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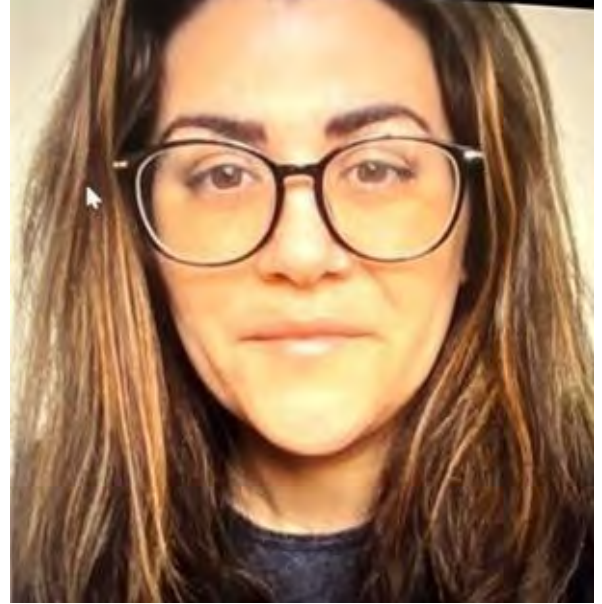
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# Table of Contents

- 1**      **Editorial** • *E. Krahe Billings*
  
- 2**      **Mindset Matters: Enhancing Grading Practice with a Mindset Check** • *L. Pipoly*
  
- 7**      **Summative or Formative Assessments? - That is the Question** • *S. N. Maatnefert*
  
- 11**     **Design 2.0 Innovative Curriculum Initiative, Part 1: Evaluating Implementation Using the Developmental Evaluation Approach** • *N. L. Stackhouse*
  
- 15**     **Design 2.0 Innovative Curriculum Initiative, Part 2: Findings, Effectiveness, and Recommendations** • *N. L. Stackhouse*
  
- 19**     **Curriculum and Program Assessment and Evaluation** • *S. Forrest*
  
- 23**     **Increasing Learning, Competency, and Employability Through Assessment and Assessment Feedback Practices in Higher Education** • *J. M. Lang, P. E. Darbyshire, L. A. Hines, & E. Kalendaroglu-Wheeler*
  
- 31**     **Supporting DEI Management Strategies and Practices Through Robust Assessment Efforts** • *K. Underwood & J. Flores*
  
- 34**     **Feedback Strategies and Modalities in Online Higher Education** • *A. Larson, M. Kebritchi, M. Vianna, & E. Young*
  
- 41**     **Knowledge Without Boundaries Research Summit**
  
- 42**     **Upcoming Events and Workshops**



## Editorial

Welcome to the latest edition of the Phoenix Scholar. This edition is focused on assessment in higher education. In this Summer 2023 edition, contributing authors focus on the more traditional mechanisms of assessment of learning and, germane to the University's focus on skills-aligned curriculum, dive deep into the ways we validate that our curricula are meeting learner needs.

There are resounding calls nationally and internationally for a stronger, more meaningful connection between education and careers, and the voice of the learner is perhaps loudest among them. From international conversations at the World Economic Forum to our industry partnerships here at the University of Phoenix, and most important, what we have learned from our own students about their needs. We have heard and are answering that call.

As higher education continues to coalesce at this intersection of education and careers, authentic assessment and skills-aligned curriculum at the University of Phoenix cultivates learners who simultaneously demonstrate the comportment indicative of engagement in higher education and in their respective industries. We are connecting curriculum to careers.

In this edition we celebrate the Herculean efforts of the University of Phoenix in its new approach to assessment and curriculum that sits at the intersection of higher education and careers. The articles delve into the stories of innovation, dedication, and transformation

that are shaping the present and future of higher ed.

As you read this edition of the Scholar, we encourage you to consider an active role in continuing this dialogue around assessment and skills-aligned curriculum, and showcasing your own research and insights on future pages. Thank you for being a part of our readership!

Sincerely,

**EKBillings.**

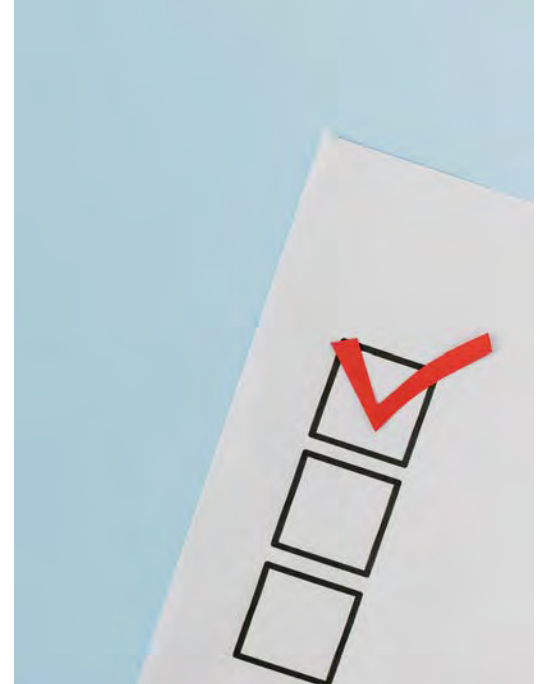
**Eve Krahe Billings, PhD**  
Dean, Academic Innovation & Evaluation  
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# Mindset Matters: Enhancing Grading Practice with a Mindset Check

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## Abstract

The focus on fostering a growth mindset in the online classroom has led to increased research. While most applications target students by providing encouragement, normalizing the struggle, and praising the learning process, this article takes a different approach. It aims to summarize existing literature on self-assessment and explores its practical application as a mindset check for higher education instructors. In this context, a self-assessment can be effectively translated into practice as a reflective exercise that enables instructors to evaluate their own mindset and approach toward grading. By implementing such a practice prior to grading student assignments, instructors can identify and minimize grading biases. This application can promote self-awareness, allowing instructors to evaluate their grading practices and make necessary adjustments. Mindset checks contribute to ensuring fairness, objectivity, alignment with learning objectives, and empathy in the assessment process. Implementing the mindset check before grading can contribute to improving grading practices.

*Keywords:* self-assessment, mindset check, grading, faculty, higher education, academia, best practices, growth mindset, bias in grading, assessment

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## Introduction

The concept of mindset is deeply rooted in the social-cognitive model of achievement motivation

first explored by Carol Dweck (1999). With the recent academic interest in incorporating a growth mindset framework in higher education, multiple studies have uncovered that mindset interventions can positively impact beliefs, motivation, and learning (Zeeb et al., 2020). Many growth mindset strategies are supportive interventions within the classroom that focus on encouraging students, normalizing the struggle, and praising the learning process. These strategies are impactful since mindsets have the potential to direct people in their thinking, feeling, and acting in education (Sadoughi & Hejazi, 2023).

Research illustrates the importance of this topic since de Kraker-Pauw et al. (2017) found that teacher mindset influences the amount and type of feedback provided to students. However, there remains a dearth of literature exploring a growth mindset from the perspective of how it is related to the assessment process. Evaluating one's perspective can effectively ensure fairness, objectivity, and empathy in feedback. As instructors, it is paramount to reflect prior to the grading process. The concept of a mindset check is about the current state of one's mind, which would allow for increased self-awareness and clarity.

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## Recognizing and Minimizing Bias in Grading

There are multiple reasons why it is important for instructors to reset the state of one's thought process prior to grading. One of these is the implication

that this self-assessment practice allows one to be introspective in recognizing and minimizing grading bias. Doornkamp et al. (2022) proposed that an area for future research should focus on increasing awareness of teachers regarding the role of their own gender-typed expectations of male and female students in grading practices. Studies have even explored grading disparities related to weight-biased attitudes among teachers with mixed evidence related to lower grades, but consistent evidence that students were perceived as less capable (Finn et al., 2020). Further research elaborates on the need to recognize and minimize bias in grading. Ferman and Fontes (2022) provided quantitative results that illustrate teachers are not neutral to students' behavioral characteristics when assessing their scholastic skills and making high-stakes decisions. To help mediate bias in an academic setting, some clinical programs have begun incorporating implicit bias training into their curriculum with positive results, although there currently is no standardized approach to implicit bias training (O'Sullivan et al., 2023). A call for more research is needed to identify effective techniques. Research demonstrates that evidence-based grading practices such as standardized rubrics have decreased bias and disparities in grading (Colson et al., 2023). Regardless of the context for grading bias, improving teachers' self-awareness can lead to increases in the quality of teaching (Schussler et al., 2010).

Instructors are human, so it makes sense that their overall mood and attitude might impact grading. Stress, distractions, emotional exhaustion, burnout, and a fixed mindset can all have an impact on one's outlook. In terms of stress, university instructors have been reported to have higher rates of stress when compared to elementary or middle school teachers (Lackritz, 2004). A systematic review of the literature from 2005-2020 on burnout rates of university instructors, consisting of over 12 studies with a total sample of 2841 university instructors, found a reported burnout rate of 37% (Fernández-Suárez et al., 2021). In another study with a sample of 100 university instructors 61.6% of the participants were identified as being in an early stage of burnout, 35.3% as having burnout syndrome, and 2.1% as having possible burnout. Only 1% of the sample did not exhibit any indication of burnout (de Araujo Leite et al., 2020).

As online instructors often work from home, environmental distractions should also be considered. Kooraram and Durbarry (2021) studied work-from-

home employees post-COVID and found multiple boundaries that muddled office and family life. While family conflict was reported in the above study, other studies reported environmental distractions such as pets, children, housemates, TV, social media, messages, news portal, mind wandering, noise, doorbells, and household chores (Baumann et al., 2023).

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## Self-Assessment as a Mindset Check Tool

As an instructor prepares to grade, a self-reflective exercise can ensure that one is in the proper mind space to begin evaluation. A self-assessment can serve as a mindset check. This may involve a structured framework or questionnaire that prompts an instructor to reflect on their grading practices, current mood state, identify any biases or misconceptions they may hold, and work towards rectifying them. A self-assessment is the evaluation of one's own abilities. It is reflective since it allows one to consider their own strengths and weaknesses. According to Cornell University (2023), self-assessment techniques allow self-monitoring, a reflection of practice, self-directed learning, motivation, and a range of personal transferrable skills. Furthermore, self-assessment can be described as monitoring one's own processes to make adjustments that deepen and enhance learning (Andrade, 2019). While there is a plethora of research on the topic of self-assessment, there is no definitive rationale in terms of the specific cognitive or affective mechanisms. It is, however, suspected that the benefit of self-assessment from a pedagogical framework is that it comes from an active engagement in the learning process (Andrade, 2019).

While this concept is applied to many disciplines and non-academic outcomes, it is most utilized in the counseling, nursing, and teacher education fields. In education, a wealth of literature focuses on applying self-assessment to students and their ability to assess and develop their own learning abilities. The studies reviewed explored the consistency of students' self-assessments, the relationship between self-assessment and achievement, self-regulated learning, and students' perceptions of self-assessment. However, self-assessment is not just a technique employed to increase student learning. Self-assessment can be used to improve professional and academic practice.

It can help to create a reflective practitioner, an educator that can think critically about their own practice, plan changes, and observe the effectiveness of these modifications (Ross, 2006). Judging one's performance, in theory, should allow one to take this feedback, apply it, and thus improve their work.

A search of the literature was conducted to uncover published mindset check surveys, questionnaires, instruments, or assessments. However, no specific self-assessments were identified that were designed to be used by instructors before grading student assignments. Most of the published assessments focused on general feedback or were designed as an end-of-year performance evaluation for teachers. The Teacher Mindset Scale was reviewed, although this focuses on a teacher's present state of mind from a growth vs. fixed perspective (Kaya & Yuksel, 2022). Since no published instruments were located for this purpose, one was created using growth mindset language. For timeliness and usability, the following self-assessment was designed to be brief. It allows for an opportunity to be actively involved in resetting one's mindset and beliefs about grading and identifying areas for improvement. It further encourages a deeper understanding of one's own approach to grading to create a more effective and fair evaluation system.

These questions should be integrated into one's grading workflow as a self-reflective exercise, as this self-assessment was created out of a need illustrated in the literature:

Mindset Check Self-Assessment:

- Am I in a calm and focused state of mind before beginning the grading process?
- Have I considered any personal biases or preconceived notions while grading?
- Have I reviewed the summative grading rubric to ensure consistency and fairness?

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## Reflection

Kusters et al. (2023) discuss the importance of teachers' ability to prepare and implement educational changes. University instructors can implement this growth mindset approach as a meaningful and impactful way to reset before grading. It can encourage one to de-stress, increase clarity, create a sense of calm, and focus on the grading process. While teachers frequently report the desire to take the initiative to

reform teaching practices and improve teaching, research reports that they are often inhibited from doing so based on time constraints (Kusters et al., 2023). However, adding in a brief self-assessment can create the reverse effect of feeling less pressured, intentionally limiting distractions, and making the overall grading process a priority that goes smoothly.

Furthermore, previous studies have demonstrated that teachers' attitudes toward mindset influence their teaching practices and prospects provided for learning, which, in turn, impact students' performance (Kaya & Yuksel, 2022). Mesler et al. (2021) found that teachers with a growth mindset have a statistically significant and positive association with the development of their student's growth mindset. As instructors our feedback to students holds weight. Thus, a trickle-down impact may occur, leading to constructive, actionable, and supportive feedback to foster student growth and improvement.

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## Author Bio

Laura Pipoly is a full-time faculty member at the University of Phoenix (UOPX) and teaches students in the Student Success Series. Laura has been employed at UOPX for over 10 years in the College of General Studies and is involved with committees and scholarship work across the university. She earned her bachelor's degree in psychology from Hiram College and holds a master's in school counseling and community counseling from Youngstown State University. Laura graduated from Nova Southeastern University with a doctorate in special education and in instructional technology, and distance education (ITDE). Laura is a licensed mental health counselor, co-author of the book *Meeting the Challenge of Bipolar Disorder: Recovery, Remission, and Prevention* and presenter at national conferences such as Law and Ethics in Counseling Conferences in New Orleans and the XII Guide International Conference in Orlando.

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# Summative or Formative Assessments? - That is the Question

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## Abstract

Assessments are fundamental in the process of teaching and learning. The primary types of assessments are summative and formative (Myers, 2021). Educators decide formally and informally which assessment type to apply for learning retention and objectives. This article explores how summative and formative assessments were traditionally applied and how assessments were reimagined since the COVID-19 Pandemic. Based on findings since the COVID-19 Pandemic, assessments were the metrics used to re-assessed students learning and to re-map the teaching and learning landscape to recapture learning loss and to re-design assessments in curriculum and instruction for academic excellence (Turner, 2022; Uyar & Kadan, 2022). Applying learning theories is one innovative approach for evidenced-based assessments (Uyar & Faruk, 2022) to determine the best single or combination of summative and formative assessments. According to Ismail et al. (2022) and Mohamadi (2018), learning and educational outcomes are expected to improve with assessments.

## Introduction

Assessments are a quantifiable means for educators to enhance students' learning and reduce the gap between students' current knowledge base and their target learning goals (Ismail et al., 2022). According to Myers (2021), summative and formative assessments are the two primary types of educational assessments. Education and assessment are intertwined in academics (Mohamadi, 2018). A critical approach to the foundational assessment types, summative and formative, could improve learning and instructional outcomes (Ismail et al., 2022; Mohamadi, 2018).

Educators converting to online teaching and learning re-assessed applying summative and formative assessments in their curriculum and lesson plans (Lawlor, 2023; Mohamadi, 2018). Educational organizations used assessments to gauge the ramifications and opportunities for students' learning from the COVID-19 pandemic (Uyar & Kadan, 2022). For example, learning loss emerged as a ramification of the COVID-19 pandemic on educational outcomes

(Turner, 2022; Uyar & Kadan, 2022) from the analysis of assessments.

Identifying assessment types such as summative and formative in curriculum development was not required in the author's corporate educational career. The summer theme about assessments for the Phoenix Scholar (University of Phoenix, 2023) prompted the researcher to explore current applications of summative and formative assessments. Educators could qualify assessments dynamically in curriculum and development by gauging the needs of the students and the current educational challenges. The assessment context could be enhanced with relevant learning theories applied practically (Lang, 2023).

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## Summative Assessments

Summative assessments are used to evaluate students' learning at the end of an instructional lesson and unit by comparing it with a standard and benchmark like a rubric (Maatnefert, 2020). Categorically, summative assessments are for accreditation and validation of predetermined learning outcomes for programmatic or accreditation objectives (Mohamadi, 2018). Myers (2021) cited examples of summative assessments such as standardized tests, final exams, graded projects, work portfolios, research papers, literature reviews, and dissertation defenses with a grading rubric. The investigator experienced summative assessments in doctoral course assignments required weekly in the form of a doctoral research paper or project based on the weekly lessons.

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## Formative Assessments

Marzano (2006) identified the goal for formative assessments as the opportunity to develop and formulate students with ongoing feedback to improve their learning throughout the course (Maatnefert, 2020). Categorically, formative assessments are for assessment for learning (Mohamadi, 2018). Formative assessments involve the mediation of the teacher and student interaction allowing for the scaffolding and personalized assistance from the teacher to the student (Mohamadi, 2018).

Formative assessments were used in the researcher's doctoral coursework weekly during the eight-week

course week in the form of two weekly discussions based on the weekly lessons and readings. Myers (2021) cited examples of formative assessments such as unannounced quizzes, journaling, worksheets, homework, oral questioning, and responses, review questions, and checking notebooks. A formative technique used for in-person and online courses is polling. Polling online was embedded in online applications such as Zoom and Webex videoconferencing products (Cisco, 2023; Zoom Video Communications, 2022) in online courses and iterative questions throughout the lesson.

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## Hybrid Assessments

The enactment of the No Child Left Behind Act of 2001 (NCLB) popularized applying a hybrid of formative and summative assessments (Myers, 2021). The hybrid consisted of pre-assessments (formative assessments) based on the summative assessment. The pre-assessments assisted educators to predict the performance of students on high-stake tests used for NCLB guidelines and state standards (Myers, 2021). The flexibility of pre-assessments allows tailoring to the different learning styles of the students (Myers, 2021). The formative assessments help educators develop curriculum and instructions to accomplish the goals of the summative assessments (Myers, 2021). Summative and formative assessments could be used in a hybrid model depending on the educational goals. For example, information from summative assessments could be used as formative when students and faculty use it to guide their efforts and activities in succeeding courses (Carnegie Mellon University, 2023; Maatnefert, 2020).

Studies on summative and formative assessments poised advantages on academic motivation, learning attitudes, test anxiety, and self-regulation (Ismail et al., 2022). Research by Ismail et al. (2022) accessed from one-way ANOVA and Bonferroni test analysis that summative and formative assessments were effective. However, formative assessments were more effective on the categories of academic motivation, test anxiety, and self-regulation skills. A skill such as self-regulation was advantageous to students in other academic aspects. Self-regulation was cited as a successful characteristic for students in online higher education retention rates (Kebritchi et al., 2023).

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## Innovations

A parsed wholistic approach to assessment planning could innovate teaching strategies. Applying evidence-based research to assessments could also solidify educators' teaching strategies and approaches for enhanced student academic achievement. In addition to the common summative and formative assessment types, an innovative assessment could include self-directed learning where students initiate diagnostic assessments in their learning (Baker, 2023).

In the 21st century, innovative approaches led to improving the connection between contemporary learning theories and classroom assessments (Kang & Furtak, 2021). Assessments became a renewed response as noted at National Council on Measurement in Education (NCME) conferences since 2017 (Kang & Furtak, 2021). Classroom assessments are potentially the greatest influencer on student learning (Kang & Furtak, 2021). As examples, socio-cognitive and socio-cultural learning theories were applied in developing assessments. The learning theories were used to guide the development of assessments not typically considered in assessment planning and development.

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## Conclusion

A wholistic assessment plan based on evidence and leveraging educational theories, framework, organizational goals, current educational challenges, and students needs could improve academic achievement and replenish learning loss (Ismail et al., 2022; Mohamadi, 2018; Uyar & Faruk, 2022). Uyar and Faruk (2022) stated students' learning loss could be compensated after the pandemic using a combination of strategies. The strategies involving assessments from Uyar and Faruk (2022) could be parsed into formative and a hybrid of formative and summative assessments. Formative assessment strategies for replenishing learning loss were the main strategies that included recovery courses and training, book reading activities, quizzes, trial exams, and homework.

The dissertation model at the University of Phoenix (2023) could be used as template for all levels of educators from pre-kindergarten to corporate and vocational educational settings (University of Phoenix, 2023). University of Phoenix (2023) required the dissertation include a conceptual or

theoretical framework. Similarly, Uyar and Faruk (2022) mentioned coordinating theory with practical assessments. Higher education benefits from research and best practices in assessment, curriculum, and instruction aligned with learning theories and educational frameworks. Since taking courses for a doctorate in education at the University of Phoenix, the researcher has contributed to innovative curricula and courses in corporate technology training and education with the knowledge and skills gained from the summative and formative assessments given in the coursework and dissertation proposal writings.

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## Author Bio

Seshatms N. Maatnefert is a Doctor of Education candidate in the fourth phase at the University of Phoenix specializing in curriculum and development. Seshatms is a member of the University of Phoenix mentorship program and research club. She is a U.S. Coast Guard veteran and transitioned from a career in engineering to education. She has been a corporate educator in information technology for the past ten years. She volunteers for a private primary school in academic support. Seshatms holds a master's degree in electrical engineering from George Washington University and a bachelor's degree in electrical engineering from Howard University.

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# Design 2.0 Innovative Curriculum Initiative, Part 1: Evaluating Implementation Using the Developmental Evaluation Approach

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## Abstract

The Design 2.0 curriculum initiative project at the University of Phoenix aims to implement best practices and innovative teaching and learning strategies that are career-relevant and skills-aligned. The Center for Teaching and Learning (CTL) and the Academic Assessment and Evaluation (AAE) teams conducted surveys, interviews, and focus groups of students, faculty, and college stakeholders to answer the following research questions: how did stakeholders perceive the application, usefulness, and effectiveness of Design 2.0; what was the effect of Design 2.0 on student performance; and what opportunities exist to improve the effectiveness of Design 2.0? Patton's Developmental Evaluation (DE) approach was used to capture system dynamics, interdependencies, and emergent interconnections. The need emerged to support colleges in comprehensively presenting their vision planning for converting current programs to Design 2.0 resulting in the development of a Design 2.0 Program Kick-Off Template. Additional programs

converting to Design 2.0 are using the template in their vision planning.

## Introduction

At the University of Phoenix (UOPX), a major curriculum initiative project is underway. Design 2.0 is aimed at improving teaching and learning in online higher education by using best practices and innovative teaching and learning strategies to better prepare adult learners for the current workplace. A culmination of previous research-based initiatives at UOPX, this skills-aligned curriculum initiative establishes skills-aligned curriculum maps ensuring programs are aligned to in-demand marketplace skills based on employment data along with accreditation expectations, faculty, and advisory council input.

The primary purposes for implementing Design 2.0 are to enhance a skills-aligned curriculum and to support each student's career connections (Center for Teaching and Learning, Learning Innovation

<b>Making Skills and Outcomes Evident</b>	<b>Igniting Students' Professional Identity</b>	<b>Representing the Voice of the Customer/Industry</b>	<b>Providing Interactive Experiences</b>
Evidenced through: *Syllabus *Module Titles *Naming Conventions *Course Guide *Faculty Guide	Evidenced through: *Career-Relevant Discussions *Job Titles *Summative Assessments *Course Content	Evidenced through: *Narrative Elements *Course Guide *Weekly Module *Titles/Descriptions *Assessments	Evidenced through: *Career-Relevant Resources and Support *Career-Relevant Videos *Subject Matter Expert (SME)

Note. Learning Innovation Update: Design 2.0 (Center for Teaching and Learning, 2023)

**Table 1 | Reinforcing a skills-aligned curriculum.**

Update: Design 2.0, 2023). The best practice strategies undergirding Design 2.0 include the following elements detailed in Table 1.

To meaningfully evaluate the implementation of four pilot programs selected for conversion to Design 2.0 in July 2022 (Bachelor of Science in Education – Elementary [BSED/E], Master of Management [MM], Bachelor of Science in Criminal Justice Administration [BSCJA], and Bachelor of Science in Health Administration [BSHA]), an innovative educational evaluation approach was applied. Developmental Evaluation (DE) was created by evaluation expert and author, Michael Quinn Patton, who states, “Developmental Evaluation supports innovation development to guide adaptation to emergent and dynamic realities in complex environments. Innovations can take the form of new projects, programs, products, organizational change, policy reforms, and system interventions” (2011, p. 1).

<b>Traditional Evaluations</b>	<b>Complexity-Based Developmental Evaluations</b>
Render definitive judgments of success or failure.	Provide feedback, generate learnings, support direction, or affirm changes in direction.
Measure success against pre-determined goals.	Develop new measures and monitoring mechanisms as goals emerge and evolve.
Position the evaluator outside to assure independence and objectivity.	Position evaluation as an internal, team function integrated into action and ongoing interpretive processes.
Design the evaluation based on linear cause-effect logic models.	Design the evaluation to capture system dynamics, interdependencies, and emergent interconnections.
Aim to produce generalizable findings across time and space.	Aim to produce context-specific understandings that inform ongoing innovation.
Accountability focused on and directed to external authorities and funders.	Accountability centered on the innovators' deep sense of fundamental values and commitments.
Accountability to control and locate blame for failures.	Learning to respond to lack of control and stay in touch with what's unfolding and thereby respond strategically.
Evaluator controls the evaluation and determines the design based on the evaluator's perspective on what is important.	Evaluator collaborates in the change effort to design a process that matches philosophically and organizationally.
Evaluation engenders fear of failure.	Evaluator supports hunger for learning.

Note. Evaluation for the way we work (Patton, 2006)

**Table 2 | Traditional evaluations vs. complexity-based developmental evaluations.**

The differences between traditional evaluations and complexity-based developmental evaluations are portrayed in Table 2.

In 2014 at the American Evaluation Association's national conference in Denver, CO, Patton further advanced his theory that DE makes complexity manageable for the purpose of improved student learning. With DE, sometimes parts of the assessment plan are left behind while new innovative assessments emerge (Patton, 2014). A fuller description of Patton's DE approach is presented here: [What is Developmental Evaluation?](#) (3 min videoclip).

To evaluate the implementation of the Design 2.0 innovative curriculum initiative, the Center for Teaching and Learning (CTL) team (Mary Elizabeth Smith, Director of Learning Innovation Strategies and Instructional Design, Jason Covert, Senior Learning Experiences Designer and Lead Researcher on Design 2.0 Curriculum Initiative Project, and Donna Smith, Senior Learning Experiences Designer) and the Academic Assessment and Evaluation (AAE) team (Dr. Nancy Stackhouse, Assessment Manager, and Dr. Eve Krahe-Billings, Dean of Academic Innovation and

<b>Research Questions</b>	<b>Topic(s)</b>	<b>Method(s)</b>
How did students, instructional designers (IDs), curriculum production editors (CPEs), curriculum quality analysts (CQAs), college curriculum managers (CCMs), associate deans (ADs), and faculty perceive the application, usefulness, and effectiveness of Design 2.0?	Skills and Careers Assessments Resources Student Performance Design	Surveys Interviews Focus Groups
What was the effect of Design 2.0 on student performance?	Student Performance	Grades Faculty Survey
What opportunities exist to improve the effectiveness of Design 2.0?	Skills and Careers Assessments Resources Student Performance Design	Survey Interviews Focus Groups Grades

Note. Learning Innovation Update: Design 2.0 (Center for Teaching and Learning, 2023)

**Table 3 | Research questions and methodology.**

Evaluation) collaborated to determine the following research questions and methodology depicted in Table 3.

Overall data collection procedures for the Design 2.0 curriculum initiative project are displayed in Table 4.

In January 2023, the Learning Innovation Update: Design 2.0 was presented at the Colleges Expanded Leadership Meeting by Mary Elizabeth Smith. While a final evaluation research report is expected in spring 2023, timely insights and actionable recommendations based on ongoing data collection



Project	Stakeholders	Faculty
Understand the impact of the application of Design 2.0 strategies and where pivots or additional support may be needed:	Understand perspectives and experiences in the translation and application of Design 2.0 strategies:	As all Design 2.0 courses roll out, supporting faculty in multiple ways, in addition to surveying faculty in targeted 1 <sup>st</sup> two courses of the program:
Survey faculty in 1 <sup>st</sup> course start date (CSD)	Focus groups (early) – IDs, CCMs, ADs, CPEs, and CQAs	Pre-course email from faculty training including faculty resource center (FRC) content about how to strengthen connections to skills and careers
Survey students in 1 <sup>st</sup> three CSDs	Program and course feedback	In-course content via the faculty guide
Interview two students per course	AD/ID retrospective	
Withdraw/fail and assessment data for three CSDs compared to previous three CSDs		
Separate high-level analysis of summative assessment and rubric due to focus and changes		

Note. Learning Innovation Update: Design 2.0 (Center for Teaching and Learning, 2023)

**Table 4 | Initiative details.**

and data analysis were presented. A preliminary emerging insight was the need to further support the colleges and the Center for Teaching and Learning in effectively implementing the Design 2.0 curriculum initiative. Using the Developmental Evaluation (DE) approach, system dynamics, interdependencies, and emergent interconnections were captured throughout the pilot implementations. The CTL team and the AAE team were able to provide feedback to colleges resulting in an emergent need to develop a Design 2.0 Program Kick-Off template (with data points and points of contact) to support colleges in effectively and comprehensively presenting their vision planning for converting current programs to Design 2.0. Dr. Nancy Stackhouse crafted a Design 2.0 Program Kick-Off Template (rubric) based on criteria found in previously presented Design 2.0 training materials (Design 2.0

Design 2.0 Vision Planning PPT Elements	Score*	Evaluation Feedback
1-2.0 Program Vision/Mission	N	No vision or mission statement included. Please develop/include.
2-Student Demographics	E	Gender, race, age, learning modality included.
3-Gaps - Incoming and at Graduation: Technical	E	Students struggle navigating the My Time Log system, Excel, etc.
4-Gaps - Incoming and at Graduation: Non-cognitive/soft skills	P	Mention on slide X of "program bridging the gap between theory and practical application through applied assignments." Need to include specific non-cognitive/soft skills.
5-Career Services Feedback-Ask "What are students lacking when they graduate from this program?"	N	Career services feedback not included. Please communicate with Career Services and develop/include.
6-Student and Enrollment Services Feedback (ERs/ACs)	E	Student enrollment NDE and TDE trends, transfer credits included.
7-Feedback from Tech Support-Ask "Where are students having issues and in what classes?"	N	Please determine and include. Communicate with tech support.
8-Data Analysis: PBI (Power Business Intelligence platform) SEOCs (Student End-of-Course evaluations)	E	Student course sentiment included.
9-Data Analysis: PBI FEOCs (Faculty End-of-Course evaluations)	P	Mentioned on slide X, but no FEOCs data or faculty sentiment provided. Please include summary.
10-Data Analysis: Progression Data	E	Average program completion rate, data stability, and comparison to UoPX completion average are included.
11-Data Analysis: W/F Rates	E	Standout courses with higher W/F rates included.

**Table 5 | Design 2.0 program kick-off template.**

12-Data Analysis: Summative Assessments	P	Summative assessments mentioned. Please include summary of student success data.		
13-Data Analysis: RAPs (Course-Rapid Assessment Process)	P	Specific courses with RAPs indicated. Please include high-level summary of planned course changes.		
14-Data Analysis: CAPs (Program-Comprehensive Assessment Process)	N/A	Not available. No CAP completed to date.		
15-Program Gaps/Challenges	P	TDE numbers have declined, program has remained relatively stable. Need to better align skills to each course during curriculum revision. Please include specifics.		
16-High-Risk/Challenging Courses	N	Not included. Please summarize and include.		
17-Specific Tools Student Should Know About	P	Connect, MyEducator, SmartBook. Please include other tools experienced in the workplace.		
18-Relevant Professional Organizations Student Should Know About	P	Courses mapped to industry skills/course level skills. Please include relevant professional organizations.		
19-Relevant Career Tools Program Should Consider	P	Indication in PPT of need to be discussed and determined. Please develop/determine.		
20-Video Strategy (where applicable/types of videos depending on course and student)	E	Video strategy included. Indication on slide X to "incorporate video content to make the material more engaging for students."		
<b>TOTAL:</b> *E=Evident, P=Partially Evident, N=Not Evident, N/A=Data Not Available	7	8	4	1
*"No data available" element(s) subtracted.	3	4	2	1
	7	2	1	1
	5%	5%	1%	1%
Design 2.0 Vision Planning PPT is about 79% complete or partially complete.				
Note, Design 2.0 Program Kick-Off Template (Stackhouse, 2022)				

**Table 5 (Cont.) | Design 2.0 program kick-off template.**

Roles and Responsibilities deck and Design 2.0 Kick-Off deck, 2022). Hypothetical scoring and feedback are included for reader understanding in Table 5.

As additional programs at UOPX are planned for conversion to Design 2.0, colleges are using the Design 2.0 Program Kick-Off Template in their vision planning and consulting with CTL for guidance. At the conclusion of the Design 2.0 curriculum initiative project, recommendations based on student data points and a detailed report out with recommendations to each college will occur and may be published in a future edition of Phoenix Scholar.

## About the Author

Dr. Nancy Stackhouse is an Assessment Manager on the Academic Assessment and Evaluation team at University of Phoenix. Her research interests are assorted and comprise outcomes assessment, evaluation research, developmental evaluation, instructional design, and curriculum auditing. Dr. Stackhouse reviewed two editions of the graduate level textbook entitled *Of Learning and Assessment*. Her expertise in evaluation and assessment includes national licensure as a curriculum auditor and educational consultant work providing in-services and interpreting test data for public school teachers and administrators in underperforming and failing K-12 school districts nationwide. Dr. Stackhouse resides in Scottsdale, AZ, with her husband, Scott.

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# Design 2.0 Innovative Curriculum Initiative, Part 2: Findings, Effectiveness, and Recommendations

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## Abstract

Aligning higher education with the world of work has been the driving force behind implementation of the Design 2.0 innovative curriculum initiative at the University of Phoenix. Primary purposes include integrating evidence-based best practices in curriculum, instruction, and assessment, enhancing a skills-aligned curriculum, responding to the voice of the customer (the student), and making clear and transparent the Career connections for each student. Data analysis of surveys, interviews, and documents reveal numerous findings of effectiveness encapsulated in the form of a “Top Ten Findings” list. Successes in collaborative teamwork, formative and summative assessments, use of summative assessment grading rubrics, creation of a “Program Kick-Off” template, strong student desire to complete the program, and positive student perceptions of Design 2.0 course elements are highlighted. Minor recommendations for greater success in expanding the Design 2.0 initiative conclude the article.

*Keywords:* skills-aligned curriculum, innovative curriculum design, career-relevant curriculum

## Introduction

Improving the curriculum in higher education has been researched for many years. Recently, the focus on aligning higher education with the world of work (Helyer, 2011) has prompted institutions of higher education to incorporate specific career skills into curriculum maps, courses, and instructional design (Verougstraeta et al., 2021). Equally important to improving curriculum in higher education is the evidence-based teaching practice of distinguishing assessment as the driver of learning (Newton, 2021), where exemplary rubrics are used to enhance student feedback (Cockett & Jackson, 2018). Furthermore, research suggests that careful and purposeful integration of videos into the course improves learning (Noetel et al., 2021).

As described in a previous Phoenix Scholar article entitled “Design 2.0 Innovative Curriculum Initiative, Part 1: Evaluating Implementation Using the Developmental Evaluation Approach” (Stackhouse, 2023), the primary purposes for implementing Design 2.0 at the University of Phoenix are to implement

best practice in curriculum, instruction, and assessment, enhance a skills-aligned curriculum, respond to the voice of the customer (the student), and support each student’s career connections (University of Phoenix, 2023b). The primary goal of evaluating implementation of the research-based Design 2.0 curriculum initiative is to understand how staff, students, and faculty perceive its application, usefulness, and effectiveness in the four pilot programs of Bachelor of Science in Education – Elementary (BSED/E), Master of Management (MM), Bachelor of Science in Criminal Justice Administration (BSCJA), and Bachelor of Science in Health Administration (BSHA) (University of Phoenix, 2023a).

This current article, “Design 2.0 Innovative Curriculum Initiative, Part 2: Findings, Effectiveness, and Recommendations,” is a celebration of the “wins” revealed through analysis of data collected through student surveys, student interviews, college program vision “kick-off” presentations, review of courses, and focus group interviews (including associate deans, college curriculum managers, instructional designers, editors, and content quality analysts). The successes are encapsulated below in the form of a “top ten” list (from ten to one) and followed by several recommendations going forward (University of Phoenix, 2023a).

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## Findings and Effectiveness

### **Finding #10: Peer Support and Positive Collaboration**

Focus group interview participants repeatedly expressed appreciation of peer support and positive collaboration experiences across teams when planning, designing, creating, and refining the courses as they integrated the effective elements of Design 2.0, including career-relevant assessments and videos.

### **Finding #9: Strong Formative Support and Rubric Measurements of the Summative Assessments**

Assessment team members reviewed 15 of the pilot courses and determined that 78% of the formative assessments were aligned to the summative assessments and 8% were partially- aligned for a total of 84% full or partial alignment. Course reviews also

indicated strong rubric measurements of summative assessments.

### **Finding #8: Effective Summative Assessments**

Student survey responses indicated 86% of students agreed or strongly agreed that the summative assessments challenge students to create products they can share with employers.

### **Finding #7: Use of Grading Rubrics**

Students surveyed agreed or strongly agreed at a rate of 94% that they reference the grading rubrics provided within the course to complete summative assessments.

### **Finding #6” Creation of Design 2.0 Program Kick-Off Template**

Analysis of four pilot program “Program Kick-Off” presentations resulted in the determination of specific criteria that were assimilated into a “Program Kick-Off” template to assist colleges in incorporating all criteria within their presentations and is being used for newly identified programs undergoing conversion to Design 2.0.

### **Finding #5: Student Survey Response Rate of 81%**

The student response to surveys embedded within the Design 2.0 courses was overwhelming, with 2,578 completed surveys and over 3,000 responses to free-response questions. The 81% student survey response rate is exemplary.

### **Finding #4: Strong Student Desire to Complete Their Program**

When asked if they had a strong desire to complete their program after taking Design 2.0 courses, 93% of students report agreement or strong agreement on the student survey.

### **Finding #3: Themes Emerging from Student Interviews**

All students participating in the student interviews recognize the career relevance integration into their courses and believe the summative assessments help them understand how they could be applied to careers. Responses also suggest that students value video-based instruction and recognize when videos are not included in a course.

## Finding #2: Students Noticed What Was Different in the Design 2.0 Courses

Ninety-two percent of students surveyed agreed or strongly agreed that the course content is designed to help students demonstrate specific in-demand skills. When asked the free-response survey question, “How was the course different from other courses you have taken?” 84% of students responded positively, suggesting an improvement in the course experience for students. Specific themes that emerged after content analysis of student responses include: a) instructor engagement can have a significant impact on student satisfaction, b) career relevance was more recognizable in Design 2.0 courses, and c) students notice when videos are absent from courses.

## Finding #1: Positive Sentiment About Design 2.0 Course Elements Students Liked

Ninety-five percent of students completing the free-response survey question “What do you like about your course?” provided positive student sentiment. Student responses were coded to identify primary and secondary themes. The following categories were identified, and example student comments are included: *Career Relevance* – “I did enjoy the assignments and their relevance to my field. I feel it gave me a real boost to keep going after being discouraged.” *Assessments* – “I enjoyed doing the practice tests. The tests gave me a chance to challenge what I know while also learning what I did not know.” *Curriculum* – “I feel like I learned a lot and can’t wait to keep continuing on with my education.” *Instructor* – “I like that the professor seems passionate about the topic. I truly enjoyed her enthusiasm and dedication about each section we explored week after week. She was one of the most active professors I’ve had so far.” *Discussions* – “The discussions with my peers and the professor assisted us all to agree to disagree on certain discussions and, in addition, assisted me in knowing others’ points of view on certain topics.”

## Recommendations

While the story of Design 2.0 at the University of Phoenix recounts numerous positive effects, the evaluation of its implementation reveals a few recommendations to consider for even greater success moving forward as the innovative curriculum initiative expands across colleges and the university. It is

recommended that the Course Model Guide contents increase in clarity. The development of professional learning communities across teams should continue to be supported and strengthened. Program kick-off presentations should follow the developed template (Stackhouse, 2022), and exemplary program kick-off presentations should be shared across programs. Additional resources and support for completing assessments are requested by students. Further examples should be provided to colleges relevant to the development of video strategies. Last, support for creating more interactive/active-learning videos for courses should continue to be provided (University of Phoenix, 2023a).

## Author Bio

Dr. Nancy Stackhouse is an Assessment Manager on the Academic Assessment and Evaluation team at the University of Phoenix. Her research interests are assorted and comprise outcomes assessment, evaluation research, developmental evaluation, instructional design, and curriculum auditing. Dr. Stackhouse reviewed two editions of the graduate level textbook titled *Of Learning and Assessment*. Her expertise in evaluation and assessment includes national licensure as a curriculum auditor and educational consultant work providing in-services and interpreting test data for public school teachers and administrators in underperforming and failing K-12 school districts nationwide. Dr. Stackhouse resides in Scottsdale, AZ, with her husband, Scott.

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# Curriculum and Program Assessment and Evaluation

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## Abstract

Curriculum and educational programs have an impact on student outcomes (Gini-Newman & Case, 2018). The curriculum should be engaging and meaningful, challenging learners to think in a critical manner. The program should be flexible and designed to meet the needs of the learner. Evaluation of the curriculum is a critical phase in the program development process providing a systematic multi-faceted method to determine if goals and objectives are being actualized. The process helps identify what is working well and what can be improved upon. A successful evaluation allows for informed decisions and strengthens relationships across the institution. The purpose of this article is to enhance understanding of assessment and evaluation approaches and trends.

## Introduction

Curriculum and program assessment and evaluation facilitates the impact of education programs. These processes verify the value of the curriculum, appropriateness of content/teaching methods, quality of student learning, and is fundamental to improving the success of a curriculum. The purpose of this article is to enhance understanding of assessment and evaluation approaches and trends.

## Terminology

A *curriculum* is a collection of courses and their content

(prescribed and set by the educational institution) designed to further a student's knowledge in a particular subject or field. The curriculum focuses on the academic aspects of learning and is often limited to course materials. A curriculum is a dynamic entity and can be considered 'alive' (Khan, et al., 2021). Students should engage in critical thinking, active learning, and intellectual development (Yorke, 2011). The curriculum guides the learner and determines the quality and impact of the education system (Apsari, 2018).

An *educational program* is a vehicle of learning made up of a series of components or planned experiences where students practice and achieve proficiency in content and skills (Jonnaert, & Therriault, 2013). It can be prepared in an academic structure; however, how the components are implemented in the classroom determines its effectiveness (Pak, et al., 2020). The program can be adapted to fit the student's needs and preferences; students are provided with opportunities to gain practical skills and apply their knowledge in real-world settings. Students experience purposefully planned learning activities or opportunities in a specified structure involving experiences, materials and methods, attitudes, and skills designed to achieve specified goals (Ryan, 2015).

*Curricular development and renewal* involve a lengthy, in-depth review of specified aspects of the curriculum (McLeod & Steinert, 2015). The process is interactive and characterized by thoughtful evaluation, revision, ongoing responsiveness, and modernization. The goal is to assess learners to determine how well they are

doing and evaluate programs to determine their merit or worth. The process can be *objective-oriented* (define goals/objectives at start of the activity and evaluate to determine if the goals have been met; *process-oriented* (formative and summative information is collect and evaluated); *participant-oriented* (determines how the people involved perceive the program).

*Curriculum evaluation* involves teasing apart the curriculum into its component parts; analyses how the parts fit together; reviews underlying beliefs and assumptions to determine validity; and seeks justifications for choices and assumptions (Petrina, 2022). This process helps to establish the worth of a program. It is a judgmental process aimed at decision-making (Gordon, Taylor, & Oliva, 2019). An evaluation can be completed while the curriculum is being developed (formative) or after it has been implemented (summative). The two most important questions in any evaluation are Whose opinion matters? and What would really be meaningful to them? (Kilmer, & Cook, 2020).

The *evaluative process* includes the systematic collection, analysis, and use of data to review the effectiveness and efficiency of the curriculum or educational offering (Wisniewski, Zierer, & Hattie, 2020). In higher educational settings, this process is used to: identify methods of improving the quality of offerings; provide feedback to students, faculty, and administrators; and ensure programs, policies, curriculum, departments, and/or institutions are functioning as intended and promoting desirable outcomes. Improvements using available resources are identified; consideration is given to proposed revisions/expansions (Posner, 2004). Evaluative methods include: *needs assessment* (Altschuld, & Kumar, 2022): identifies whether existing needs are being met, *backwards design* (McTighe, & Silver, 2020): content remains focused and organized,

*Curriculum mapping* (Al-Eyd, et al., 2018): identifies if modifications are needed to ensure the curriculum has the appropriate breadth and depth,

*Program review* (Dyjur, et al., 2019): occurs on a regular schedule; examines how the program changes over time and affords a periodic assessment of program goals.

Participants include:

*Students*: The primary and the most important source of information to examine the implementation,

effectiveness, and needs analyses.

*Faculty*: Having the role of transacting the curriculum, as well as being a part of it, faculty have a considerable share in the evaluation processes.

*Subject experts*: These individuals can contribute to evaluation and implementation processes.

*Curriculum/program experts*: The responsibilities of such experts include formulating a comprehensive evaluation process.

*Policy makers*: Assesses how the program is being implemented and whether it is meeting its targets.

*Community*: Provides a targeted assessment of the effectiveness and efficiency of the curriculum or the program.

*Dropouts sample*: Students who have dropped out from a particular course/program could provide invaluable information about the misconceptions, reasons, or factors which led them to make such a decision.

*Employers*: Engaging employers can help create effective, well-balanced programs to minimize content drift.

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## Curriculum Evaluation Models

Curriculum evaluation models make useful distinctions between merit (intrinsic value) and worth (value for a given context).

*Backward Design* (Button, 2021): curriculum is planned backward from long-term, desired results through a three-stage design process (Desired Results, Evidence, and Learning Plan); the three stages must clearly align to standards and to one another.

*BEKA Model* (Hall, 2014): benchmarking (compares curriculum against external standards), evidencing (objective and content/resource mapping), knowing, assessment analysis.

*Course Innovation Framework* (Tassone, et al., 2022): emphasizes course innovation, dissemination, consistency, and reflection.

*Discrepancy Evaluation Model* (Steinmetz, 2000): compares actual performance to a desired standard; facilitates rational decision making related to goals.

*Prescribed-Intended-Enacted-Sustainable* (Reigeluth, et al, 2008): integrates evaluation, implementation, and education theory.



*Context, Input, Process, Product Evaluation* (Stufflebeam, 2003): focuses on continuous improvement: goals or mission (Context); plans and resources (Input); activities or components (Process); and outcomes or objectives (Product).

*Four-Level Model of Learning Evaluation* (Kirkpatrick, & Kirkpatrick, 2006): focuses on reaction (what individuals think and feel about the program); learning (increase in knowledge/skills); behavior (transfer of knowledge, skills, attitudes); results (implementation in real-life situations).

*Five Levels of Evaluation* (Kaufman, et al, 2006): input (use of training materials); process (learning experience); acquisition (use of learning); application (performance); organizational payoffs (performance improvement); societal outcomes (societal enhancement).

*Tyler Model* (Tyler, 1969): focuses on the product rather than process; evaluates the degree to which pre-defined goals and objectives have been attained.

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## Conclusion

Both the curriculum and educational program have an impact on student outcomes (Gini-Newman & Case, 2018). The curriculum should be engaging and meaningful, challenging learners to think in a critical manner. The program should be flexible, designed to meet the needs of the learner, and have merit and worth. Broader perceptions of the concept of curriculum imply it is never the curriculum itself that we analyze but the evidence about it, which can be documentary (in the form of readily available plans or curriculum materials) or empirical (in the form of observations, opinions, and other specially collected information (Kelly, 2004).

Evaluation of the curriculum is a critical phase in the program development process. It provides a systematic multi-faceted method to determine if a program is achieving its stated goals and objectives. The process helps identify what is working well and what can be improved upon. A successful evaluation allows for informed decisions and strengthens relationships across the institution.

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## Author Bio

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# Increasing Learning, Competency, and Employability Through Assessment and Assessment Feedback Practices in Higher Education

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## Abstract

Assessment and assessment feedback are integral components of higher education, and research confirms their effects on student learning, professional competencies, and employability after graduation. However, several research studies reveal that ineffective assessment and feedback methods negatively affect students and higher education institutions. Fundamentally, the focus of this literature review is to identify assessment and assessment feedback practices that may assist higher education institutions in increasing student learning, graduates' competence, and employability. The inclusion criteria for this review consisted of using the work of seminal and germinal authors in the field of assessment

and feedback, including peer-reviewed articles dating from the 1980s to 2023. After the inclusion criteria were applied, 43 articles were selected. The literature review results showed that authenticity in assessment and assessment feedback positively alters students' learning quality and increases graduates' competencies and, thus, employability.

## Introduction

Assessment and assessment feedback in higher education (HE) coalesce to create successful student learning (Winstone & Boud, 2022) and are paramount in developing graduates' competencies to support a professional prowess profile embedded in life-long

learning. Watling and Ginsburg (2019) referred to assessment and assessment feedback as the alchemy of learning. Correspondingly, Dawson et al. (2021) described these practices as robust processes influencing students' retention and acquisition of critical knowledge. Research studies surrounding assessment for learning to increase graduates' competencies and employability have proliferated in the literature since the 1990s (Knight, 2002; Thomas, 2023; Winstone & Carless, 2019).

Despite scholars acknowledging the critical role assessments and assessment feedback play in students' success, the extant literature abundantly describes ineffective practices plaguing these fields (Irons & Elkington, 2021; Sambell, 2016; Winstone & Boud, 2022). Considering that assessments and assessment feedback are consequential for HE institutions, examining the existing literature to bridge the gap between research and practice is critical. Consequently, the focus of this literature review is to identify assessment and assessment feedback practices that may assist higher education institutions in increasing student learning, graduates' competencies, and employability.

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## Research Question

What assessment and assessment feedback practices may assist HE institutions in developing students' learning, graduates' competence, and employability?

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## Background

The absence of institutional accountability, concerns about the quality of education, and pressures from companies and government executives have propelled criticism and driven reforms in HE institutions through the decades (Ashford-Rowe et al., 2014; Harris, 1986). In the 1980s, scholars determined that improving HE required measuring student progress and achievement. Accordingly, a different dialogue around HE assessment emerged (Ewell, 1984). As Loacker et al. (1985) succinctly noted, "Assessment seems to be loitering expectantly in the corridors of higher education, thereby reinforcing the hope that it will soon enter the classroom to serve the learner" (p. 3).

During the 1980s and 1990s, educational researchers called for supplanting decades of testing with a new

era of assessments to improve student learning and graduate competencies (Brown & Knight, 1994; Dochy et al., 1999; Loacker et al., 1985). The search for gold standard best practices to revamp assessments and narrow the gap between curriculum and the workplace in HE prompted scholars to mine the extant literature and delve into research. Subsequently, in the 1990s, the term authentic assessment transformed the field, becoming increasingly popular after Grant Wiggins promoted the concept in 1989 (Lund, 1997).

While evidence exists in the literature on the implementation of assessment feedback as a critical assessment component (Brinko, 1993; Evans, 2013; Gikandi et al., 2011; Kinash et al., 2018), it was not until recently that the term authentic feedback was introduced in the higher education narrative by Dawson et al. (2021). According to Dawson et al. (2021), this innovative concept draws from the tenets of authentic assessment. Equivalently to authentic assessment, enhancing feedback under the principles of authenticity ignites a two-way conversation between the learner and the instructor that resembles students' future work fields of practice (Dawson et al., 2021).

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## Results

Authentic assessments and authentic assessment feedback are ascribed to have the ingredients to assist higher education institutions in developing a solid graduate profile. Researchers have credited these assessment practices with the potential to affect learning, graduates' competence, and future employability (Dawson et al., 2021; Ornellas et al., 2019). Dawson et al. (2021) also added that preparedness for the workplace through authentic assessment and authentic feedback positively impacts students' and universities' goals.

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## Student Learning

An authentic approach to assessment and assessment feedback assists HE instructors in developing student cognition and critical thinking (Dawson et al., 2021; Villarroel et al., 2020). Authentic assessment requires students to demonstrate the acquisition and mastery of indispensable knowledge required to perform in the workplace. The relevance of authentic assessment activities students experience when solving problems in their fields within the constraints of a classroom

positively influence learning (Ismail et al., 2023).

Assessment feedback has proven to have enormous benefits in the learning process. In recent years, Dawson et al. (2021) highlighted the importance of incorporating authenticity to enhance assessment feedback. Furthermore, drawing from the work of Villarroel et al. (2018), Dawson and colleagues identified three critical elements for the design of authentic assessments: realism, cognitive challenge, and evaluation and judgment. The dimension of evaluation and judgment is critical to understanding the conceptualization of authentic assessment feedback in the learning process (Dawson et al., 2021). Evaluative judgments entail a reflective method propelled by ongoing feedback (Dawson et al., 2021) and encompass contemplating the quality of one’s work in real-life settings (Tai et al., 2018). In this process, instructors should consider imparting feedback inherent to the student’s field of practice. Similar to the workplace, students are expected to incorporate feedback into their performance (Dawson et al., 2021).

The nature of authentic assessment and authentic feedback tasks augments student motivation. Motivated learners are accountable, persistent, resourceful, and proactive in their learning; they monitor their progress, employ self-reflection, work harder, and pay closer attention (Ramadhiyah & Lengkanawati, 2019). Student engagement increases as students participate in authentic tasks and demonstrate an expert employee’s work quality product (Hart et al., 2011). Hart et al. (2011) also contended that when students perceive learning as memorization of irrelevant facts, students lose interest and become disengaged. Table 1 shows examples of authentic assessment and feedback concepts conducive to learning.

Table 1

Concepts Associated with Authentic Assessment and Authentic Assessment Feedback Conducive to Learning

Note: Table 1 was created using examples of authentic assessment and authentic feedback concepts extracted from the work of Dawson et al. (2021) and Villarroel et al. (2018).

## Graduates’ Competency and Employability

Separating graduates’ competencies from employability is challenging as these concepts are entwined. A competency-based perspective on employability stems from the notion that individuals need to gain knowledge (learn) and skills (competencies) for effective performance at work (Dawson et al., 2019; Kinash et al., 2018). For example, Römgens et al. (2020) explained that attention to employability in future graduates is linked to a competence-based dimension. In addition, scholars have identified skills or competencies as leading factors in improved employability (Pang et al., 2019).

Employers expect graduates to be competent professionals (Zaheer et al., 2021). Competence enables the individual to perform satisfactorily in a given job and is described as the capacity to meet job demands to attain results (Thurab-Nkhosi et al., 2018). A competent individual mobilizes professional and personal assets to solve a problem in a given field (Abelha et al., 2020). Guzzomi et al. (2017) theorized that developing graduates’ technical and professional competencies are critical for success and employability.

Competence requires more than acquiring raw

Authentic Assessment	Authentic Assessment Feedback
Deep, complex learning	Peer feedback
Meaningful and experiential	Student-Instructor dialogue with the student as an active participant
Students are the actors or doers	Student-centered
Assessments should be designed around real-world experiences.	Evaluative judgment
Innovative thinking	Timely
Formative	Relevant
Critical thinking	Constructive
Problem-solving	Formative Feedback
Collaboration	Collaboration

**Table 1** | Concepts Associated with Authentic Assessment and Authentic Assessment Feedback Conducive to Learning. Note: Table 1 was created using examples of authentic assessment and authentic feedback concepts extracted from the work of Dawson et al. (2021) and Villarroel et al. (2018).

knowledge; it encompasses being skillful. Hui et al. (2021) referred to these skills as 21st century competencies and noted the importance of these core proficiencies to function in a global market. Boud et al. (2018) masterfully contextualized the importance of graduates' competence in the following example: "A medical graduate who thinks they know how to perform a procedure but does not know what an acceptable performance of that procedure looks like, is a dangerous person" (p. 1).

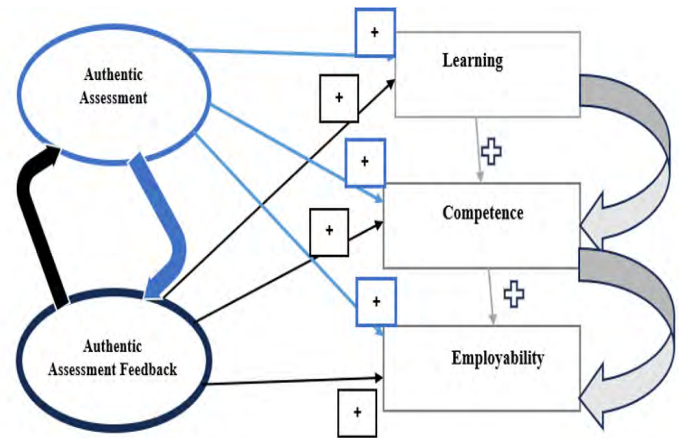
Graduates' employability has been a widespread concern for companies and policymakers, as many university students do not find employment after graduation. (Sotiriadou et al., 2020). Employability may be attained when graduates possess core skills or competencies that individuals transfer into the labor market to retain employment successfully (Teng et al., 2019). Furthermore, employers seek competent individuals who can work with diverse teams and possess excellent leadership and communication prowess. Talented workers who use soft skills, are motivated, and can problem-solve are highly employable (Arsenis et al., 2022; Bhatti et al., 2022; Sharma, 2018; Villarroel et al., 2018).

The primary role of universities is to equip future graduates with the knowledge and competencies required for employability (Kinash et al., 2018; Sotiriadou et al., 2020). Educators in HE have responded to the gap between work and the learning environment by inserting Work Integrated-Learning (WIL) into the curricula (García-Aracil et al., 2023). WIL is an inherent element of authentic assessment and authentic assessment feedback (Bhatti et al., 20203; Sotiriadou et al., 2020).

Embedding the concept of WIL in authentic assessments and feedback may provide a path for students to transfer the acquired knowledge to their fields of practice (Bayley, 2016; Sambell, 2016). Students who have had experience with authentic assessment and authentic feedback practices are more confident and may be better prepared to utilize that feedback to contextualize learning and become more competent in their fields, leading to future employability (Dawson et al., 2021).

In sum, incorporating authentic assessment and authentic assessment feedback in the curricula increases graduates' learning, competence, and employability as students closely reflect on real-life work scenarios instead of merely showing the

acquisition of basic knowledge (Karunanayaka & Naidu, 2021). Furthermore, the positive effect of student learning in replicating tasks aligned with performance standards found in the real world develops competent future graduates and, thus, increases students' chances of becoming more employable. See Figure 1.



**Figure 1** | Effect of Authentic Assessment and Feedback on Students' Learning, Competence, and Employability. *Note: The blue color shapes in Figure 1 represent authentic assessment and its impact on learning, competence, and employability. The black color shapes denote authentic feedback and its influence on learning, competence, and employability. Gray arrows describe how learning thrusts graduates' competence and, thus, more employable.*

## Discussion

The focus of this literature review was to identify assessment and assessment feedback practices that may assist higher education institutions in increasing student learning, graduates' competence, and employability. The review revealed that scholars embrace authentic assessment and authentic assessment feedback practices as important pedagogical venues to engage and motivate learners through designing assessments that entail WIL tasks and evaluations (Ashford-Rowe et al., 2014; Dawson et al., 2021; García-Aracil et al., 2023; Winstone & Carless, 2019). Furthermore, the literature also exposed the influence of these assessment practices on the development of graduates' competencies and employability (Sotiriadou et al., 2020; Thurab-Nkhosi et al., 2018).

Although the benefits of authentic assessment and feedback for HE students were outlined in this review,

limitations within should be considered. While the review was systematic and rigorous, only 46 articles were included due to time constraints. Consequently, a more comprehensive review is needed.

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## Recommendations

Designing an assessment is a monumental task. However, the literature on authentic assessment and assessment feedback lacks a clear direction. Hence studies are needed to guide assessment and feedback design practices. Furthermore, assessment validity and reliability should be carefully considered during the design process. Quantitative and qualitative research on authentic assessment feedback deems necessary as the concept is relatively new in the extant literature. In addition, scholars should conduct participatory action research in HE. The latter may also assist in finding solutions to assessment barriers impeding HE students from incorporating effective assessment and feedback practices.

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## Conclusion

Researchers have advocated a shift in HE assessment and feedback methods for the last two decades. Assessment and feedback are pedagogical components that significantly affect students' learning quality. Hence, appropriate assessment and feedback pedagogies should be carefully considered in HE, as implementation significantly influences how students thrive as learners and professionals.

Authentic assessment and authentic assessment feedback are described in the literature as providing learners with opportunities to enhance their professional prowess. Implementing these practices may assist HE institutions in creating the conditions to catapult learning and increase graduates' competencies and may result in higher chances of employability. The literature on authentic assessment and authentic feedback revealed that the learner should be at the center of the assessment and feedback processes by providing tasks mirroring the workplace.

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## Authors Bios

**Juana M. Lang, MEd, Ed.D.**, is a part-time college instructor and a full-time K-12 educator. During her extensive career in education, Dr. Lang has served in different roles and mentored educators and graduate

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**Pamayla E. Darbyshire, MSN/CNS, DHA**, has worked in nursing for over 40 years, finishing her career as a clinical nurse specialist educator with the US Air Force. As a researcher, consultant, and peer reviewer for numerous international journals, she conducted research in case management and chronic diseases. Dr. Darbyshire collaborated as a co-author for several peer review journals, has participated as a presenter at virtual conferences, is an alumna of the University of Phoenix, is a member of several research SIGs, and serves on the National Research Committee for AORN. Dr. Darbyshire continues to engage in research and mentorship with various professional organizations.

**Lucinda A. Hines, DHA, MBA**, is a healthcare executive with a Master of Business Administration degree from Charleston Southern University; she was recently conferred a doctorate in Healthcare Administration by the University of Phoenix, Arizona. Dr. Hines has 30 years of healthcare administration experience with the Department of the Air Force, Air Force Reserve, and the Department of Veterans Affairs, having served in an array of leadership roles such as Chief, Medical Enlisted Force, Superintendent of Medical Operations/Inspector, Manager of Medical Readiness, Facility Lead for Credentialing and Privileging and the Air Force lead for Professional Medical Staff management.

**Elif Kalemdaroglu-Wheeler, MBA, Ed.D.**, has 23 years of experience teaching Special Education, Social Studies, and Science at middle and high school grade levels and in K-12 school administration. She served as a Behavior Intervention Coordinator, Dean of Students, Athletic Director, Instructional Coach, Head of Academy, and Director of Virtual Curriculum and Instruction. She founded Capella Educational Services, LLC., which provides educational consulting, coaching, and mentoring services. She is currently in line to obtain her Master of Jurisprudence with a concentration in Education Law. She is a recent research fellow with the Center of Leadership Studies at the University of Phoenix.

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# Supporting DEI Management Strategies and Practices Through Robust Assessment Efforts

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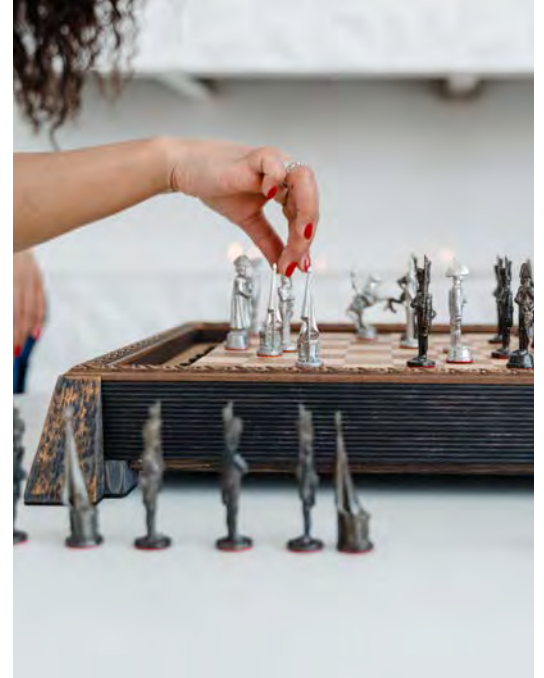
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Inequities have been a hallmark of higher education throughout the United States' history – including the barring of women, Black and Indigenous peoples, and religious minorities from formal education systems. While there has been some meaningful progress in dismantling inequitable systems and achieving some level of diversification of student, faculty, staff, and administrator ranks, some colleges and universities still rely on the “3Fs” – food, fun, and festivals – as evidence of their diversity, equity, and inclusion (DEI) management efforts.

Within DEI management, it is important to clearly distinguish between the three concepts. The concept of diversity encompasses the uniqueness and individual differences each person brings to an organization. These include the dimensions of characteristics, affiliations, or ideologies (Underwood & Slaven, 2021). While this definition has morphed in meaning to no longer solely represent women and people of color, it is important for organizations to recognize and begin to utilize terms such as underrepresented and underserved population and clearly define which demographics are represented in each and in what contexts.

According to Underwood and Slaven (2021), inclusion incorporates deliberate, strategic actions and practices that support opportunities for authentic engagement and encourage positive experiences within diverse teams and workforces. This includes the responsibility of ensuring that these actions and practices effectively translate into a sense of belonging by members. Finally, equity is the just treatment of all members through the creation of opportunities leading to equitable outcomes that assist in closing representation and participation gaps.

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## What is DEI Assessment?

In response to the heightened discourse around inequities and disparities in society, many colleges and universities have committed to pledges to improve their diversity management efforts. However, in some instances, the intention within the pledges has yet to provide evidence of measurable and sustainable outcomes (Cumming et al., 2023). Sturm et al. (2011) suggested that, in order to meet the core mission of higher education to create opportunities for all to fully participate, leaders must implement a process of institutional attentiveness across every area of their respective colleges and universities. This level of attention creates opportunities for colleges and universities to harness the benefits of DEI assessment strategies, especially when both onus and reinforcement of DEI strategies and initiatives are widely distributed across stakeholders.

Assessment in higher education is a systemic, iterative, and participatory process for collecting and analyzing evidence surrounding specified outcomes for the purpose of continuous improvement (adapted from the Higher Learning Commission). Historically, colleges and universities have narrowly assessed DEI through outcomes such as enrollment, retention, and graduation rates of women and students of color. Today, DEI assessment has expanded to include an exploration and understanding of the overall effectiveness and health of an

institution through the process of obtaining valid, reliable data. This includes levels of exploration, from individual course assessments to full institution-wide assessment.

## Why Is DEI Assessment So Important?

There are several reasons supporting the importance of DEI assessment:

1. *External Reporting:* A college or university may often find itself within a continuous cycle of external reporting. In addition to regular state and federal reporting mandates, external agencies, such as university and programmatic accrediting bodies, have recently shifted a focus toward the strategies and methods in which colleges and universities address DEI throughout their organizations.

2. *Data-Driven Decision Making:* DEI assessment data serves as critical evidence for strategic planning, decision making around current and future initiatives, diversity management practices, and benchmarking. Not only does it provide evidence of where an organization may excel, it also provides insight into where additional focus may be needed, currently or in the future.

3. *360 Degree Assessment:* By creating a DEI assessment plan that includes all levels of the institution, these efforts assist in identifying and defining the constellation of DEI efforts throughout. This also creates transformative opportunities for all university stakeholders to become change agents in DEI spaces (Freire, 2014).

4. *Accountability:* While colleges and universities may have the best intentions when it comes to DEI management practices, these intentions may not always translate into sustainable, meaningful actions. By having a well-developed, robust assessment plan related to DEI strategies and management, data holds all relevant stakeholders accountable for the achievement (or lack thereof) of desired outcomes. Whitney and Trosten-Bloom (2003) assert that trust and transparency are the foundation for change. As a part of organizational accountability, transparency within the DEI assessment process requires a clear presentation of what is occurring and how assessment is occurring. This helps support stakeholders' trust in the DEI management and assessment processes.

5. *Creating a Culture of Continuous Improvement:* Creating a culture of continuous improvement in DEI means abandoning perfection — there is no perfect organization. Rather, this means fostering an organization-wide approach that honestly assesses strengths and weaknesses in DEI, without the defensiveness that can often accompany charged issues.

### Common Sources of High-Level DEI Assessment Data

Organization Level	Program/Unit Level
Campus-wide Climate Surveys	Student, Faculty, and Staff Satisfaction Surveys
Graduation Exit Survey	Course Completion Rates
Employee Exit Interviews	Unit- and program-level assessment data focused on areas such as recruitment, retention, professional development, scholarship, engagement, and graduation.
Data Dashboards	Data Dashboards
Campus -level assessment data focused on areas such as recruitment, retention, professional development, scholarship, engagement, and graduation.	Graduation Exit Survey
Job Satisfaction/Performance Surveys	Job Satisfaction/ Performance Surveys Employee Exit Interviews
External instruments, such as HEDS Survey or Integrated Postsecondary Education Data System (IPEDS)	Program Review Processes
Bias Reporting Systems	

## Conclusion

As the abbreviation suggests, creating an effective and sustainable DEI management plan is an intricate, multidimensional process. Thus, this process benefits through the parallel creation of a robust DEI assessment plan. Assessing DEI requires multiple approaches with an understanding of the variety of dimensions and representations within an institution, while also considering institutional mission and political contexts (Cumming et al., 2023). A common misconception is that assessment solely relies on the collection of quantitative data. However, DEI is about people—all people— including their capabilities, backgrounds, orientations, identities, etc. In this instance, DEI-related institutional policies, programs, and processes should align with meaningful efforts to assess outcomes beyond enrollment, retention, and graduation rates of women and students of color and support the existence of inclusive actions and practices meant to engage and encourage positive experiences, thus fostering a sense of belonging for all.

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## Author Bios

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# Feedback Strategies and Modalities in Online Higher Education

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## Abstract

Online education has become an integral part of higher education with increasing demand for online programs. Many studies suggest various strategies for promoting feedback and enhancing student learning; however, there is a dearth of systematical review of all feedback strategies and learners' preferred modalities. This study aimed to explore those issues to enhance student performance. A systematic literature review was conducted using the PRISMA framework. Thirty studies conducted between 2000 and 2022 were included in this study. Identified feedback approaches included online student response systems, epistemic and suggestive feedback, peer discussion, self-reflection, direct feedback within the assignment content, and feed-forward personalized to promote future assignment modifications. Desired

characteristics of feedback included clear, concise wording with a humanistic approach, timely return of feedback, the balance between positive and negative grade justification, and emotionally moderated feedback.

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## Introduction

Online education has become integral to higher education in the United States (Allen & Seaman, 2018). There is a higher demand for online programs (Byrd, 2016; Fuller et al., 2014). However, the attrition rate and the extended length of degree completion are major challenges in online programs (Johnson-Motoyama et al., 2014). Ali and Leeds (2009) reported that the retention rate for online students was 20% lower than face-to-face course. This remained

the same in 2015 and 2022 (Haynie, 2015, 2022). Feedback has been suggested to reduce the attrition rate and improve students' learning. Feedback plays a significant role in the student learning process and success (Ghilay & Ghilay, 2015). However, students report that feedback is generally suboptimal (Office for Students, 2018).

Success in the online classroom environment requires students to be independent learners who are goal-oriented, self-motivated, and have a level of maturity necessary for time management and self-regulation (Brindley, 2014). The student's adaptability to the teaching-learning process is an essential skill that must be acquired in the online environment and includes the student's ability to incorporate feedback into their learning (Ianos, 2017). While there is a plethora of literature on how faculty provide feedback, there are minimal studies on how students receive and use the feedback they are given to improve their future work (Ianos, 2017; Rotar, 2022). Many studies suggest various strategies for promoting feedback; however, there is a dearth of research focusing on learning gains based on feedback. This study aimed to identify strategies for cultivating effective feedback based on the literature. To fulfill the purpose of the study, the following questions were developed.

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## Research Questions

1. What are strategies for promoting feedback effectiveness in online courses in higher education?
2. What are the preferred modalities for receiving feedback based on students' perceptions?

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## Method and Design

A systematic literature review was conducted to answer the research questions. The review was conducted based on the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines (Moher et al., 2015). The inclusion criteria were studies conducted between 2000 and 2022 regarding feedback strategies and modalities in online higher education. As a result of applying the criteria and search strategy, a total of 46 articles were found, and the 30 most relevant articles were included in this study. The identified feedback strategies and modalities were summarized, and the most effective

ones based on the studies' suggestions are shared in the result section. The literature search for the articles was extensive and systematic, using the aforementioned strategy to find as many relevant studies as possible; however, the review was not exhaustive.

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## Results

The literature review indicated various strategies to enhance the quality of feedback. The use of software technology tools may help instructors improve the effectiveness of their feedback if used properly. In particular, online polling technologies or student response systems allow instructors to conduct instant formative assessments and gauge their learner status. Both instructors and learners can adapt their teaching and learning using polling technologies such as Socrative, Kahoot!, and TurningPoint (Mollin, 2021). A few studies found that the use of these technologies promoted more student engagement, motivation, enjoyment, and positive attitudes toward the classroom material (Balta & Tzafilkou, 2019; Molin, 2021; Mork, 2014). However, it is critical to discuss the feedback after using polling technologies (Mollin, 2021). Instructors and peer discussion can significantly improve learners' understanding of the feedback and help them incorporate them into their learning.

Students in online higher education value real-time clear, concise, and legible feedback (Hepplestone & Chikwa, 2014). Generic and vague feedback is viewed as ineffective. The lack of individual applicability prevents students from successfully integrating the feedback into their academic success and making connections to assessment criteria or grades received (Hepplestone & Chikwa, 2014; Weaver, 2006). As students develop self-regulatory skills in online learning, considerations related to the timing and appropriateness of feedback are fundamental to providing insight into the student's receptivity toward the professor's comments (Lefevre & Cox, 2017). In a study by Weaver (2006), students acknowledged a lack of guidance on reading and using feedback, resulting in misinterpretation affecting the students' overall integration and response to the feedback received. Specific assignment or assessment feedback was valuable to students in higher education, leading to the integration of feedback into their learning experience (Weaver, 2006).

Students showed the most significant learning gain when they engaged in peer discussion and received their instructor's feedback in an experimental study conducted by Molin et al. (2021). Students thrive on self and peer feedback when working in a team to better evaluate themselves and others (Hoo et al., 2020; McCarty, 2017). Hoo et al. (2020) found that prescribed reflective journaling helps students assess their performance and skills while teaching students to negotiate the proper way to integrate feedback as a self-reflective process. Students value interactive online collaborative learning platforms where they directly interact with their instructors while receiving feedback. Online student expectation for online feedback includes using social networks, personal and organizational emails, mobile phone text messages, and virtual face-to-face venues within the online environment (Ianos, 2017).

Suggestive (why) feedback and epistemic (how) feedback affected students' metacognitive and affective activities. This is crucial in successful teaching and learning in online environments, especially since the teaching process is asynchronous. Students who learn to self-regulate learning with the teachers' support prove more successful. Suggestive feedback allows students to use the comment received and reflect on their understanding or knowledge effectively (Guasch et al., 2018). Using open-ended conversational feedback elicits an environment for students to express themselves, seek clarification, and receive emotional and relational support to use the feedback effectively to enhance their knowledge and learning. However, like other types of feedback provided to students, if students fail to incorporate feedback into their learning practices, misinterpret the intention behind the purpose of the feedback, or do not reflect on feedback constructively, hindering their overall academic performance and success (Torres, 2022).

Students desire feedback and instruction efficiently delivered with a personal touch (Crook et al., 2012). Online students preferred a humanistic approach to learning as opposed to the mechanical written comment approach used for the past two decades (Brown & Wilson, 2016; Stone, 2019). The value students place on incorporating feedback was related to the student's trust in the faculty's benevolence in providing feedback (Snijders et al., 2021). The content of the feedback, the mode of delivery, the context, the timing, and the students themselves all influence

the extent to which the student uses the feedback for their growth and development (Jonsson, 2012). The expectation students have about the feedback received is directly related to the quality and quantity of feedback and reflects their academic level (Boone et al., 2020).

Students in higher academic levels desire more significant direct interaction and instructor feedback to validate their overall performance. Students noted delays in receiving verbal or written feedback influence their academic confidence and performance (Jonsson, 2012). Students interpret feedback in various ways through purposeful recognition and the technology used to elicit the feedback. Recognizing the purpose of feedback can greatly help students incorporate the feedback. Although previous studies have indicated students lack the ability to understand how to recognize the purpose of feedback, Hepplestone and Chikwa (2014) found that through qualitative feedback interviews students understood the purpose of feedback to improve their academic experiences better.

Effective feedback enables students to feed-forwarded information to align with course goals, values, and beliefs and to become active agents in their learning (Guasch, Espasa, & Martinez-Melo, 2018; McCarthy, 2015; Thibodeaux & Harapnuik, 2020). Students acknowledge written and oral feedback as forms of verbal feedback (Hepplestone & Chikwa, 2014; McCarty, 2017). The effectiveness of feedback modalities depends on multiple factors, such as the online environment, students' ages, the learning task, feedback timeliness, the student's learning abilities, and performance level with digital tools (Hattie & Timperley, 2007; McCarthy, 2015), and the professors' delivery style and level of guidance on students' improvement in the task or assignment (Howard, 2021; Watkins et al., 2014).

Study results of students' preferred modalities for feedback in online learning in higher-level education indicated that students' receptivity toward feedback was linked to feeling connected to the professor and peers in the online environment (Boone et al., 2020; Lunt & Curran, 2010; Thibodeaux & Harapnuik, 2020). Although students valued a mixed modality of audio, electronic, written, and video recordings for receiving feedback (Gould & Day, 2013; Howard, 2021; McCarthy, 2015; Wang & Lehman, 2021; Watkins et al., 2014), students preferred to receive one mode of



feedback rather than two types of feedback on the same assignment to avoid redundancy (Li et al., 2020; McCarthy, 2015).

Students' perceptions of preferred feedback modalities evidenced no model is a perfect fit, yet feedback should be timely, specific, detailed, and aligned with learning goals, criteria, and standards' expectations (Lunt & Curran, 2010; McCarthy, 2015). Students who received one modality of feedback, written or a video recording, reported a deepened sense of community and motivation to incorporate the professor's suggested feedback. Video feedback from the professor yielded student connectedness to the online environment and professor, thus motivating feed-forward and enhanced learning (Howard, 2021; Li et al., 2020; Thibodeaux & Harapnuik, 2020; Wang & Lehman, 2021). Further, students optimized the use of the feedback when they received a video recording.

Students' feedback preferences aligned with the classroom content, type of course, and the students' developing connection to the learning environment (Gould & Day, 2013). Audio feedback was less favored when compared to video and written modalities for the digital media course due to a preference for visualizing the feedback simultaneously with the artwork (McCarthy, 2015). Thus, students' preferences in digital media were connected to and affected by the course content and goals. The goal of feedback is to enable students to assess their abilities critically and reflect on improving their skill set, and to self-regulate their ownership of learning (Gould & Day, 2013; Thibodeaux & Harapnuik, 2020). As students develop self-regulatory skills in online learning, students consider timing and appropriateness of feedback as fundamental in a technology course. Lefevre and Cox (2017) found that the feedback timing, delayed or immediate, provided insight into the students' receptivity toward the professor's comments.

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## Conclusion

Feedback plays a significant role in student learning. Although many studies focus on feedback in general, there is a dearth of studies clarifying effective feedback approaches and preferred learners' modalities in online higher education. The purpose of the current study was to close that literature gap and identify effective feedback strategies and modalities. The literature review indicated several feedback strategies

and modalities for enhancing feedback effectiveness. Online student response systems such as Socrative are recommended as an effective approach for formative assessment feedback enabling real-time, instant feedback and stimulating student engagement, motivation, and positive attitude toward the content and feedback. Feedback should be unambiguous, concise, and focused. Timing of feedback is essential in incorporating feedback and gaining knowledge. Suggestive and epistemic feedback are impactful feedback approaches. Epistemic feedback provides the student with a clarifying question to evoke thoughtful analysis of the students' truth or validation of what they have learned or comprehended. Suggestive (why) feedback and epistemic (how) feedback affect students' metacognitive and affective activities, which is crucial in successful online teaching and learning.

Students crave feedback and instruction delivered in a more humanistic yet efficient manner. Positive and constructive critics provided in an emotionally moderated tone should be integrated to be impactful. Students' chosen feedback modality should enable them to project forward with appropriate feedback to deepen their learning and connection to the material. Essentially how students interpret the feedback should be contextualized to complement the virtual higher education learning space. The findings from this study may inform online program administrators, instructional designers, and faculty members about the strategies and their impact on enhancing online students' course success.

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Angela Larson, PhD, APRN, CNS, ACCNS-AG, CCNS, CCRN, is an Advanced Practice Clinical Nurse Specialist with ~ 20 years of professional clinical, systems, and unit leadership experience in critical and emergency care nursing and ~15 years of academic teaching experience in undergraduate and graduate nursing and doctoral programs. She works full-time as a Lead Program Development Owner and serves part-time as a Doctoral Staff Faculty and College of Doctoral Studies Panel Validator in the College of Doctoral Studies- ACCESS program and serves as an active member of the academic research community.

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RESEARCH SUMMIT

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Oct. 12-14, 2023



The [2023 Knowledge Without Boundaries](#) (KWB) annual conference serves as a dynamic forum for research, while also exploring the innovative possibilities for advancing the value prospects amongst industry practices, scholar-practitioner engagement, and ever-evolving research concerning pivotal societal issues.

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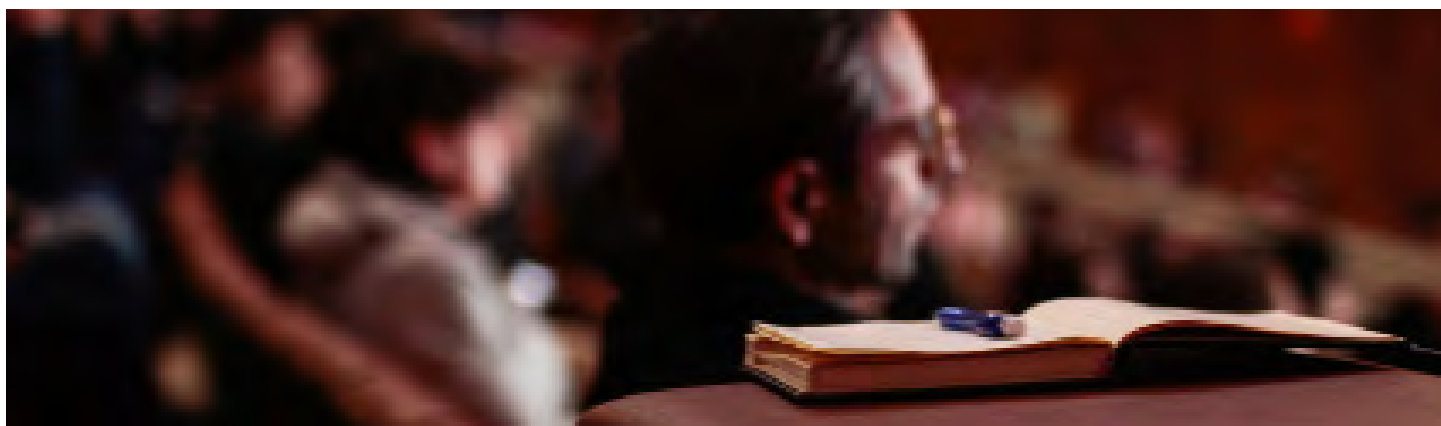
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## **KWB Summit Registration Now Open!**

Are you ready to attend the 2023 KWB Summit? Our Eventbrite link is available to the public, and guests, attendees and presenters to register for the annual research conference hosted by the College of Doctoral Studies. Simply open your browser on any device and type in this address: <https://tinyurl.com/kwb2023>.

## Upcoming Events and Workshops



The College of Doctoral Studies offers a variety of events and workshops for students, faculty, and alumni. Below, you will find information for upcoming events and workshops; to access the full calendar please visit the [Events Calendar](#) on the Research Hub. All events are in the Arizona time zone, which does not observe daylight savings time. Feel free to reach out to us if you have an idea for a future event or workshop.

Date	Time	Title & Host	Description	Registration
09/07/23	11 AM (MST)	<b>Doctoral Webinar: Tools &amp; Services</b> University Library	Did you know that there are tools and services in the library whose purpose is to make your research journey much easier? Join this webinar to learn how to access and use the library's tools, databases, and services available to you to aid your dissertation research. Topics such as saving your work faster, finding the full text of an article, locating alternative article locations, and more will be covered. We will also look at resources, including RefWorks, Sage Research Methods, Request a Document, and several others. For more information visit <a href="#">this page</a> .	Via <a href="#">this page</a>
09/07/23	4 PM (MST)	<b>Deep Dive: Academic Writing 101</b> CDS Writing Team	This two-part session is designed to introduce students to the practice of writing for academic purposes. It will prepare students for work in doctoral courses in which research writing is a requirement and introduces basic research writing skills including: synthesizing, paraphrase, summarizing, direct quotations, and critical thinking. Space is limited to 20 participants. You must use your university email address to register (i.e., username@email.phoenix.edu).	Via <a href="#">Google Form</a>

Date	Time	Title & Host	Description	Registration
09/09/23	9 AM (MST)	<b>DHA Networking Call</b>	An opportunity for DHA students to meet others along the dissertation journey, gather insights, and build a community of learning.	Attend via <a href="#">Microsoft Teams</a>
09/09/23	10 AM (MST)	<b>Deep Dive: Proposal and Dissertation Alignment</b>  CDS Student Writing Team	Dissertation alignment is a key concept in writing a dissertation. Alignment must be evidenced throughout the proposal and final dissertation. Each section of the proposal is focused and consistent on specific content of the proposal elements. This workshop session will help students narrow their focus and develop consistency in presenting the Title, Problem Statement, Purpose Statement, and Research Questions throughout the proposal and dissertation. Proper alignment ensures the methodology is sound. Examples of alignment for each of the research sections will be presented during the session. Space is limited to 20 participants. You must use your university email address to register (i.e., username@email.phoenix.edu).	Via <a href="#">Google Form</a>
09/14/23	4 PM (MST)	<b>Deep Dive: Academic Writing 101 (Part II)</b>  CDS Student Writing Team	This two-part session is designed to introduce students to the practice of writing for academic purposes. It will prepare students for work in doctoral courses in which research writing is a requirement and introduces basic research writing skills including: synthesizing, paraphrase, summarizing, direct quotations, and critical thinking. Space is limited to 20 participants. You must use your university email address to register (i.e., username@email.phoenix.edu).	Via <a href="#">Google Form</a>
09/16/23	9 AM (MST)	<b>CDS Student Coffee Chat</b>  CDS Coffee Chat Team	The College of Doctoral Studies Student Coffee Chat (SCC) is a virtual, bi-monthly event aimed at fostering student success. Each session includes a lively discussion, with like-minded people, for inspiration and guidance as you advance within your program and beyond. SCC topics are announced approximately two weeks beforehand, so please visit the Student Coffee Chat page for additional information about topics and registration.	Via <a href="#">this page</a>
09/21/23	4 PM (MST)	<b>Webinar: Research Problem, Purpose, and Questions for a Delphi Design</b>  Dr. Phil Davidson	This webinar provides detailed explanations and examples for developing appropriate research problems, purposes, and questions for a Delphi study. Participants may bring their examples to discuss.  Focus: Research Designs	Via <a href="#">Collaborate</a>

Date	Time	Title & Host	Description	Registration
10/07/23	10 AM (MST)	<b>Deep Dive: APA Rules for Citations and Resources</b> CDS Student Writing Team	This session will allow students to familiarize themselves with some of the basic format requirements. This session will highlight general guidelines students should know, familiarize students with effective utilization of the manual, and present the mechanics of some of the more common citation and resource formats.	TBD
10/19/23	4 PM (MST)	<b>Webinar: Research Problem, Purpose, and Questions for a Program Evaluation Design</b> Dr. Jim Lane	This webinar provides detailed explanations and examples for developing appropriate research problems, purposes, and questions for a program evaluation study. Participants may bring their example to discuss.	Via <a href="#">Collaborate</a>
09/26/23	4 PM (MST)	<b>Mastering the Art of Doctoral Thinking</b> CDS Student Writing Team	This interactive session focuses on critical thinking and other skills necessary to succeed as a budding doctoral student. Participants will engage in Socratic dialogue aimed at generating thoughts and reflections on the actions and behaviors needed to successfully progress throughout each stage of the doctoral journey. This session also explores some of the guidelines and attributes for doctoral students to model in completing their doctoral studies.	TBD





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