāne, 2023; Weleschuk et al., 2019</p>
<hr/> <p><b><i>Rethinking Feedback</i></b></p> <hr/>	
<p>Feedback, while an essential element of assessment practice, serves the unique purpose of generating valuable information to influence future learning and achievement.</p> <p>Feedback should be approached as a learning-centered practice. Students may initiate the feedback process to gather information that may improve their work or learning.</p> <p>Assessment feedback is intentional, personalized, and continuous so students feel supported and confident about their learning progress.</p> <p>Feedback is most helpful when it is immediate, frequent, and dialogical and when students have an active and engaging role in the feedback process.</p>	<p>Boud, 2020; Memarian &amp; Doleck, 2023; Winstone &amp; Boud, 2022</p> <p>Dison &amp; Padayachee, 2022; Ibarra-Sáiz et al., 2020; Winstone &amp; Boud, 2022</p> <p>Lister et al., 2023; Winstone &amp; Boud, 2022</p> <p>Boud, 2020; Dison &amp; Padayachee, 2022; Winstone &amp; Boud, 2022</p>
<hr/> <p><b><i>Student Wellbeing, Mental health, and Assessment</i></b></p> <hr/>	

<p>The literature repeatedly identifies assessment as a barrier to well-being. Assessment tasks should be accessible and flexible, with clear guidelines about deadlines, extensions, evaluation criteria, and support.</p>	<p>Jones et al., 2021; Lister et al., 2023</p>
<p>To reduce academic stress related to assessment, it is recommended assessment practices are more compassionate, proactive, holistic, and accessible for students.</p>	<p>Jones et al., 2021; Lister et al., 2023</p>
<hr/> <p><b><i>Generative AI, Academic Integrity, and Assessment</i></b></p> <hr/>	
<p>Given the emergence of generative AI in higher education, it is imperative for faculty to (re)examine their current assessment tasks and practices and to focus on assessment tasks that are authentic, experiential, and process-related.</p>	<p>Crawford et al., 2023; Memarian &amp; Doleck, 2023; Moorhouse et al., 2023</p>
<p>To address issues of plagiarism and to promote academic integrity, faculty should cultivate a sense of moral character in students and provide guidance for the productive, ethical, and responsible use of AI tools.</p>	<p>Alabidi et al., 2023; Memarian &amp; Doleck, 2023; Moorhouse et al., 2023</p>
<p>The guidelines for using generative AI should be communicated clearly to students through a statement in the course syllabus or outline and by engaging in open and well-intended discussions with them in class.</p>	<p>Alabidi et al., 2023; Hooda et al., 2022; Moorhouse et al., 2023</p>
<p>Assessment should pass the AI test, meaning that faculty should ensure that the assessment tasks are not achieved solely by using generative AI tools.</p>	<p>Crawford et al., 2023; Moorhouse et al., 2023; Williams, 2023</p>
<p>Assessment is designed such that the student learning process(es) is evident and cannot be autogenerated in entirety by using AI tools.</p>	<p>Alabidi et al., 2023; Moorhouse et al., 2023</p>
<p>Utilizing generative AI tools does not have value in itself. It becomes important when it ethically advances learning and</p>	<p>Alabidi et al., 2023; Williams, 2023</p>

assessment practices to achieve pedagogical objectives.

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### ***Inclusion, Social Justice, and Assessment***

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To achieve inclusion in assessment, it is critical that students are actively and holistically involved in assessing their learning.	Montenegro, 2021; Elkhoury et al., 2023; Jankowski & Baker, 2023
Learning outcomes are designed and communicated such that they are accessible and relatable to all students.	Elkhoury et al., 2023; Jankowski & Baker, 2023
Assessment practices rooted in relationality, reflexivity, and storytelling are valued in indigenous ways of knowing, doing, and being.	Gleeson & Fletcher, 2022
At any instance of learning, students may be offered multiple ways to demonstrate their attainment of learning outcomes.	Montenegro, 2021; Elkhoury et al., 2023; Jankowski & Baker, 2023; Kaur et al., 2017

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## Conclusion and Recommendations

The guidelines and principles shared in Tables 1-3 provide a range of research-informed insights and learnings on how student assessment is conceptualized and approached, what purposes assessment serves, and what trends and discourses are visible in assessment practice in recent years. Based on the guidelines, there is a clear focus and attention on enabling students' learning and development through assessment. It is emphasized that students are understood and approached as whole human beings who have diverse needs, who bring to universities rich experiences and perspectives, and who have a wide range of academic and professional goals that they wish to achieve with and through university education.

Assessment processes and practices should acknowledge and value students as whole people and advance their role, position, and contributions in teaching and learning environments. The involvement of students in the process of assessment ensures that students have (co)ownership over their assessment practices and can make a meaningful impact on their learning experiences.

As we think about our guidelines, we offer five recommendations to make assessment practice relevant and effective for student learning.

1. **Communicate with clarity.** Communication is key to making assessment objectives and processes accessible to students. Students should know, with clarity, what is expected of any assessment task and how their engagement in it will assist with achieving learning goals in a particular course and beyond.
2. **Focus on well-being.** Student well-being, while extremely important, has been an often neglected area of assessment practice. However, the COVID-19 pandemic brought to the

fore students' needs and concerns for mental health and well-being. It is important that educators acknowledge that students have lives beyond academia, and it is necessary to consider mental health and well-being when designing assessments and communicating expectations, tasks, and procedures at all levels. As reflected in the findings of this literature review, we also acknowledge that sustainable assessment practices must consider well-being across the academic community, including faculty, graduate student instructors, and other staff members.

3. **Prioritize inclusion and social justice.** We live in an unequal world where structures and systems perpetuate inequalities. Higher education is no different. We must make the issues of inclusion and social justice central to all our systems and practices related to assessment, including curriculum development and revisions, teaching and learning endeavors, and academic development offerings and programs.
4. **Enable capacity-building and support.** Our review of the literature shows that the assessment of student learning is a dynamic and expanding practice. Faculty and other instructional support staff have increasing demands to put more time, energy, and resources towards their teaching and assessment work. It is, therefore, important that as we develop an institution-wide commitment and principles of assessment, we must consider our instructors' capacity, wellness, and workload. We need to closely engage with instructors at all levels and ensure that their academic development needs are met, and they are adequately supported with resources.
5. **Affirming Indigenous Ways of Knowing.** A key gap in this literature review is how assessment practices and principles in higher education affirm Indigenous Ways of Knowing, Being, Doing, and Connecting. As UCalgary moves forward with this work we must draw upon the recommendations and principles communicated through UCalgary's *ii' taa'poh'to'p* Indigenous Strategy to create a more inclusive campus by increasing Indigenous representation in teaching, learning and assessment practices, and by creating more opportunities for all members of the UCalgary community to learn about Indigenous histories, epistemologies, philosophies, and methodologies.

This literature review offers a wide range of recommendations and thinking points. Our primary task is to determine how we may make use of these research-informed guidelines in developing a set of principles that guide the assessment practice and culture of assessment at UCalgary. As we embark on this task, we are reminded of Lindstorm and Taylor's (2016) valuable advice:

*If, as an institution, we commit to making meaningful and effective assessment an intentional, well-articulated goal, we will derive a number of benefits. When common principles are entrenched in our planning documents and embedded in our institutional culture, program goals, curriculum, and the minds of policy leaders and instructors alike, then we can better ensure that our students perceive the assessment process as an opportunity for further*

*learning, rather than one that focuses primarily on anxiety and stress. (p. 15-16)*

We take this advice to heart and hope that this literature review will initiate meaningful discussions and consultations across the institution and will provide the foundation for the development and articulation of assessment principles at the University of Calgary.

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