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Designing for Balance: How Courses Shape Adult Learner Wellbeing and Persistence

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Abstract

As adult learners increasingly balance work, caregiving, and academic responsibilities, instructional design must account for emotional sustainability alongside traditional academic outcomes. This mixed methods study examined how instructional design features and instructor practices relate to adult learners' perceived work-life-learning balance, wellbeing, persistence intentions, and happiness in learning. A sample of 203 adult learners completed a survey assessing course structure, instructor support, wellbeing, and a modified mature happiness scale, alongside open-ended reflections. Descriptive, correlational, and thematic analyses indicated that flexibility, clear organization, predictable pacing, and supportive instructor communication were consistently associated with higher reported balance, reduced stress, and greater happiness in learning. Instructor practices demonstrating empathy and responsiveness were meaningfully related to emotional equilibrium and persistence intentions. Grounded in Control-Value Theory, findings support the role of perceived control and value in shaping adult learners' emotional experiences. The proposed Happiness in Learning Model reframes instructional quality to include calm, confidence, and harmony as essential outcomes for sustainable adult education.

Introduction

Adult learners enrolled in professional development, continuing education, or higher education programs often navigate complex responsibilities related to employment, family, and personal obligations alongside their academic pursuits (Kasworm, 2018; et al., 2014). Balancing these competing demands can create significant cognitive and emotional strain, particularly in structured learning environments that were not designed with adult learners in mind. Instructional design and instructor practices therefore play a critical role in either supporting or constraining learners' ability to achieve work-life-learning harmony. Prior research has emphasized the importance of course design features such as accessibility, clarity, flexibility, and instructor presence in shaping learners' engagement and persistence, particularly in online and adult learning modalities (Garrison et al., 2001; Shea & Bidjerano, 2014). While accessibility-focused design has received substantial attention, less emphasis has been placed on how adult learners perceive instructional strategies in relation to their broader life contexts. From a motivational and emotional perspective, learners' perceptions of control over learning activities and the value they assign to those activities are central to their academic emotions and self-regulated learning behaviors (Pekrun, 2007).

This study examines how instructional design and instructor practices influence adult learners' work-life-learning balance, wellbeing, persistence intentions, and happiness in learning. It contributes by (1) providing empirical evidence linking course design and instructor behaviors to adult learners' emotional experiences, (2) extending Control-Value Theory to adult learning contexts, and (3) introducing a Happiness in Learning Model that positions calm, confidence, and life-learning harmony as meaningful instructional outcomes. Guided by Control-Value Theory (CVT), this study investigated how adult learners perceived the effectiveness of instructional design features

and instructor practices in promoting harmony among work, life, and learning. By centering learner perceptions, the study sought to extend existing research on instructional design and adult learning by highlighting humanistic and emotionally responsive approaches that support persistence, well-being, and meaningful engagement in adult education settings. Although research in this area is growing, particularly regarding design features such as flexibility and engagement (Garrison et al., 2001; Shea & Bidjerano, 2014), empirical studies have yet to fully examine how adult learners subjectively experience these strategies while balancing multiple life roles.

Literature Review

Adult learners comprise a substantial and growing share of postsecondary enrollments, with many balancing employment, caregiving, and academic responsibilities simultaneously (Kasworm, 2018; Nietzel, 2025). Classical models of nontraditional student persistence emphasize that these external obligations shape engagement patterns differently than those of traditional-aged students, highlighting the importance of environmental supports and institutional responsiveness (Bean & Metzner, 1985). More recent research on adult and online learners similarly underscores the role of flexible course structures, predictable organization, and instructor presence in promoting persistence and satisfaction (Park & Choi, 2009; Martin et al., 2020). As flexible access models and AI-enabled delivery systems expand across higher education, institutions face increasing pressure to design learning environments that accommodate time scarcity without compromising academic rigor (Educational Advisory Board, 2024). Within this context, scholars increasingly conceptualize student engagement as a multidimensional construct encompassing affective, cognitive, and behavioral dimensions rather than purely behavioral indicators such as participation or completion. Kahu (2013) synthesizes multiple traditions of engagement research and proposes a framework that distinguishes the psychological state of engagement from its antecedents and consequences. Within this perspective, emotional responses such as enthusiasm, interest, belonging, and stress are understood as central components of engagement rather than peripheral outcomes. Research in online learning environments similarly demonstrates that emotion is an integral element of the learning experience and can shape how students interact with course design, instructors, and peers (Cleveland Innes & Campbell, 2012).

Control–Value Theory offers a useful framework for examining how instructional structures influence learners’ emotional responses (Pekrun, 2007; Pekrun et al., 2011). According to the theory, achievement emotions are shaped by learners’ perceptions of control over learning activities and the value they attribute to those activities. Course features such as clear expectations, manageable workload, flexible pacing, and supportive communication may enhance perceived control and reduce anxiety, thereby supporting motivation and sustained engagement. Emerging research in higher education has increasingly called for attention to well-being and emotional sustainability as legitimate dimensions of student success, particularly in online and adult-focused programs (Bedenlier et al., 2020; Seligman, 2011). However there is limited empirical work linking instructional design features to adult learners’ reported balance, well-being, and happiness while navigating competing life roles.

Purpose and Guiding Questions

The purpose of this study is to examine the relationship between instructional strategies and adult learners' perceived ability to manage work-life-learning balance. The research focuses on learners in professional development and continuing education programs. The study focused on the following research questions.

- Research Question 1: To what extent do adult learners perceive that instructional design features and instructor practices support work life learning balance and wellbeing? (Quantitative)
- Research Question 2: What is the perceived impact of instructional practices that support work life learning balance on adult learners’ engagement, course completion, and future enrollment intentions? (Quantitative)
- Research Question 3: Is there a statistically significant relationship between instructor practices that promote balance and adult learner happiness? (Quantitative)
- Research Question 4: What strategies do adult learners report using to remain calm and focused while navigating course demands? (Qualitative)
- Research Question 5: What recommendations do adult learners provide for making courses more supportive of working adults? (Qualitative)

Theoretical Framework: Control-Value Theory of Achievement Emotions

The study draws on CVT (A Theory of Achievement Emotions), developed by Reinhard Pekrun (Pekrun, 2007). CVT examines how instructional design influences adult learners' emotional experiences and, consequently, their ability to achieve harmony between work and life learning (Artino & Jones, 2012). CVT posits that achievement emotions are discrete affective states such as enjoyment, anxiety, boredom, and pride (Pekrun, 2007). Frustration arises primarily from two cognitive appraisals: control (perceived agency over learning activities and outcomes) and value (perceived importance or utility of those activities). In the context of adult education, where learners often juggle professional demands, family obligations, and academic pursuits, these appraisals are particularly salient. High control appraisals (Pekrun, 2007) fostered by flexible instructional features like asynchronous modules or self-paced assessments, can elicit positive activating emotions (e.g., hope and enjoyment), enhancing motivation and self-regulation while mitigating stress from competing roles. Conversely, low control, such as rigid deadlines or overwhelming synchronous requirements, may trigger negative deactivating emotions, such as boredom or hopelessness, exacerbating feelings of overload and disrupting balance. CVT extends beyond traditional student populations to adult learners by emphasizing the functional role of emotions in multifaceted achievement contexts. Negative emotions, while often viewed as detrimental, can serve adaptive purposes; for instance, moderate anxiety (a negative activating emotion) may prompt strategic effort to overcome barriers, such as reallocating time from work to study, thereby supporting persistence amid role conflicts. However, when appraisals of value are high (e.g., viewing education as essential for career advancement) but control is low, intense negative emotions like frustration or shame can lead to avoidance behaviors, procrastination, or withdrawal, intensifying work-life-learning imbalances. This bidirectional dynamic, in which emotions influence appraisals and vice versa, highlights the theory's relevance: Instructional practices that enhance control (e.g., personalized feedback) and value (e.g., real-world applications) can regulate emotions, fostering a virtuous cycle of engagement and equilibrium.

In this study, CVT directed the investigation by framing instructional design features (e.g., flexibility, supportiveness) as proximal antecedents that shape control-value appraisals. Thereby mediating the relationship between practices and learners' perceived balance. This contextual application of CVT to adult learners achievement settings, where emotions interact with external stressors such as employment and caregiving to affect learning outcomes. By integrating CVT, the research not only addresses the research questions but also contributes to humanistic instructional design principles that prioritize emotional well-being. This study employed an exploratory mixed-methods survey design to illuminate adult learners' perceptions of instructional strategies through both breadth (quantitative) and depth (qualitative). Consistent with a convergent mixed-methods approach, quantitative and qualitative data were collected concurrently via a single instrument, analyzed separately, and integrated during interpretation to triangulate insights and enhance understanding of emotional and motivational dynamics (Creswell & Creswell, 2017). This design was selected for its alignment with CVT, allowing numerical assessment of control-value appraisals alongside narrative explorations of lived balance challenges.

Methods

The study employed a quantitative correlational survey design to examine relationships between instructional practices and adult learner outcomes (Creswell & Creswell, 2017; Fowler, 2014). The following sections describe the participants, data collection procedures, and data analysis methods.

Participants

Participants were adult learners aged 25 and older enrolled in postsecondary courses, including professional development, continuing education, and workforce training programs offered through higher education institutions. Inclusion criteria emphasized individuals balancing employment and or family responsibilities, consistent with the study's focus on work life learning harmony. Purposive convenience sampling was used to recruit participants from courses designed for working adults. A total of 203 participants completed the survey. Valid responses varied slightly across items due to missing data, with listwise Ns ranging from 200 to 203 depending on the scale. This sample size is appropriate for exploratory descriptive and correlational analyses. The sample primarily consisted of working adults balancing multiple responsibilities, reflecting the broader demographic profile commonly observed in adult education contexts. This sampling approach enabled the study to capture adult learners experiencing a wide range of instructional environments, course formats, and institutional contexts, thereby increasing variability in instructional design exposure and strengthening the ecological relevance of the findings.

Data Collection

Data were collected via an online survey administered through Qualtrics and distributed to participants recruited through Prolific, a research panel platform that enables targeted sampling of adult learners. Eligibility criteria were embedded within the Prolific screening process to ensure participants were aged 25 or older and currently enrolled in a postsecondary course. Upon providing consent, respondents were instructed to reflect on the most recent course they had completed. The survey required less than eight minutes to complete and was mobile optimized to accommodate working adults. A total of 237 individuals initially responded to the survey. After data cleaning procedures, including removal of incomplete submissions and cases that did not meet inclusion criteria, 203 responses were retained for analysis. Analytic sample sizes varied slightly across scales, ranging from 200 to 203, reflecting small amounts of nonresponse on individual items. The instrument was informed by Control Value Theory, operationalizing perceptions of control through instructional design features such as clarity, structure, predictability, workload management, and flexibility, and perceptions of value through relevance, alignment with learning outcomes, and meaningful engagement. The survey included multiple sections assessing instructional design features supporting balance, instructor practices that promote balance, perceived impacts on wellbeing, persistence intentions, and student happiness in learning. All close ended items were rated on a five point Likert scale ranging from 1 Strongly Disagree to 5 Strongly Agree. The Student Happiness section adapted items from a modified Mature Happiness Scale with a course specific focus. Additional demographic items captured age, gender, employment status, caregiving responsibilities, first generation status, enrollment status, and course type. Three open-ended questions invited participants to describe strategies that helped them remain calm and focused and to suggest ways to make courses more supportive of adult learners. Participants were compensated through Prolific in accordance with platform standards, and no additional incentives were provided.

Data Analysis

Data were analyzed using IBM SPSS Statistics Version 28. Given the exploratory design of the study, analyses were descriptive and correlational in nature. To address RQ1, descriptive statistics including means and standard deviations were calculated to summarize adult learners' perceptions of instructional design features, instructor practices, and perceived impacts on work life learning balance and wellbeing. To address RQ2, descriptive statistics were examined for outcomes related to engagement and persistence intentions, including likelihood of continued enrollment and perceived support for course completion. To address RQ3, Pearson correlation analyses were conducted to examine the relationships between instructor practices that promote balance and the composite measure of student happiness in learning. In addition, an exploratory factor analysis was conducted during instrument development to examine the underlying structure of the survey items and to inform scale refinement. Because the focus of the present study is on descriptive and relational findings aligned with the research questions, detailed psychometric analyses will be reported separately using a larger validation sample. Qualitative responses associated with RQ4 and RQ5 were analyzed using inductive thematic analysis to identify patterns in adult learners' reported strategies and recommendations (Braun & Clarke, 2006). Open ended responses were first read in full to develop familiarity with the dataset. Responses were then grouped according to recurring ideas related to self-regulation strategies, course design features, and instructional practices that participants perceived as supportive of balance. Through iterative review, these groupings were refined into broader thematic categories representing common approaches to remaining calm and focused as well as suggestions for improving course support for working adults. Representative quotations were retained to illustrate each theme and provide contextual depth that complements the quantitative findings. Because the qualitative component was exploratory and intended to enrich interpretation of survey patterns, themes were developed through interpretive grouping rather than formal coding reliability procedures.

Results

Research Question 1

Descriptive statistics were calculated to examine adult learners' perceptions of instructional design features and instructor practices that support work life learning balance, as well as perceived impacts on wellbeing. These analyses assessed the extent to which course design and instructional practices were perceived as supportive of balance and overall wellbeing. Participants reported high levels of agreement across instructional design features, with mean scores ranging from $M = 3.78$ to $M = 4.25$ on a 5 point scale. The highest rated items reflected clarity

and predictability, including clear assignment instructions and effective course scheduling that supported planning ahead. These findings are presented in Table 1.

Table 1

Descriptive Statistics for Instructional Design Features Supporting Balance

Item	N	Min	Max	M	SD
Instructions for assignments were clear and allowed me to plan ahead effectively.	203	1	5	4.25	0.74
The course schedule allowed me to balance learning with my work and personal life.	203	2	5	4.22	0.69
Weekly expectations followed a predictable and consistent pattern.	202	2	5	4.22	0.72
Grading criteria and rubrics were clear and reduced uncertainty about expectations.	203	1	5	4.19	0.80
Assignments were clearly aligned with the stated learning outcomes.	203	1	5	4.15	0.72
The learning management system was easy to navigate and reduced time troubleshooting.	203	1	5	4.14	0.77
The course structure helped me understand how weekly activities fit together.	203	1	5	4.10	0.74
Assignments allowed me to connect course content to my professional or personal context.	202	1	5	4.02	0.80
The overall workload was reasonable given the course credit hours.	203	1	5	4.00	0.85
Time expectations for assignments were realistic for working adults.	203	1	5	3.97	0.93
The course design supported flexible participation such as asynchronous options or flexible deadlines.	202	1	5	3.96	0.94
Assignments were spaced out in a way that reduced stress and overload.	203	1	5	3.88	0.94
I had meaningful choices in how I demonstrated my learning.	203	1	5	3.85	0.97
Large or complex assignments were broken into manageable components.	203	1	5	3.78	0.96

Note. Scale ranged from 1 (strongly disagree) to 5 (strongly agree). Valid N (listwise) = 200.

Similarly, perceptions of instructor practices were strongly positive, with mean scores ranging from $M = 3.80$ to $M = 4.20$. Participants reported particularly high agreement for clearly established participation expectations and psychologically safe learning environments. Practices related to flexibility, such as reasonable extensions and instructor understanding of outside responsibilities, were rated slightly lower but remained above the scale midpoint. These results are shown in Table 2.

Table 2

Descriptive Statistics for Instructor Practices That Promote Balance

Item	N	Min	Max	M	SD
Expectations for participation and interaction were clearly established.	203	1	5	4.20	0.78
The course environment felt psychologically safe for asking questions or expressing concerns.	203	1	5	4.17	0.80
The instructor's communication style felt respectful and supportive.	203	1	5	4.17	0.81

The instructor directed students to appropriate academic or technical resources when needed.	203	1	5	4.09	0.85
I was encouraged to seek support services without feeling penalized or judged.	203	1	5	4.05	0.87
The instructor provided timely feedback that helped me stay on track.	201	1	5	3.99	0.90
Instructor feedback was specific and helped me improve future work.	203	1	5	3.90	0.94
The instructor anticipated common difficulties and addressed them in advance.	202	1	5	3.89	0.91
Feedback focused on learning and growth rather than only on grades.	203	1	5	3.85	0.99
The instructor was understanding of my responsibilities outside of class.	203	1	5	3.82	0.95
The instructor allowed reasonable extensions when life or work interfered with learning.	203	1	5	3.81	1.02
The instructor checked in with students when challenges were likely to arise.	203	1	5	3.81	1.02
I felt comfortable communicating with the instructor about work-life challenges.	203	1	5	3.80	1.02

Note. Scale ranged from 1 (strongly disagree) to 5 (strongly agree). Valid N (listwise) = 200.

Regarding perceived wellbeing outcomes, participants reported moderately high levels of work-life-learning balance and motivation, with means ranging from $M = 3.66$ to $M = 3.99$. Respondents indicated that instructional strategies supported balance and helped prevent burnout, though reductions in stress relative to other courses were somewhat lower. These findings are presented in Table 3

Table 3

Descriptive Statistics for Impact on Wellbeing

Item	N	Min	Max	M	SD
I was able to maintain a healthy work-life-learning balance during this course.	202	1	5	3.99	0.87
The instructional strategies used in this course helped me stay motivated.	202	1	5	3.94	0.86
I was able to manage course demands without feeling overwhelmed.	202	1	5	3.90	0.96
The course design helped prevent burnout over the term.	202	1	5	3.82	0.97
I experienced less stress in this course compared to others I've taken.	202	1	5	3.66	1.03

Note. Scale ranged from 1 (strongly disagree) to 5 (strongly agree). Valid N (listwise) = 202.

Collectively, results indicate that adult learners perceived both course design features and instructor practices as supportive of balance and wellbeing.

Research Question 2

Descriptive statistics were examined to assess adult learners' perceptions of engagement and persistence outcomes associated with balance oriented course design. These analyses explored the perceived impact of instructional practices that support balance on engagement and persistence intentions. Participants reported strong agreement that the course design supported engagement and persistence, with mean scores ranging from $M = 4.02$ to $M = 4.12$. The highest rated item indicated that learners would be more likely to take another course designed in a similar way.

Participants also reported that the course design helped them remain engaged, complete the course, and stay enrolled despite competing responsibilities. These results are presented in Table 4.

Table 4

Descriptive Statistics for Impact on Persistence

Item	Min	Max	M	SD
I would be more likely to take another course designed in this way.	1	5	4.12	0.91
This course design helped me stay engaged and complete the course.	1	5	4.11	0.84
This course design made it easier for me to stay enrolled despite competing responsibilities.	1	5	4.04	0.85
I would recommend this course to other adult learners with busy lives.	1	5	4.03	0.91

Note. Scale ranged from 1 (strongly disagree) to 5 (strongly agree). N = 202.

Findings suggest that balance oriented instructional practices are perceived as positively influencing adult learners' engagement and persistence intentions.

Research Question 3

Descriptive statistics for student happiness indicated generally high levels of contentment, confidence, and sense of purpose in learning. These measures were used to examine the relationship between instructor practices that promote balance and adult learner happiness. With mean scores ranging from M = 3.61 to M = 4.21 indicating generally high levels across items. Participants reported strong agreement with items reflecting acceptance of challenge, satisfaction with progress, and comfort participating in course activities. These descriptive findings are presented in Table 5.

Table 5

Descriptive Statistics for Student Happiness in Learning

Item	Min	Max	M	SD
I have learned to accept challenges in the course as part of the learning process.	2	5	4.21	0.66
I feel content with how I am progressing in this course.	1	5	4.16	0.77
I felt satisfied with both the process and outcomes of my learning in this course.	1	5	4.14	0.76
I feel comfortable and confident participating in course activities.	2	5	4.11	0.72
I felt a sense of purpose and meaning in my learning activities.	1	5	4.03	0.85
I have learned to remain calm and focused, no matter the course demands.	1	5	4.02	0.85
I can learn in harmony with classmates and instructors who matter to me.	1	5	4.00	0.84
The course supported a sense of harmony between learning and my broader life.	1	5	3.98	0.80

I am able to maintain inner peace while engaging in this course.	1	5	3.90	0.88
I have learned to let go of unnecessary worries about grades or performance in this course.	1	5	3.61	1.09

Note. Scale ranged from 1 (strongly disagree) to 5 (strongly agree). N = 200.

Table 6 presents correlations between student happiness in learning and instructor practices that promote balance. All practices were positively and significantly associated with happiness, with correlations ranging from moderate ($r = .403$) to substantial ($r = .570$) using Davis's descriptors. The strongest relationships were observed for relational climate practices, including respectful instructor communication ($r = .570$), psychological safety ($r = .529$), and comfort discussing work-life challenges ($r = .523$). Instructional feedback practices, particularly timely feedback ($r = .554$) and specific feedback for improvement ($r = .507$), also demonstrated substantial relationships. Practices related to course structure and anticipatory support showed moderate associations, including support services encouragement, anticipating difficulties, instructor check-ins, and flexible extensions. Overall, both relational teaching behaviors and instructional support practices were associated with higher levels of student happiness.

Table 6

Correlations Between Student Happiness and Instructor Practices That Promote Balance

Variable	r	Description
Relational Climate and Psychological Safety		
The instructor's communication style felt respectful and supportive.	.570	Substantial
The course environment felt psychologically safe for asking questions or expressing concerns.	.529	Substantial
I felt comfortable communicating with the instructor about work-life challenges.	.523	Substantial
The instructor was understanding of my responsibilities outside of class.	.498	Moderate
Instructional Feedback and Learning Support		
The instructor provided timely feedback that helped me stay on track.	.554	Substantial
Instructor feedback was specific and helped me improve future work.	.507	Substantial
The instructor directed students to appropriate academic or technical resources when needed.	.463	Moderate
Feedback focused on learning and growth rather than only on grades.	.431	Moderate
Course Structure and Anticipatory Support		
Expectations for participation and interaction were clearly established.	.533	Substantial
I was encouraged to seek support services without feeling penalized or judged.	.485	Moderate
The instructor anticipated common difficulties and addressed them in advance.	.465	Moderate
The instructor checked in with students when challenges were likely to arise.	.445	Moderate
The instructor allowed reasonable extensions when life or work interfered with learning.	.403	Moderate
Note. Values are Pearson correlations with the composite Student Happiness score. ** $p < .01$ (two-tailed). N varies due to pairwise deletion.		

These findings indicate that instructor practices that promote balance are meaningfully associated with adult learner happiness in learning contexts.

Research Question 4

Open-ended responses were analyzed to examine Research Question 4, which explored the strategies adult learners use to remain calm and focused while balancing course demands. Participants described a wide range of approaches, with clear patterns emerging around organization, pacing, mindfulness, and support systems. The most dominant theme was proactive time management and structured planning. Many participants emphasized "Preparing for the week ahead of time and creating study priorities for the week," "Planning ahead," and "Use posted schedules of course due dates, exams, etc to effectively manage my time and keep balance between work and school." Others described breaking assignments into smaller components, such as "I break things down so they are easier to

manage,” “Breaking down an assignment into smaller pieces,” and “Breaking the work down into smaller more digestible size workloads.” Several participants highlighted pacing strategies, including “Taking the class one assignment at a time” and “Focusing on one step at a time.” A second prominent theme involved mindfulness, emotional regulation, and intentional stress reduction. Participants reported “Meditation,” “Deep breaths and walks outside,” “Taking short breaks when feeling stressed or overwhelmed,” and “Practicing deep breathing or mindfulness exercises before starting challenging tasks.” Others described setting boundaries and routines, such as “Setting a strict ‘no-school’ boundary after 9:00 PM helped me wind down without feeling guilty,” and “Spacing out when I would work on the course, but being very focused during those assigned times.” Some participants also referenced cognitive reframing strategies, including “Don’t overthink it. Just go with the motions and do it,” and “Trying to ignore my need for perfectionism has been my biggest milestone/breakthrough in college.” Finally, many respondents emphasized the importance of social and structural support. Participants noted “Relying on family and coworkers for emotional support,” “My wife was very helpful in supporting me throughout my studies/work life,” and “Having access to support at all times.” Others highlighted the value of clear course structure, such as “Following a predictable weekly schedule and knowing the instructor provided clear rubrics reduced my performance anxiety significantly,” and “The ability to work on assignments at my own pace kept me calm.” Collectively, these responses indicate that adult learners rely on a combination of personal regulation strategies, structured planning behaviors, and relational or instructional support to sustain calm and focus while balancing competing responsibilities.

Research Question 5

To provide contextual depth to the quantitative findings, participants responded to an open ended question asking what suggestions they had for making courses more supportive of adult learners. Responses were reviewed using inductive thematic grouping to identify recurring patterns across participants. The most prominent theme was flexibility in deadlines and pacing. Many respondents emphasized the importance of extended timelines, reduced penalties, and the ability to work ahead. For example, one participant noted, “Providing a full ‘semester-at-a-glance’ calendar on day one is vital. When you’re juggling a job and kids, knowing exactly when the big projects are due weeks in advance allows you to plan your work shifts and childcare around those deadlines.” Similarly, others requested “More flexible deadlines and recorded lectures would help,” and simply stated “Flexible deadlines” or “Extended deadlines.” Several participants also commented on course intensity, with one explaining, “The course is so accelerated that it feels like you are doing double the amount of work in a shorter period of time.”

A second recurring theme involved clarity and structure. Participants indicated that ambiguity heightened stress, particularly when balancing competing responsibilities. One respondent wrote, “Clear expectations are listed out. Ambiguous expectations are stressful and I often don’t have the luxury of completing something last minute because instructions or deadlines were not clear.” Others called for “Organize due dates and assignments in an easier way to identify and use. I would like a checklist,” and “Have tasks be planned out further ahead of time, to plan accordingly.” Instructor responsiveness and empathy also surfaced repeatedly, with participants emphasizing the importance of flexibility and understanding, such as “Being flexible so they can handle responsibilities outside of course work” and “That the instructors understand that many adults are balancing their jobs, family life, and personal life with their coursework.” Finally, some respondents highlighted the importance of minimizing rigid coordination demands, with one stating, “Absolutely no group projects or assignments. I work 55 hours a week and cannot coordinate with other people.” Collectively, these qualitative insights reinforce the quantitative findings by underscoring the central importance of flexibility, clarity, workload calibration, and relational support in promoting work life learning balance for adult learners.

Discussion of Findings

This study examined how instructional design features and instructor practices relate to adult learners’ perceived work life learning balance, wellbeing, persistence intentions, and happiness in learning. Across analyses, adult learners consistently identified flexibility (Kuluşaklı, 2025), clear organization (Green, 2024), predictable pacing (Fredrick, 2024), and supportive instructor communication as essential for sustaining balance alongside work and caregiving responsibilities (Ren et al., 2025). These findings align with research emphasizing that flexible course design and supportive learning environments are critical for nontraditional learners managing competing demands (Galad et al., 2024; Kamat & Bernstein, 2025; Knowles, Holton, & Swanson, 2014). Structured course organization and predictable pacing also reflect principles from cognitive load and instructional design research, which suggest that clear expectations and manageable course structures reduce unnecessary cognitive burden and help learners

focus on meaningful learning tasks (Mayer, 2005). In addition, participants' emphasis on responsive instructor communication reflects broader literature on instructor presence in online learning environments, where empathy, clarity, and responsiveness support engagement, motivation, and satisfaction (Cleveland Innes & Campbell, 2012; Garrison et al., 2000; Garrison & Cleveland Innes, 2005; Kahu & Nelson, 2018).

The findings strongly align with Control Value Theory, suggesting that course structures that provide predictability, clarity, manageable workload, and flexibility function as structural sources of perceived control. When adult learners understand expectations and can plan ahead, they are better able to integrate academic work with professional and personal obligations. Instructor practices that demonstrate empathy, timely feedback, respectful communication, and reasonable flexibility further contribute to learners' perceptions of control and value appraisals (Pekrun, 2006; Pekrun et al., 2011). These relational practices were meaningfully associated with indicators of student happiness, which in this study reflected inner peace, acceptance of challenge, reduced performance anxiety, and harmony between learning and life. Consistent with research on emotional wellbeing in online learning environments, supportive instructional climates appear to shape learners' emotional experiences and motivation (Bedenlier et al., 2020; Martin et al., 2020).

One of the key contributions of this study is positioning happiness as a legitimate educational outcome. Recent scholarship in higher education and positive education has increasingly recognized student wellbeing and flourishing as central outcomes of effective learning environments rather than peripheral byproducts of academic achievement (Kern et al., 2020). Rather than focusing solely on persistence or satisfaction, the Modified Mature Happiness Scale captured emotional steadiness, calm focus, and acceptance of challenge within the learning process. Happiness and wellbeing were positively associated with persistence intentions and likelihood of recommending the course, suggesting that emotional equilibrium may play an important role in sustaining engagement and motivation in learning contexts. The open ended findings further illustrate that adult learners actively use strategies such as time blocking, task segmentation, mindfulness, and family support to regulate learning demands, which aligns with research on self regulated learning strategies that support persistence and performance in online and adult learning environments (Broadbent & Poon, 2021). However, these strategies are often enabled or constrained by course design, as instructional structure, clarity of expectations, and instructor presence play a critical role in shaping learners' emotional experiences and engagement in online environments (Bond et al., 2020; Martin et al., 2020). Together, the findings extend Control Value Theory into adult education contexts characterized by complex work family systems, reinforcing the role of achievement emotions in shaping motivation, engagement, and persistence (Linnenbrink Garcia et al., 2021). Designing courses that promote clarity, flexibility, and supportive instructor presence may therefore be essential for fostering both academic persistence and emotional sustainability in adult learning environments.

Significance of the Study

This study contributes to instructional design theory and practice by identifying instructional structures and instructor practices that adult learners perceive as supportive of sustaining learning alongside work and life obligations. Drawing on data from a large sample of adult learners, the findings provide empirical evidence that flexibility, clarity, instructor responsiveness, and supportive communication are consistently associated with reported balance, wellbeing, persistence intentions, and happiness in learning. These results offer value to instructional designers, educators, and institutional leaders seeking to create more equitable and humanistic learning environments for nontraditional learners. As the population of adult learners continues to grow, now comprising more than 40% of U.S. college enrollees over the age of 22, understanding how instructional strategies intersect with learners' broader life contexts has become increasingly critical (Nietzel, 2025). At the same time, advances in artificial intelligence and expanded flexible access models are accelerating adult-focused program development and delivery, further underscoring the need for intentional, learner-centered design (Educational Advisory Board [EAB], 2024). The study holds theoretical, practical, and methodological significance for advancing instructional design in adult education by foregrounding emotional well-being as a meaningful mechanism linking course structures to learner outcomes. Grounded in Control-Value Theory, the findings provide empirical support for the role of perceived control and value in shaping adult learners' emotional experiences, motivation, and persistence. High ratings for flexibility, predictability, instructor understanding, and supportive communication, combined with statistically significant associations between instructor practices and student happiness, align with Control-Value Theory's propositions regarding control-value appraisals and their influence on achievement emotions. These findings extend the application of the theory to adult learners navigating complex work and life demands. Building on these results, the study advances a Happiness in Learning Model that integrates Control-

Value Theory with complementary perspectives from Self-Determination Theory, Flow Theory, and PERMA. Rather than positioning student success solely in terms of satisfaction or persistence, the model reframes success as inclusive of calm, confidence, and emotional equilibrium amid role conflict. The consistent descriptive patterns and significant relational findings observed across wellbeing, persistence, and happiness outcomes suggest that emotionally responsive instructional design plays a meaningful role in supporting sustainable engagement for adult learners. Accordingly, this study provides a stronger empirical foundation for future large-scale, longitudinal, and experimental research aimed at further validating happiness as a measurable outcome of instructional design in adult education.

Theoretical Contributions

Guided by Control–Value Theory (Pekrun, 2007), this study examined how instructional structures such as clarity, flexibility, and learning management system organization, along with instructor practices including supportive communication and understanding of external responsibilities, relate to adult learners’ reported work–life–learning balance, wellbeing, persistence intentions, and happiness in learning. Drawing on a substantially larger sample, the findings provide empirical support for the role of perceived control and value in shaping adult learners’ emotional experiences and motivational outcomes. Consistent patterns across descriptive and correlational analyses reinforce the theoretical proposition that course structures and instructor behaviors influence achievement emotions through control–value appraisals. Findings are interpreted through the emergent Happiness in Learning framework, which extends Control–Value Theory by integrating complementary perspectives from Self-Determination Theory, Flow Theory, and PERMA. The framework offers a practical lens for identifying instructional “balance builders” that may enhance emotional equilibrium, confidence, and sustainable engagement among adult learners. By positioning calm, focus, and emotional steadiness as meaningful outcomes of instructional design, this study expands the theoretical conversation beyond satisfaction and persistence to include well-being as a legitimate educational construct.

Practical Implications

The findings offer actionable guidance for instructional designers, educators, and institutional leaders seeking to cultivate more equitable learning environments for nontraditional students, who comprise over 40% of U.S. higher education enrollments (Kasworm, 2018). Patterns associated with “balance builders,” such as flexible deadlines, clear expectations, predictable weekly structures, and personalized feedback, contrast with “balance breakers,” including rigid pacing and compressed course formats. These insights can inform faculty development initiatives, course redesign efforts aligned with established quality frameworks, and institutional policies that intentionally prioritize learner well-being alongside academic performance. Results further indicate that learner happiness and emotional well-being are meaningfully associated with persistence intentions and perceived course quality. This suggests that emotionally responsive instructional design is not peripheral but central to sustaining engagement among adult learners managing work and caregiving responsibilities. Integrating low-stakes engagement strategies, real-world relevance, flexible access, and transparent organization may strengthen both academic and emotional outcomes. Limitations of the present study are discussed in the following section.

Limitations of the Study

Several limitations should be considered when interpreting these findings. First, the study relied on cross-sectional self-report data, which limits causal inference and may be influenced by social desirability, recall bias, or individual differences in emotional interpretation. Although statistically significant associations were observed between instructor practices and student happiness, the design does not permit conclusions about directionality. Second, participants were recruited through Prolific and asked to reflect on a recently completed course, which may limit generalizability to all adult learners or institutional contexts. While the sample size was substantially larger than the pilot phase, it does not represent a nationally stratified sample of institutions, disciplines, or delivery formats. Third, the study examined perceived balance, wellbeing, persistence intentions, and happiness rather than objective academic outcomes such as grades or retention data. As such, findings reflect learners’ subjective experiences, which, while meaningful, may not fully capture long-term behavioral outcomes. Finally, although open-ended responses provided contextual depth, qualitative analyses were exploratory and not conducted using formal coding reliability procedures. Future research employing longitudinal, experimental, and multi-institutional designs would strengthen causal claims and enhance the external validity of the Happiness in Learning Model.

Implications for Practice/Policy

Findings from the full study suggest that institutions can move beyond general calls for flexibility and instead adopt structured, evidence-informed approaches to designing adult-responsive learning environments. At the course level, instructors may begin by gathering brief diagnostic input from students regarding work schedules, caregiving responsibilities, and time constraints early in the term. Such information can inform intentional adjustments to pacing, deadline flexibility, communication expectations, and assessment design. Clear weekly structures, predictable timelines, and transparent grading criteria function as “balance builders” that strengthen learners’ perceived control and reduce anxiety, while rigid pacing, compressed formats, and high coordination demands may operate as “balance breakers,” particularly for working adults. At the program and policy levels, institutions may consider integrating balance audits into course quality review frameworks. These audits could evaluate course structure levers such as pacing models, deadline flexibility, assessment load, learning management system organization, and instructor presence. Faculty development initiatives can be aligned with these findings by equipping instructors with practical strategies for implementing flexible deadlines, structured checklists, early access to assignments, meaningful feedback, and options for asynchronous participation. Policies that normalize limited deadline extensions, encourage workload transparency, and reduce unnecessary synchronous requirements may further support adult learners managing employment and caregiving responsibilities. Embedding well-being metrics alongside traditional academic performance indicators may also help institutions recognize emotional sustainability as a core dimension of student success.

Future Research Directions

To advance the Happiness in Learning Model, future research should employ longitudinal and multi-institutional designs to examine changes in emotional well-being, control-value appraisals, and persistence across course terms. Pre- and post-course assessments using adapted measures such as the Modified Mature Happiness Scale could clarify how instructional structures influence shifts in calm, confidence, and perceived control over time. Such designs would strengthen causal inferences regarding the role of emotionally responsive instructional design in supporting work–life–learning harmony. Future studies should also examine variation across demographic and contextual factors, including gender, race and ethnicity, age, employment intensity, and caregiving responsibilities, to identify potential intersectional inequities in perceived balance and happiness. Exploring caregiver dynamics in greater depth, including differences based on care recipient age or intensity of caregiving demands, may illuminate role-specific stressors that moderate instructional effects. Experimental and quasi-experimental interventions, such as structured deadline flexibility models or alternative pacing frameworks, could further test mediation pathways using structural equation modeling to evaluate the predictive strength of the Happiness in Learning Model. Collectively, these directions would strengthen the theoretical precision and practical scalability of emotionally responsive instructional design in adult education contexts.

Conclusion

This study underscores the central role of instructional design and instructor practices in supporting adult learners’ ability to balance work, life, and learning. Findings from a large sample of adult learners indicate that flexible course structures, clear organization, predictable pacing, and supportive instructor communication are consistently associated with higher levels of perceived balance, wellbeing, persistence intentions, and happiness in learning. Both descriptive and correlational results reinforce the importance of emotionally responsive course design in sustaining engagement among nontraditional learners managing complex professional and personal responsibilities. Grounded in Control-Value Theory, the findings provide empirical support for the role of perceived control and value in shaping adult learners’ emotional experiences and motivational outcomes. The Happiness in Learning Model offers a conceptual and practical framework for translating these insights into instructional decision-making across asynchronous, synchronous, hybrid, and fully online modalities. By reframing instructional quality to include calm, confidence, and emotional equilibrium alongside traditional academic indicators, this work advances a more holistic understanding of student success. As adult learners continue to comprise a growing share of higher education enrollments, designing for balance is not an optional enhancement but a structural necessity. Intentional “balance-building” practices embedded in course design and institutional policy may play a meaningful role in promoting equitable, sustainable, and emotionally supportive learning environments for working adults and caregivers alike.

References

- Artino, A. R., Jr., & Jones, K. D., II (2012). *Exploring the complex relations between achievement emotions and self-regulated learning behaviors in online learning*. *The Internet and Higher Education*, 15(3), 170–175.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional student retention. *Review of Educational Research*, 55(1), 485-540.
- Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O., & Kerres, M. (2020). Facilitating student engagement through educational technology in higher education: A systematic review in the field of educational technology. *International Journal of Educational Technology in Higher Education*, 17, 1–23.
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International journal of educational technology in higher education*, 17(1), 1-30.
- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The internet and higher education*, 27, 1-13.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Cleveland-Innes, M., & Campbell, P. (2012). Emotional presence, learning, and the online learning environment. *International Review of Research in Open and Distributed Learning*, 13(4), 269-292.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Educational Advisory Board. (2024, December 10). What 2024 taught us about the future of graduate and online education. <https://eab.com/resources/blog/adult-education-blog/what-2024-taught-us-about-the-future-of-graduate-and-online-education/>.
- Fowler, F. J. (2014). *Survey research methods* (5th ed.). Sage.
- Fredrick, S. (2024). Course Schedule and Course Pacing: Does it Affect Student Success in Online Asynchronous Courses?. *Online Journal of Distance Learning Administration*, 27(4).
- El Galad, A., Betts, D. H., & Campbell, N. (2024, April). Flexible learning dimensions in higher education: aligning students' and educators' perspectives for more inclusive practices. In *Frontiers in Education* (Vol. 9, p. 1347432). Frontiers Media SA.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7–23. <https://doi.org/10.1080/08923640109527071>
- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. *American Journal of Distance Education*, 19(3), 133–148. https://doi.org/10.1207/s15389286ajde1903_2

- Green, D. N. (2024). Adult learners: Connecting andragogy and transformational leadership in the classroom. *Business Ethics and Leadership*, 8(4), 137-147.
- Hill, E. J., Grzywacz, J. G., Allen, S., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsoupes, M. (2008). Defining and conceptualizing workplace flexibility. *Community, Work & Family*, 11(2), 149–163. <https://doi.org/10.1080/13668800802024678>
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in higher education*, 38(5), 758-773.
- Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: understanding the mechanisms of student success. *Higher Education Research & Development*, 37(1), 58–71. <https://doi.org/10.1080/07294360.2017.1344197>
- Kamat, P. H., & Bernstein, J. (2025). Assessing help-seeking strategies among nontraditional learners in distance education. *Cogent Education*, 12(1), 2568564.
- Kasworm, C. E. (2018). Adult Students: A Confusing World in Undergraduate Higher Education. *The Journal of Continuing Higher Education*, 66(2), 77–87. <https://doi.org/10.1080/07377363.2018.1469077>
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The journal of positive psychology*, 10(3), 262-271.
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2014). *The adult learner: The definitive classic in adult education and human resource development*. Routledge.
- Kuluşaklı, E. (2025). Student engagement and flexibility in distance learning in higher education. *SAGE Open*, 15(1), 21582440251329979.
- Linnenbrink-Garcia, L., Rogat, T. K., & Koskey, K. L. (2011). Affect and engagement during small group instruction. *Contemporary Educational Psychology*, 36(1), 13-24.
- Martin, F., Sun, T., & Westine, C. D. (2020). A systematic review of research on online teaching and learning from 2009 to 2018. *Computers & education*, 159.
- Martin, F., Wang, C., & Sadaf, A. (2020). Facilitation matters: Instructor perception of helpfulness of facilitation strategies in online courses. *Online Learning*, 24(1), 28–49. <https://doi.org/10.24059/olj.v24i1.1980>
- Mayer, R. E. (Ed.). (2005). *The Cambridge handbook of multimedia learning*. Cambridge university press.
- Nietzel, M. T. (2025, June 25). Nontraditional students are the new college majority, report finds. *Forbes*. <https://www.forbes.com/sites/michaelnietzel/2025/06/25/nontraditional-students-become-the-new-college-majority-report-finds/>
- Park, S. Y., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Educational Technology & Society*, 12(4), 207-217. <https://www.jstor.org/stable/jeductechsoci.12.4.207>
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The control-value theory of achievement emotions: An integrative approach to emotions in education. In *Emotion in education* (pp. 13-36). Academic Press.
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, 36(1), 36–48. <https://doi.org/10.1016/j.cedpsych.2010.10.002>

Ren, X., Zhou, Y., & Detrick, R. (2025). Investigating working adult learners' feedback literacy in online project-based learning: a convergent mixed methods study. *Distance Education*, 1-22.

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.

Shea, P., & Bidjerano, T. (2014). Does online learning impede degree completion? A national study of community college students. *Computers & Education*, 75, 103-111. <https://doi.org/10.1016/j.compedu.2014.02.009>

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Artificial Intelligence in Higher Education: Enhancing Learning and Navigating Risks

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Abstract

Artificial intelligence (AI) is reshaping higher education by influencing decision-making, instructional design, resource allocation, and institutional strategy. This paper examines how AI-driven tools and systems are transforming leadership practices across higher education contexts. Drawing on current literature and comparative case analyses of four institutions—MIT, the University of Central Florida (UCF), the National University of Singapore (NUS), and the Open University (OU)—the study explores the opportunities and challenges associated with AI adoption, including ethical considerations, data governance, faculty partnership, student fairness, and sustainable strategy. The analysis reveals that responsible AI integration is fundamentally a leadership challenge requiring vision, ethical governance, faculty empowerment, and equity-centered policy. A five-pillar leadership framework is proposed as a road map for institutions navigating AI-enabled transformation. Recommendations for future research and practice are provided.

Keywords: *artificial intelligence, educational leadership, digital transformation, learning analytics, ethical governance*

Introduction

Artificial intelligence (AI) is transforming higher education at a pace that challenges traditional models of teaching, assessment, and institutional governance. Once confined to narrow applications such as plagiarism detection or adaptive learning, AI now permeates nearly every dimension of academic life—from advising and enrollment forecasting to instructional design, grading, and student support. Generative AI has accelerated this shift, enabling students to produce sophisticated work with minimal effort and prompting faculty to rethink long-standing assumptions about authorship, originality, and cognitive development. As institutions grapple with these disruptions, the central question is no longer whether AI will shape higher education, but how leaders will guide its integration in ways that strengthen rather than undermine the educational mission.

Early institutional responses to AI were often reactive, fragmented, or restrictive, reflecting uncertainty about the pedagogical and ethical implications of generative tools. As the technology matures, higher education is moving toward more strategic, learning-centered approaches that emphasize pedagogy, equity, and responsible innovation. This transition requires leadership that can balance innovation with caution, efficiency with human judgment, and data-driven decision-making with ethical stewardship.

This paper argues that AI adoption in higher education is fundamentally a leadership challenge, rather than a technological one. Drawing on leadership theory, digital transformation research, and comparative examples from MIT, UCF, NUS, and the OU, the paper identifies the leadership practices that enable responsible, equitable, and pedagogically meaningful AI integration. The central contribution is a leadership framework with five pillars—Vision and Communication, Ethical Governance, Faculty Partnership, Student Fairness and Agency, and Sustainable Strategy—offering institutions a road map for navigating AI-enabled transformation.

Literature Review

AI in higher education is not merely a technological development; it represents a profound shift in how institutions conceptualize learning, assessment, governance, and leadership. To understand how educational leaders can navigate this transformation, it is essential to examine four interconnected bodies of literature: (1) leadership theory and digital transformation, (2) AI applications and risks in higher education, (3) pedagogical shifts driven by AI, and (4) ethical governance and institutional policy.

Leadership Theory and Digital Transformation

Transformational Leadership

Transformational leadership emphasizes vision, inspiration, and cultural change. Leaders articulate a compelling future state, motivate stakeholders, and foster an environment that allows innovation to flourish. In the context of AI, transformational leaders:

- Frame AI adoption as an opportunity to enhance learning rather than a threat
- Communicate a clear institutional vision for responsible AI use
- Encourage experimentation and reflective practice
- Build coalitions across academic, administrative, and technical units

Research shows that transformational leadership is closely associated with successful digital transformation because it helps institutions navigate ambiguity and build shared purpose [7, 8]. AI adoption requires precisely this kind of vision-driven leadership, as institutions must rethink long-standing assumptions about teaching, assessment, and academic integrity.

Transactional Leadership

Transactional leadership focuses on structures, processes, and accountability. While sometimes viewed as less innovative, transactional leadership is essential for operationalizing AI governance. Leaders must:

- Establish clear policies and guidelines
- Define acceptable and unacceptable uses of AI
- Ensure compliance with privacy and data protection regulations
- Provide training and support for faculty and staff
- Monitor implementation and adjust policies as needed

In AI contexts, transactional leadership provides the procedural backbone that ensures consistency, fairness, and risk mitigation. Without it, AI adoption becomes fragmented, inconsistent, and potentially harmful.

Servant Leadership

Servant leadership centers on empathy, equity, and the well-being of students and faculty. It is particularly relevant in AI adoption because AI systems can unintentionally reinforce inequities or undermine student agency. Servant leaders:

- Prioritize student rights, privacy, and autonomy
- Consider the impact of AI on vulnerable or marginalized groups
- Ensure that technology enhances rather than replaces human relationships
- Advocate for equitable access to AI tools and support

As AI becomes more embedded in learning environments, servant leadership helps institutions maintain a human-centered approach that aligns with educational values.

Blended Leadership for AI Transformation

The literature increasingly suggests that no single leadership model is sufficient for AI-era transformation. Instead, leaders must blend elements of transformational, transactional, and servant leadership to create a balanced approach. This blended model supports:

- Vision (transformational)
- Governance (transactional)
- Equity and care (servant)

If any dimension is missing, AI initiatives can fail in predictable ways: vision without governance leads to confusion and inconsistency; governance without vision produces compliance-driven minimalism; innovation without equity results in greater disparities and reduced trust. Thus, leadership in the AI era requires a multidimensional approach that integrates strategy, ethics, and pedagogy.

AI in Higher Education: Applications, Benefits, and Risks

AI has rapidly expanded across higher education, influencing both academic and administrative domains in ways that reshape how institutions operate and how students learn. In teaching and learning, AI now supports a wide range of instructional functions, including adaptive learning platforms, intelligent tutoring systems, automated assessment tools, and generative AI systems. Learning analytics dashboards further enable faculty to identify at-risk students and intervene earlier. These tools promise more responsive, flexible, and personalized learning experiences. Beyond the classroom, AI is increasingly embedded in administrative processes such as enrollment forecasting, advising chatbots, resource allocation, scheduling, and early alert systems for student retention.

Despite these benefits, AI introduces significant risks that require careful leadership and governance. One of the most pressing concerns is equity and bias: AI systems trained on historical data can reproduce or amplify existing inequities, disproportionately flagging certain student groups or reinforcing achievement gaps. Privacy and surveillance concerns also emerge as AI systems rely on extensive data collection. Academic integrity presents another challenge, as generative AI complicates traditional notions of authorship and originality. Finally, trust becomes a central issue: inconsistent policies, unclear expectations, or sudden changes can erode confidence among students and faculty, making transparent communication essential for responsible AI adoption.

Overall, the literature suggests that AI's impact on higher education is both transformative and fraught with complexity. Effective leadership is therefore essential to ensure that AI strengthens rather than undermines the educational mission.

Pedagogical Shifts in Teaching and Learning

AI is reshaping the pedagogical foundations of higher education in ways that require leaders to rethink long-standing assumptions about how students learn. One of the most significant shifts is the inversion of Bloom's taxonomy. Traditionally, students progress from lower-order cognitive skills toward higher-order skills like analyzing, evaluating, and creating. Generative AI disrupts this sequence by enabling students to produce polished outputs at the "create" level with minimal effort, often before they have engaged in foundational thinking. This inversion challenges educators to redesign learning experiences so that students cannot bypass essential cognitive processes. Instead of evaluating final products, instructors increasingly emphasize process-based learning, requiring students to critique AI outputs, justify revisions, and reflect on their decision-making [1, 2].

Another major pedagogical shift involves the emergence of reflective AI literacy as a core competency. AI literacy extends far beyond technical proficiency; it encompasses ethical reasoning, critical evaluation, and metacognitive awareness. Students must learn not only how to use AI tools but when and why to use them, how to identify bias or inaccuracies, and how to articulate the role AI played in their work. Leadership plays a crucial role in embedding AI literacy across the curriculum and ensuring that faculty receive adequate support [5, 6].

A third pedagogical shift concerns the decline of grade-first thinking. As AI makes it easier for students to generate high-quality outputs quickly, traditional assessments that reward polished products rather than authentic engagement become increasingly misaligned with learning goals. To counter this, educators are adopting alternative assessment models such as portfolios, oral examinations, authentic tasks, and iterative mastery-based assessments. Leadership must legitimize these assessment reforms, align them with accreditation expectations, and provide faculty with the resources needed to implement them effectively.

Together, these pedagogical shifts signal a broader transformation in how learning is conceptualized in the age of AI. They require leaders to recognize that AI is not simply a tool but rather a catalyst for rethinking pedagogy, assessment, and student development.

Ethical Governance and Institutional Policy

Ethical governance has become a central concern in higher education as institutions integrate AI into teaching, assessment, and administrative decision-making. Universities vary widely in their approaches to AI policy, with some offering detailed guidelines and others providing only broad statements or restrictive bans. This inconsistency creates confusion for students and faculty. Effective governance requires clear, transparent, and actionable policies that articulate acceptable uses of AI, outline expectations for academic integrity, and provide guidance for both faculty and students [3, 4].

Transparency and accountability are essential components of ethical governance. Institutions must clearly communicate how AI systems operate, what data they collect, and how decisions are made. Accountability also requires regular audits of AI tools to identify bias, inaccuracies, or unintended consequences. Protecting students' rights is another critical aspect: students must be informed about when AI is being used, what data is collected, and how that data influences academic or administrative decisions.

Finally, effective governance requires cross-functional collaboration. AI adoption cannot be siloed within IT departments or academic units; it requires shared governance including faculty, students, administrators, legal experts, and data specialists. Institutions that establish ethics committees, data governance boards, and advisory groups are better positioned to make informed, balanced decisions. Ultimately, ethical governance is not a static set of rules but rather an ongoing process of reflection, evaluation, and adaptation as AI technologies evolve.

Methodology

This study employs a qualitative, comparative case study design to examine how leadership practices shape the responsible integration of AI in higher education. Drawing on established methodological frameworks [1, 2], the study analyzes four purposively selected institutions—MIT, UCF, NUS, and the OU—as bounded cases that represent diverse institutional contexts, geographic regions, and AI adoption strategies. Comparative case study methodology is well suited to this inquiry because it enables cross-case synthesis while preserving the contextual complexity of each institution's leadership environment [1].

Case selection followed a theoretical sampling logic designed to maximize variation across four dimensions: institutional type and mission; geographic and regulatory context (United States, Singapore, and United Kingdom); scale of AI investment; and the maturity of AI governance frameworks. Data were drawn from publicly available institutional documents and secondary academic sources, consistent with document analysis methods appropriate for comparative policy research [4]. Sources included institutional AI strategies and policy statements, published case studies and white papers, peer-reviewed scholarship, and reports from international bodies such as UNESCO and the OECD [5, 6].

Analysis proceeded in two stages. First, each institutional case was examined individually to identify documented leadership practices, governance structures, and pedagogical priorities related to AI adoption. Second, cross-case synthesis was conducted to identify recurrent patterns, tensions, and enabling conditions across the four institutions. Thematic analysis guided this synthesis, with themes generated inductively from the case evidence and refined through iterative comparison with leadership theory [4]. The study acknowledges several limitations, including reliance on publicly available documents and the rapidly evolving nature of AI adoption in higher education.

Comparative Case Analysis

The following case analyses examine how MIT, UCF, NUS, and the OU have each translated the leadership challenges described in the preceding literature review into documented institutional practices. Each institution offers a distinct model of AI leadership, and together they illustrate how the theoretical dimensions of vision, governance, faculty partnership, student agency, and sustainable strategy are enacted in varied real-world contexts.

Massachusetts Institute of Technology

MIT offers one of the most distinctive models of AI leadership in higher education, characterized by a deliberate effort to align internal institutional governance with outward-facing public AI literacy initiatives. In response to the emergence of generative AI tools, MIT's chair of the faculty directed all instructors to consult guidance developed collaboratively by the Teaching and Learning Laboratory (TLL), the IT Governance Committee, the Information Technology Policy Committee, and the Office of General Counsel [9]. This cross-functional governance structure exemplifies the blended leadership approach, combining transformational vision with transactional accountability across legal, technical, and academic domains. Rather than issuing a blanket institutional policy, MIT empowered faculty to set course-level expectations while providing shared infrastructure for decision-making—a model that preserves academic autonomy while establishing institutional guardrails.

MIT's leadership vision extends beyond campus policy into the broader AI literacy ecosystem through its Responsible AI for Social Empowerment and Education (RAISE) initiative and the associated Day of AI program. Developed by researchers in the MIT Media Lab and led by Professor Cynthia Breazeal, who serves simultaneously as RAISE director and MIT's dean for digital learning, Day of AI provides a free, open-source curriculum now used by educators in over 170 countries [10]. The program's emphasis on critical, ethics-centered AI literacy reflects the servant leadership dimension described in the framework: ensuring that AI knowledge is accessible to all students regardless of background.

University of Central Florida

As one of the largest universities in the United States by enrollment, UCF provides a compelling case study in scaling AI-enabled student success initiatives within a complex, high-enrollment institution. UCF's leadership approach is notably faculty-centered and practice-oriented. The university's Faculty Center for Teaching and Learning and Division of Digital Learning jointly founded the Teaching and Learning with AI (TLWAI) conference—the first practitioner-focused national conference dedicated to AI in higher education—which has convened annually since 2022 [11]. This initiative reflects the Faculty Partnership pillar of the proposed framework: rather than positioning AI adoption as an administrative mandate, UCF's leadership invested in creating shared professional communities where faculty could collaboratively redesign pedagogical practice.

UCF has also demonstrated leadership in using AI to advance student equity, particularly for underserved populations. The university participated in a \$7.6 million U.S. Department of Education–funded study to test AI-enhanced chatbot technology at scale. Prior research had shown that AI chatbots increase grades and retention rates among lower-income and first-generation students by providing timely, personalized support [12]. UCF's Institute for Artificial Intelligence further institutionalized these priorities, signaling that AI strategy is a sustained, mission-aligned commitment rather than a short-term initiative.

National University of Singapore

NUS represents a case in which national AI strategy and institutional leadership are tightly integrated, creating a distinctive governance environment that accelerates and shapes university-level AI adoption. Singapore's 2023 National AI Strategy 2.0 committed S\$500 million in funding, providing a policy mandate and resource base that NUS has translated into concrete institutional structures [13]. In March 2024, NUS established the NUS Artificial Intelligence Institute (NAII)—a university-wide body tasked with advancing AI research, developing governance frameworks, and partnering with industry and government on real-world applications. Critically, the NAII was embedded at the institution's academic core rather than within a technology services unit, signaling that NUS understands AI governance as an academic and ethical responsibility [14].

NUS's approach to AI in teaching and learning is distinguished by the specificity and pedagogical intentionality of its policy framework. In early 2023, NUS published a comprehensive Policy for the Use of AI in Teaching and Learning, developed by a cross-disciplinary committee that included faculty from philosophy, computer science, public health, and other fields [15]. The policy explicitly discouraged blanket AI bans in favor of course-level differentiation and established principles for ethical and transparent use. At the instructional level, NUS faculty developed innovative AI-integrated learning experiences, including a chatbot used in a law course that simulates courtroom scenarios, allowing students to practice cross-examination techniques before live tutorials [13].

The Open University

The OU presents a uniquely instructive case because its founding mission—providing accessible, distance-based higher education to learners who cannot attend traditional institutions—makes questions of AI equity and inclusion particularly salient. The OU serves a large and diverse student population, including adult learners, students with disabilities, and those in employment. Beginning in 2023, the OU developed comprehensive student-facing guidance on generative AI, explicitly acknowledging the potential of AI as a reasonable adjustment for students with disabilities, while simultaneously warning against overreliance that could undermine the development of deeper understanding and employability skills [16]. The guidance was developed in consultation with academics, professional services staff, and students, exemplifying the shared governance model.

The OU has also demonstrated visionary external leadership in AI for education, most notably through its designation as the lead strategic partner in a £3 million generative AI initiative launched in partnership with the UK Department for Education [17]. The initiative involved sharing the OU's open-access learning resources to train generative AI tools for use by teachers across England. According to Pro Vice-Chancellor Professor Ian Pickup, the OU's scale and national reach positioned it to ensure that the benefits of AI-personalized learning could reach all communities, not just those at well-resourced institutions.

Cross-Case Synthesis

Taken together, the four cases reveal several convergent patterns that transcend institutional type and national context. First, all four institutions have moved away from reactive or restrictive responses to AI and toward proactive, learning-centered governance frameworks that explicitly position AI as a pedagogical opportunity. Second, governance in each case is cross-functional: decisions about AI involve faculty, legal experts, student representatives, and senior academic leadership. Third, each institution demonstrates a commitment to equity—whether through MIT's public AI literacy curriculum, UCF's chatbot research targeting first-generation students, NUS's differentiated policy framework, or the OU's disability-inclusive guidance. Fourth, all four institutions have invested in sustainable structures that signal long-term strategic intent rather than ad hoc experimentation. These convergent patterns provide the empirical grounding for the five-pillar leadership framework presented in the following section.

A Leadership Framework For Responsible AI Adoption

Responsible AI integration in higher education requires leadership that is ethically grounded, pedagogically informed, and strategically aligned with institutional missions. Based on the comparative analysis of MIT, UCF, NUS, and the OU, this paper proposes a five-pillar framework that captures the essential leadership practices needed to guide AI-enabled transformation.

1. Vision and Communication

Leaders must articulate a clear, learning-centered vision for AI that frames the technology as a tool for enhancing—not replacing—human judgment and connection. Effective vision-setting includes transparent communication about both opportunities and risks, consistent messaging across units, and the ability to translate complex technological issues into accessible language for faculty, staff, and students. Institutions that communicate proactively build trust and reduce the uncertainty that often accompanies emerging technologies.

2. Ethical Governance

Ethical governance provides the structural backbone for responsible AI adoption. Leaders must establish policies that define acceptable use, protect student rights, ensure data privacy, and mandate transparency in algorithmic decision-making. Governance structures should include cross-functional committees, regular audits of AI tools, and mechanisms for human review of AI-mediated decisions. Ethical governance ensures that AI strengthens institutional integrity rather than compromising it.

3. Faculty Partnership

Faculty are the primary architects of learning environments, and their partnership is essential for meaningful AI integration. Leaders must treat faculty as codesigners, providing professional development, workload recognition, and opportunities for experimentation. Institutions that invest in faculty capacity-building are better positioned to

redesign assessments, embed AI literacy, and develop pedagogically sound uses of AI. Without faculty partnership, AI adoption becomes superficial, inconsistent, or misaligned with learning goals.

4. Student Fairness and Agency

AI adoption must prioritize student equity, autonomy, and reflective AI literacy. Leaders should ensure that students have equitable access to AI tools, understand how their data is used, and develop the ability to critically evaluate AI outputs. Policies should protect students from algorithmic bias and provide avenues for opting out or requesting human review. Leadership that prioritizes student agency fosters trust and supports the development of ethical, discerning learners.

5. Sustainable Strategy

AI adoption is not a one-time initiative but an ongoing process requiring long-term planning, continuous evaluation, and strategic alignment. Leaders must invest in infrastructure, support systems, and iterative policy revision. Sustainable strategy includes horizon scanning, resource planning, and the integration of AI initiatives into broader institutional goals. Institutions that approach AI strategically are better equipped to adapt to technological change while maintaining mission integrity.

Together, these five pillars position leadership as a form of ethical stewardship, balancing innovation with care to ensure that AI enhances, rather than diminishes, the human dimensions of higher education.

Conclusion and Further Research

AI is reshaping higher education in ways that challenge long-standing assumptions about teaching, learning, assessment, and institutional governance. As this paper has demonstrated, the successful integration of AI is not primarily a technological issue but rather a leadership challenge. Institutions that adopt AI responsibly do so through leadership practices that emphasize ethical stewardship, pedagogical innovation, transparent governance, and a collaborative culture. The comparative analysis of MIT, UCF, NUS, and the OU illustrates that while institutional contexts differ, the underlying leadership principles required for responsible AI adoption are remarkably consistent. Across all four institutions, leaders who successfully navigate AI adoption share several characteristics. They articulate a clear, learning-centered vision for AI that aligns with the institution's mission and values. They communicate transparently, acknowledging both opportunities and risks. They establish governance structures that ensure accountability, protect student rights, and promote ethical decision-making. They empower faculty as codesigners of AI-enabled learning environments and prioritize student agency, equity, and reflective AI literacy. The leadership framework proposed in this paper—comprising Vision and Communication, Ethical Governance, Faculty Partnership, Student Fairness and Agency, and Sustainable Strategy—offers a road map for institutions seeking to adopt AI responsibly. Leaders must balance innovation with caution, efficiency with humanity, and automation with ethical responsibility.

Looking ahead, several areas warrant further research. First, empirical studies are needed to examine how AI adoption affects student learning outcomes across different disciplines, demographic groups, and instructional modalities. Second, future research should explore faculty experiences with AI-enabled assessment redesign. Third, research is needed on student perceptions of fairness, agency, and trust in AI-mediated learning environments. Fourth, governance models require deeper investigation. Finally, future research should examine the broader societal implications of AI in higher education and how universities can prepare students for an AI-enabled workforce while modeling ethical AI use.

In conclusion, AI presents higher education with both extraordinary opportunities and significant challenges. Institutions that approach AI adoption with ethical clarity, pedagogical insight, and collaborative leadership will be well-positioned to harness its potential while safeguarding the human dimensions of learning. Leaders who embrace this responsibility with vision, humility, and integrity will help create institutions where AI strengthens—not replaces—the human relationships at the heart of education.

References

- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE.
- Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- UNESCO. (2023). *Guidance for generative AI in education and research*. UNESCO Publishing.
- OECD. (2021). *AI in education: Challenges and opportunities*. OECD Publishing.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60(1), 421–449.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press.
- MIT IS&T. (2023). *Guidance on using generative AI at MIT*. Massachusetts Institute of Technology Information Systems & Technology. <https://ist.mit.edu/>
- MIT RAISE. (2023). *Day of AI. MIT Responsible AI for Social Empowerment and Education*. <https://raise.mit.edu/day-of-ai>
- UCF Digital Learning. (2024). *Teaching and Learning with AI (TLWAI) conference*. University of Central Florida. <https://digitalllearning.ucf.edu/>
- UCF News. (2024). UCF joins \$7.6 million study on AI chatbots to boost student success. University of Central Florida. <https://www.ucf.edu/news/>
- British Council. (2024). *AI in higher education: International perspectives on governance and pedagogy*. British Council. <https://www.britishcouncil.org/>
- NUS. (2024). *NUS Artificial Intelligence Institute (NAII)*. National University of Singapore. <https://www.nus.edu.sg/>
- NUS Centre for Teaching and Learning. (2023). *Policy for the use of AI in teaching and learning*. National University of Singapore. <https://nus.edu.sg/ctl/>
- Open University. (2023). *Generative AI: Guidance for students*. The Open University. <https://www.open.ac.uk/>
- Open University. (2024). *OU leads generative AI initiative with UK Department for Education*. The Open University. <https://www.open.ac.uk/>
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From Overwhelmed to Optimized: AI Support for Online Faculty

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Abstract

Social presence has long been recognized as a critical component of effective online and technology-mediated learning environments. Early conceptualizations defined social presence as the degree to which individuals perceive others as “real” in mediated communication (Short et al., 1976), with later work emphasizing its relational and affective dimensions (Kreijns et al., 2018). Within the Community of Inquiry framework, social presence is understood as the ability of participants to project themselves socially and emotionally as “real people” in a learning community (Garrison et al., 2000; Caskurlu, 2020). Empirical research consistently demonstrates that higher levels of perceived social presence are associated with increased student satisfaction, engagement, and perceived learning (Swan, 2002). As a result, instructors are often encouraged to adopt practices that enhance visibility, responsiveness, and interpersonal connection in online environments.

However, the enactment of social presence in online learning often depends on sustained, high-frequency instructor interaction. Practices such as timely feedback, active participation in discussion forums, and personalized communication are widely recommended, yet require significant time and ongoing attention. This tension can be better understood through the lens of invisible labor, defined as work that is essential yet unrecognized, unmeasured, and often uncompensated (Daniels, 1987). In academic contexts, this includes mentoring, responding to student concerns, clarifying expectations, and maintaining a sense of instructor availability—activities that contribute substantially to student success but are rarely accounted for in formal workload structures. Recent scholarship further conceptualizes educators’ invisible labor as a structurally embedded and expanding set of relational, emotional, and administrative tasks that are essential to teaching but often unrecognized within formal workload systems (Staudt Willet & He, 2024).

Closely related is the concept of emotional labor, defined as the regulation of one’s emotions to meet professional expectations (Hochschild, 1983). In educational settings, instructors are expected to remain patient, supportive, and responsive, even under conditions of stress or overload. This sustained emotional regulation—particularly when combined with ongoing student interaction—can contribute to strain and burnout (Grandey, 2000). Together, these strands of research reveal a critical tension: while social presence is essential for student engagement and success, its implementation often relies on forms of invisible and emotional labor that are not systematically supported or sustainably designed. What is often framed as good teaching practice is, in effect, an expanding set of expectations that can be difficult to sustain over time. As expectations for accessibility and responsiveness continue to expand in online learning environments, this misalignment between instructional demands and structural support highlights the need for new approaches to designing and distributing social presence. This paper addresses this need by introducing a framework that not only explains the source of this imbalance but also offers a practical way to redesign how instructional presence is enacted in online courses.

The Social Presence Stack

In response, this paper reframes the challenge of social presence from one of instructional overload to one of strategic optimization, offering a framework that instructors can use to redesign how presence is created and sustained in their courses.

Figure 1 illustrates the Social Presence Stack as a layered model through which instructional presence is distributed across an online learning environment. Each layer represents a different mode of presence, varying in both scalability and required instructor effort.

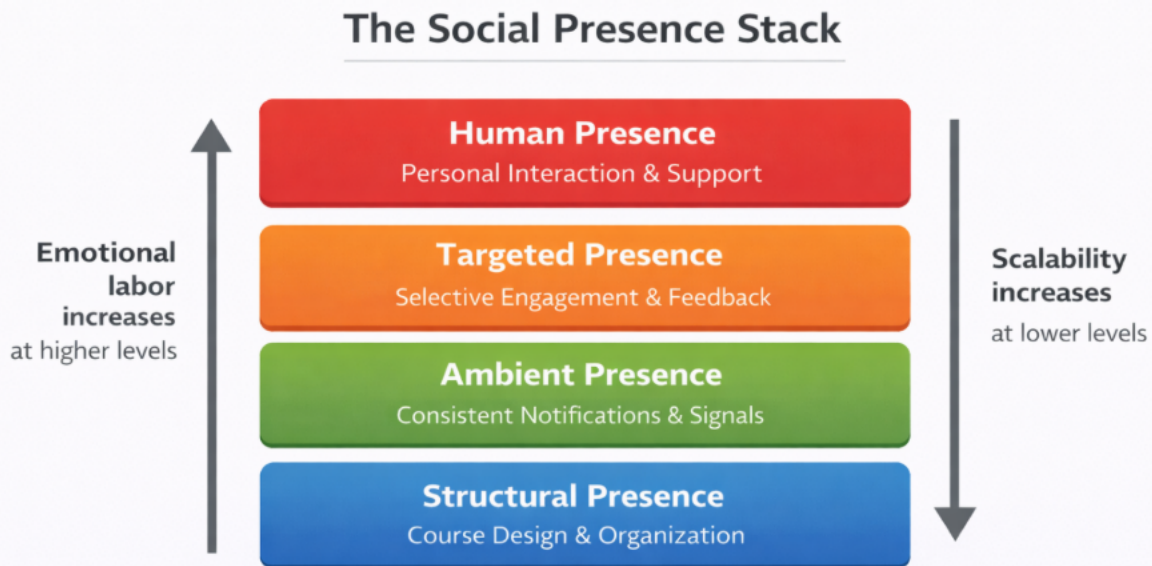


Figure 1. The Social Presence Stack: Distribution of instructional presence across layers of scalability and instructor effort.

Vertical movement across the stack reflects decreasing scalability and increasing invisible and emotional labor. At the foundational level, structural presence is established through course design elements such as clear instructions, organized modules, consistent communication patterns, and anticipatory guidance. These elements signal instructor intentionality and availability without requiring continuous interaction. Because they are embedded in the course itself, they are highly scalable and sustainable across sections and semesters. The next layer consists of ambient presence, which includes mechanisms that create a sense of ongoing instructor visibility without intensive effort. Examples include automated announcements, scheduled check-ins, and preemptive responses to common questions. These practices reinforce the perception that the instructor is present and attentive, while reducing the need for repeated, individualized responses.

At higher levels of the stack, targeted presence involves selective engagement with students, such as responding to key discussion posts, addressing emerging misunderstandings, or providing feedback at critical moments. This layer requires more direct engagement but can be managed through prioritization and timing.

At the top of the stack, human presence encompasses fully personalized, relational interactions, including one-on-one communication, individualized support, and emotionally responsive engagement. While these interactions are often the most meaningful for students, they are also the most resource-intensive and difficult to scale.

Taken together, the Social Presence Stack highlights a central dynamic: as instructional presence becomes more personalized and relational, the invisible and emotional labor required of faculty increases. Conversely, lower layers offer opportunities to distribute presence in ways that are more scalable and sustainable. In practice, instructors can use the stack to audit their courses, identifying where presence is over-concentrated at higher levels and redistributing it across more scalable layers. The model therefore shifts the question from how to increase presence to how to strategically design and distribute it across layers, supporting a move from overwhelmed instructional practices toward more optimized and sustainable approaches to teaching.

AI as an Enabler of the Social Presence Stack

Generative artificial intelligence plays a critical role in operationalizing this shift, serving as a mentor and faculty-development partner that supports instructors in redesigning their courses, communication practices, and workflows. Rather than functioning as a substitute for human interaction, AI can serve as an enabling infrastructure that extends instructional capacity while preserving meaningful engagement.

At the structural and ambient levels, AI can assist instructors in developing clear course materials, generating announcements, anticipating student questions, and maintaining consistent communication patterns. These uses reduce the time required to establish and sustain baseline presence, allowing instructors to embed support directly into the course design.

At the targeted level, AI can function as a thought partner, helping instructors identify where intervention is most needed, draft responses, or refine feedback. By supporting decision-making and communication, AI enables more efficient and focused interaction without eliminating instructor judgment.

Importantly, by strengthening lower and middle layers of the stack, AI helps reduce the concentration of labor at the highest level. When routine communication and anticipatory guidance are effectively distributed, instructors are better able to reserve time and attention for meaningful, human-centered interactions where they are most needed. In this way, AI does not replace the relational core of teaching, but instead redistributes the work of presence across a system. By aligning instructional practices with principles of scalability and sustainability, the Social Presence Stack—supported by AI—offers a pathway for maintaining high-quality, engaging learning environments while reducing the invisible and emotional labor that contributes to faculty overload. Through these applications, instructors can strengthen their presence, improve course accessibility, and manage their time more effectively without increasing workload.

Practical Applications of the Social Presence Stack

The effectiveness of AI within the Social Presence Stack depends on thoughtful and intentional implementation. Instructors must exercise professional judgment in adapting AI-generated content to align with course goals, disciplinary norms, and their instructional voice. Transparency also plays an important role in maintaining trust and authenticity in AI-supported learning environments, particularly in clarifying when and how AI is used in feedback, communication, or assessment.

For example, in a recent undergraduate course, student perceptions were solicited by asking students to compare instructor-provided feedback on a research paper with feedback generated by AI using the same rubric. While responses varied, students generally expressed openness to AI-supported evaluation while emphasizing the importance of continued human involvement in grading.

This suggests that students value both the efficiency and consistency that AI can offer, as well as the relational and contextual judgment that their instructors provide. As such, AI is most effective when used to augment—rather than replace—human interaction. Within the Social Presence Stack, this involves leveraging AI to strengthen lower and middle layers of presence, thereby preserving instructor time and emotional energy for more meaningful, relational engagement. When applied strategically, AI offers a practical pathway for helping online instructors reclaim a sense of balance and sustainability while maintaining the quality of their teaching.

AI Use Disclosure

The author used generative artificial intelligence (AI) tools to assist with editing and refining language. All ideas, interpretations, and conclusions are the sole responsibility of the author.

References

- Caskurlu, S. (2020). Confirming the subdimensions of teaching, social, and cognitive presences: A construct validity study. *The Internet and Higher Education*, 45, 100725. <https://doi.org/10.1016/j.iheduc.2020.100725>
- Daniels, A. K. (1987). Invisible work. *Social Problems*, 34(5), 403–415. <https://doi.org/10.2307/800538>
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5(1), 95–110. <https://doi.org/10.1037/1076-8998.5.1.95>
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.
- Kreijns, K., Xu, H., & Weidlich, J. (2018). Social presence: Conceptualization and measurement. *Educational Psychology Review*, 30(1), 259–279. <https://doi.org/10.1007/s10648-017-9411-5>
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. Wiley.
- Staudt Willet, K. B., & He, D. (2024). Educators' invisible labour: A systematic review. *Review of Education*. Advance online publication. <https://doi.org/10.1002/rev3.3473>
- Swan, K. (2002). Building learning communities in online courses: The importance of interaction. *Education, Communication & Information*, 2(1), 23–49. <https://doi.org/10.1080/1463631022000005016>
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Does Personal Tutoring ‘Work’ in an Online Programme, and if Not Why Not and What Can We Do to Improve Matters? A Case Study of a New Online Programme

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Abstract

This exploratory case study examines whether personal tutoring functions effectively within a new online Master’s programme with fifty students. Drawing on established literature, it analyses academic, pastoral, and retention roles, identifies structural challenges specific to online delivery, and outlines evidence-informed strategies to enhance relational continuity, student engagement, and completion outcomes.

Introduction

The expansion of online postgraduate education has intensified attention to pedagogy and digital delivery. However, whether or not personal tutoring functions effectively in online Master’s programmes remains under-examined. While tutoring is associated with engagement, wellbeing, and retention, its implementation is often inconsistent and under-supported (Lochrie et al., 2018; Grey & Osborne, 2020).

This paper presents an exploratory initial case study of a fully online MSc in Strategic Accounting and Finance (OMSAF), with asynchronous materials and online ‘live’ seminars. It seeks to establish whether personal tutoring ‘works’ in this context, which challenges arise and why, and how provision might be improved. Drawing on staff and student insights, the study evaluates academic, pastoral, and retention roles within a digitally mediated environment.

In online settings, the absence of informal contact places greater emphasis on structured support mechanisms. Personal tutoring therefore becomes a key channel through which student engagement, belonging, and progression may be enabled or constrained. This paper argues that effectiveness depends less on individual tutors and more on clarity, structure, and relational design.

Online postgraduate cohorts often include working professionals with competing demands – 30% of OMSAF students are such and are part-time. These learners may prioritise assessed work over optional engagement activities, which can reduce participation in tutoring unless its value is clearly articulated. This highlights the need for visible, structured, and integrated support mechanisms within programme design.

This paper evaluates personal tutoring against its three core functions in the literature: academic guidance, pastoral support, and student retention, and uses these lenses to assess whether and how it ‘works’ in an online programme context.

Conceptual Insights

Personal tutoring supports academic, pastoral, and developmental outcomes (Lochtie et al., 2018), but relies on clear expectations and consistency (Ross et al., 2014; Yale, 2017). It is fundamentally relational, requiring trust, continuity, and meaningful interaction (McGill et al., 2020).

In online contexts, these conditions are harder to establish. Students may be less likely to initiate contact, while tutors have fewer opportunities to build rapport informally. Diverse and time-constrained learners further complicate standardised approaches (Grey & Osborne, 2020). Rumble (2000) emphasises that support must be designed into programmes rather than added retrospectively.

The literature also highlights the importance of institutional alignment. Effective tutoring depends on clear policies, shared expectations, and integration with administrative systems. Without this, tutors may lack confidence and consistency, and students may receive uneven experiences.

This study therefore frames tutoring as a relational and design-dependent practice, shaped by institutional structures, expectations, and digital environments.

Methodology

This exploratory qualitative case study examines personal tutoring within a fully online MSc programme. Data were collected via a focus group of five students and three staff, exploring perceptions of purpose, effectiveness, and challenges.

Programme-level engagement data were also reviewed, including records of meetings and tutor reflections. These provided additional insight into actual engagement patterns and behaviours, particularly instances of non-response to outreach.

Data were analysed thematically, drawing on existing literature to inform interpretation. While the sample is small, the study provides indicative insights into how personal tutoring operates in practice. The focus is on understanding patterns and identifying areas for improvement rather than generating generalisable conclusions.

Findings and Discussion

Engagement data indicate limited uptake of the personal tutoring system. Since October 2025 (the launch of OMSAF), 20 one-to-one meetings have been recorded across 50 students, with only one student attending more than one session. This suggests low and uneven engagement, with many students either not participating or engaging only once.

Tutor reflections reinforce this pattern, highlighting non-response to meeting invitations despite reminders. This suggests that availability alone does not ensure engagement and that reliance on student initiative is insufficient. Role ambiguity further undermines effectiveness. Tutors reported their uncertainty about expectations, particularly in balancing academic and pastoral support. Some tutors expressed lack of confidence in navigating institutional systems or responding to complex student needs. This aligns with literature identifying unclear institutional frameworks as a barrier to effective tutoring (Grey & Osborne, 2020).

Relational challenges are amplified online. Students expressed uncertainty about when and why to engage, while tutors cited competing demands on their time. Limited interaction reduces opportunities for trust-building and sustained engagement, which are central to effective tutoring (McGill et al., 2020).

The findings also suggest that current approaches assume a level of student agency that may not be realistic. In online environments, disengagement can remain invisible unless actively monitored. Students may not respond to outreach due to competing priorities, lack of clarity, or limited perceived value of tutoring.

Taken together, these findings indicate that personal tutoring does not consistently function as intended. Rather than reflecting individual shortcomings, this points to systemic issues in design, communication, and integration. These patterns can also be understood in relation to the core functions of personal tutoring identified in the literature: academic guidance, pastoral support, and retention. Limited engagement reduces opportunities for academic clarification and feedback dialogue, while non-response to outreach constrains early identification of personal or wellbeing concerns. From a retention perspective, the absence of sustained contact weakens students' connection to the programme and reduces the likelihood of timely intervention. In this sense, the challenges identified are not isolated operational issues but directly affect the fundamental purposes of personal tutoring within higher education.

Implications for Practice

The findings indicate a need to move from reactive to proactive models of personal tutoring. Tutors should initiate engagement and establish structured contact points rather than relying on student requests. Embedding tutoring within programme design is critical. Scheduled or group-based sessions may help normalise participation, increase visibility, and reduce reliance on voluntary engagement (Lochtie et al., 2018). Such approaches may also improve efficiency and consistency.

Clear role definitions are essential. Tutors need clarity regarding their responsibilities and boundaries, alongside training and guidance. Integrated support systems should enable tutors to access relevant information and refer students effectively (Mann, 2020).

There is also value in co-designing aspects of tutoring with students. Understanding student expectations and constraints can help shape more relevant and accessible provision. This may improve engagement and perceived usefulness.

Finally, institutions should recognise personal tutoring as a core component of programme delivery. This requires strategic alignment, appropriate resourcing, and ongoing evaluation. Without this, tutoring risks remaining inconsistent and underutilised.

Conclusion

Personal tutoring does not consistently 'work' in online programmes when it lacks clarity, structure, and integration. However, when designed intentionally, it can play a central role in supporting engagement, belonging, and retention.

This study highlights the importance of treating personal tutoring as a core component of programme design rather than an optional add-on. While exploratory, the findings provide practical insights for improving tutoring in online postgraduate education and point towards the need for more systematic and scalable approaches.

Future research could explore larger datasets and different programme contexts to further understand how tutoring can be effectively designed and evaluated in online environments.

Reframing personal tutoring around these academic, pastoral, and retention functions provides a practical basis for redesign, ensuring that support is visible, proactive, and capable of sustaining engagement across the student lifecycle.

References

- Grey, D., & Osborne, C. (2020). Perceptions and principles of personal tutoring. *Journal of Further and Higher Education*, 44(3), 285–299.
- Lochtie, D., McIntosh, E., Stork, A., & Walker, B. (2018). *Effective personal tutoring in higher education*. Critical Publishing.

- Mann, C. (2020). Advising by design: Co-creating advising services with students for their success. *Frontiers in Education*, 5, 99.
- McGill, C. M., Ali, M., & Barton, D. (2020). Skills and competencies for effective academic advising and personal tutoring. *Frontiers in Education*, 5, 135.
- NACADA. (2017). *Core values of academic advising*. <https://www.nacada.ksu.edu/Resources/Pillars/CoreValues.aspx>
- Ross, J., Head, K., King, L., Perry, P. M., & Smith, S. (2014). The personal development tutor role: An exploration of student and lecturer experiences. *Nurse Education Today*, 34(9), 1277–1282.
- Rumble, G. (2000). Student support in distance education in the 21st century: Learning from service management. *Distance Education*, 21(2), 216–235.
- Wakelin, E. (2021). Personal tutoring in higher education: An action research project on how to improve personal tutoring for both staff and students. *Educational Action Research*, 31(5), 998–1013.
- Yale, A. T. (2017). The personal tutor–student relationship: Student expectations and experiences of personal tutoring in higher education. *Journal of Further and Higher Education*, 43(4), 533–544.
- Yale, A. T. (2019). Quality matters: An in-depth exploration of the student–personal tutor relationship in higher education from the student perspective. *Journal of Further and Higher Education*, 44(6), 739–752.

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Empowering Gen Z: Navigating Online Enrollment and Success Strategies

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Abstract

According to Education Dynamics 2022 Online College Students report, the average age of an online student is “higher than 30” (Aslanian, 2022). Historically, online institutions’ practitioners have developed and implemented online programming and services that focus on adult learner characteristics. An anomaly that has occurred from the pandemic is that some online institutions have experienced an increase in the traditional-aged student population enrolling to complete a degree fully online. Understanding differing characteristics between adult learners and traditional-aged learners will provide a guide to identify gaps in current programming and services to promote a holistic view of student success. First, a review of characteristics for the current traditional-aged learners, Gen Z, will be provided. Second, a comparison of adult learners and traditional-aged students will be offered. And last, recommendations and specific examples for improving, changing, or planning programming and services for Gen Z learners will be provided.

Keywords: distance education, student success, programming, traditional-age learner, adult learner

According to Education Dynamics 2022 Online College Students report, the average age of an online student is “higher than 30” (Aslanian, 2022). The average age has decreased slightly from previous years; however, based on the historical demographics, practitioners have been developing and implementing online programming and services with a focus on adult learner characteristics for online learners. An anomaly from the pandemic is that some online institutions have experienced an increase in the traditional-aged student population enrolling to complete a degree fully online. One institution, The Pennsylvania State University, World Campus experienced an 11% increase in traditional-aged students within two years. Additionally, according to the Online College Students Report 2022,

“The median age of online students is higher than 30. However, there is also a large, and growing, segment of the online student population under the age of 24 years old. The data indicates that age is no longer a determining factor in who enrolls in an online program over a traditional in-person course. Distance education is becoming increasingly popular among all ages and its apparent in the growing online enrollment rates at colleges and universities” (Aslanian, 2022).

With the recent change in age demographics, a focus to analyze current programming and services is imperative for encouraging student success.

Online course delivery is defined to include 80% of the course content delivered outside of a residential classroom (Allen, et al., 2018). While it is not known if the current anomaly will continue there are differences in programming and services that can assist with student success for this population of students. Recognizing the identified characteristics of Gen Z, the current traditional-aged generation who is now moving into the adult learner population, will help to develop a holistic support system for all online learners. Understanding the differing characteristics between previous and current generations will help to identify gaps in services provided by online institutions. First, let’s review characteristics of the Gen Z learner. Second, a comparison of adult learners and traditional-aged students will be offered. Last, recommendations and specific examples for improving, revising, or planning programming and services will be provided.

Gen Z Learner Characteristics

Generation Z represents the birth years from 1997-2012 (Dimock, 2019). According to Dimock (2019) as of 2019, “there are 74 million Gen Zers in the United States” with an average 18-year-old student born in 2001 (Robbins, 2019). The following traits of Gen Z learners will assist when comparing an institution’s current offerings that promote student success and identifying gaps that may need to be addressed.

- Parents are heavily involved in decision-making (Javeed, Bruschke, & Chen, 2010) (Kepic, 2006);
- Developed in a super-connected and rapid-moving technological age (Robbins, 2020);
- Absorb lots of information within seconds and less focused than previous generations (Robertson, 2018);
- Multitasking is a primary trait (Robbins, 2020);
- Accustomed to having things personalized and individualized (Fisher, 2016);
- Prefer community engagement opportunities with lasting impacts on societal problems (Robbins, 2020);
- Come from diverse backgrounds and hold strong social justice attitudes (Robbins, 2020);
- Report high levels of anxiety & depression (Supiano, 2023);
- Social skills have grown rusty (Supiano, 2023);
- Perceive information visually, short attention spans, less focused (Robbins, 2020);
- Expectation of flexibility (Supiano, 2023);
- Want to see clear connections between education and labor market outcomes (Cox, 2023);
- Expectation of seamless interactions across campus (Pathify Magazine, 2021);
- Studies need to be accessible & frictionless on mobile devices (D’Agostino, 2022);
- Expect a high level of service in return for their investment (Cox, 2023);
- A top consideration is affordability when considering higher education (Trovato, 2023) and;
- Want the convenience of asynchronous work coupled with the humanity of synchronous meetings (D’Agostino, 2022).

Understanding these characteristics and comparing what is available from an institution’s current online programming will provide a guide to meeting all student needs. Alexander Astin (1977, 1993) determined that the persistence and retention of students are “greatly affected by the level and quality of their interactions with peers as well as faculty and staff” (Nutt, 2003). Understanding the differences between generations, considering the delivery method chosen to complete a degree, and reviewing the support systems available are all areas of importance for online student success. The following section shares the differences and similarities of the characteristics for Gen Z and adult learners.

Comparing Adult Learner and Gen Z Characteristics

While Table 1 may not represent every Gen Z or adult learner, it is a common theme of characteristics that provides an understanding of the average learner in higher education. Not uncommon from generation to generation, traditional-aged learners use experiences in higher education to develop and learn skills to become contributing adults in society. In contrast, adult learners have developed many of these skills and use development in higher education to learn new topics or processes. All students want to have a sense of belonging and affinity (Rosecrans, 2022), but not all will have time to participate in programming. Traditional-aged students seek out offerings such as clubs and organizations to feel a sense of belonging. Although adult learners also want these options they may not have the time to take on additional participatory opportunities outside of the classroom because life priorities take over.

Traditional-Aged Learner	Adult Learner
Developmental recognition as adults	Developmental when learning a new topic, process
Affinity and connection are important	Life priorities take over
Preparation for independent learning	Independent learning is common
Connect learning to career	Need a reason to learn a topic

See Higher Ed professionals as authoritative	See Higher Ed professionals as partners
Desire one contact person	Are resourceful and will ask for help
Learn from peers	Learn from peers as time permits
Tech savvy	Tech knowledge is different for each learner
Parent/guardian involvement	Partner/child involvement
Want faculty connections	Faculty connections are not always necessary
Career counseling	Degree for promotion/improvement of self
Reflection in learning	Reflection is rare
Want instant answers	Person over technology

Table 1. A comparison of traditional-aged and adult learners' characteristics.

Adult learners have been known to be independent learners and want to understand why learning a topic is necessary (Twaddell, 2019). Gen Z learners have shown more independence than other generations at a traditional age (Robbins, 2020) but need additional preparation for independent learning and want to connect learning to job prospects and careers.

Gen Z learners want to make stronger connections with peers and faculty while working with one contact person to make processes more seamless and flexible (Pathify Magazine, 2021; Supanio, 2023). Connections in a variety of areas, such as within classrooms, through community events, and by participating in student groups, are where Gen Z learners feel a sense of belonging, affinity, and commitment to the institution (Robbins, 2020). Adult learners will ask for assistance at the time needed and want to connect with peers as time permits. Because of time constraints due to the “many roles that demand their time and energy” (Hittepole, n.d.), connections for adult learners come from learning and engagement in course materials and classroom work compared to outside of the classroom.

Gen Z learners are diverse minded and want to talk about different cultures and current events related to it (Wallace, 2023). Because of the digital age they have always experienced, Gen Z learners have more diverse knowledge and are exposed to current events unlike any other generation. Through social media, news outlets, and website search engines, information has always been at their fingertips as a digital native (Robbins, 2020). Adult learners are now exposed to this same information, but during their traditional-aged learning period it was not as available, and they were not as influenced by current events during developmental stages.

Gen Z learners “struggle with mental health challenges, and they have difficulty with sustained attention” (Schwartz, 2023). Although the stigma for mental illness is still apparent in current times, this generation has shown to have higher anxiety and depression (Supanio, 2023), but the difference is that they will seek out help and talk about it. It has become more normalized with Gen Z individuals than individuals in previous generations (Wallace, 2023). Each learner, regardless of generation, has a different level of technological experience. Most Gen Z learners have been exposed to technology since childhood and tend to be savvy with using it for a variety of tasks. Connecting with faculty through technology is important for both learners, but again, adult learners are based on need compared to Gen Z learners who want it for affinity (D’Agostino, 2022). Gen Z learners use technology to have instant answers while adult learners want to get instant answers through a more personal connection and real-time discussion. Both populations of students have come to like the individualization that technology has created; consider how Amazon has a “because you bought this, you may be interested in this” concept (Cox, 2023). The recommendations are based on individual preferences. Along with Amazon, many companies have made this a norm, and learners desire it from higher education, also.

Learning is also different for these two generations. Gen Z learners focus on how their learning will help them obtain a job and build a career. Adult learners are focused on earning a degree to change careers or to be promoted. In the classroom, learning extends to purpose and reflection (Twaddell, 2019). Gen Z learners want to reflect on learning and understand how it will help meet specific career goals. As mentioned earlier, adult learners want to understand the reason behind the learning and why it is important (Twaddell, 2019).

While these differences are generational, taking a closer look at current programming and services from the lens of the differences will provide a starting point to make minor changes that will promote online student success regardless of age. Next are a few considerations for focal points when reviewing current processes and services to add or make changes for a holistic student approach regardless of generation.

Online Programming and Services Recommendations

Chen (2017) explained, “an older student population that is qualitatively, developmentally, and socially very different from the traditional-age, late adolescent undergraduate student” (para. 9). This requires institutions in higher education to become more diverse to meet individual needs. Four main themes identified through Gen Z learner characteristics to consider when comparing current online programming and services between generations are parent or guardian involvement compared to other support persons, student development and understanding, degree intent relating to career goals, and a sense of belonging and affinity to the university. When considering what to change or add, ask the question “how can this resource meet the needs of all or most student populations?” Many times, resources and programming can meet the needs of many student populations by decreasing staff workloads and ensuring there are not an overabundance of options available that are only targeting specific populations.

Parent or Guardian Involvement

It is no surprise that parents or guardians would like to be involved in their child’s lifelong learning. The increase of parental and guardian involvement began with Millennials (Javeed, Bruschke, & Chen, 2010) and continues to grow with Gen Z learners. Although this is not a new concept for many staff members working in the residential setting of higher education, it is for many staff members in the online setting of higher education. Traditionally, working with family members who are supporting online learners will occur infrequently because of the higher percentage of adult learners. While involvement from family or friends can be a challenge, it can also have a positive impact on student success. Research has shown that when students have many advocates who empower them to succeed the rate of success is higher (Kepic, 2006). Many resources, services, and programming offered to online learners have focused on the needs of adult learners. And, in general, there have not historically been services available for parents or guardians from online institutions.

With the increase in parental involvement, “training parents on acceptable and appropriate ways to be involved should be encouraged through established guidelines about how to handle parents” (Kepic, 2006). Below is a list of services and programming options to consider and create for advocates—family, friends, support persons of a student—anyone who might offer support to an online learner. The first six considerations listed below are adapted from the Pennsylvania State University’s Parents & Family Guide for residential students, 2023-2024 (https://studentaffairs.psu.edu/sites/default/files/PP_ParentsandFamiliesGuide_Accessible.pdf).

- *Develop an orientation program for advocates.* Create curriculum to include in a current offering of student orientation that shares information for family and friends who support online learners. This promotes a sense of belonging and provides an understanding of an institution’s processes.
- *Offer an advocate online handbook.* Share responsibilities of the learner, confidentiality guidelines, and how to interact with others in the university community. Include training on why it is important to allow a student to make decisions that will meet educational goals.
- *Include advocate resources on a website.* Create a webpage to share important university and semester information specifically for advocates that they can access and assist in reminding learners of important deadlines, upcoming events, academic calendars, or how to get assistance when there are challenges, either academically or personally.
- *Host a virtual advocate, family, parental day.* Create a virtual space for students’ advocates to meet with faculty, staff, and each other. This will promote a sense of belonging for advocates and promote a sense of caring for online students from an institution.
- *Implement an advocate advisory board and/or ambassador program.* Gaining feedback from a student’s advocate will assist with future programming, resources, and student guidance.
- *Provide an advocate’s guide to everything financial.* Create a center to discuss financial literacy, expectations on the value of an education, and a shared understanding of when a student needs to connect with an office to discuss financial aid, tuition, and other costs. “Cost has been a top-ranking

factor in online students' decisions in the past decade about which programs to attend, and that trend continued this year when nearly three-quarters (74 percent) of respondents cited program tuition and fees as "very important" or "extremely important" (D'Agostino, 2022). Offering a guide on finances will support the learner's choice in attending higher education.

- *Establish clear guidelines for team members.* Student-facing offices need support resources to learn how to partner and communicate with advocates. Recognizing the relationship as a positive partnership provides clear expectations for team members to support both learners and advocates.
- *Establish a 'best practices' document for staff members.* Student-facing offices will receive email, phone calls, or attend virtual meetings where advocates show up. Developing a training to use when getting those unexpected phone calls, emails, or when an advocate is in a virtual appointment scheduled with a student will help the team member to provide quality services and remain compliant with federal and state laws, i.e., FERPA.
- *Develop holistic training for different populations of students.* Team members should learn about all populations of students including a section for learning positive communication, while establishing boundaries, for advocates. This can serve as a great resource for many years!

Creating programming, resources, and opportunities for interaction that focus on a student's advocate, instead of one population such as parents, will provide more streamlined processes for an institution. It promotes encouragement when supporting individual student needs while helping them to grow, make their own decisions, and develop. Once a connection is made for advocates, and learners have begun their educational journey, understanding curriculum and how it will help in learning is the next consideration.

Student Development and Understanding

It is important for Gen Z learners to understand how and why a specific course will assist them with gaining employable skills. Connecting learning to educational and career goals is important for this population of students (Cox, 2023; Rosecrans, 2022). Gen Z learners are unsure of whether to attend higher education to earn a degree or if participating in learning that provides employable skills is a better option (Donadel, 2023). These learners are very concerned about the financial impact of how earning a degree may affect their future (Trovato, 2023).

Providing developmental opportunities for learners requires the help of many higher educational professionals, as well as advocates. Involving faculty, staff, and advocates in programming, in understanding, and in resource options encourages and promotes online student success. As the saying goes, it takes a village!

- *Provide resources for mental health concerns.* Anxiety and depression are main concerns for Gen Z learners (Supiano, 2023). Ensuring that there are easily accessible resources available and well-known to the university community in a virtual environment is important. This should begin in the recruitment phase.
- *Evaluate available student groups.* Strong connections to the school community, in and out of the classroom, with engagement opportunities is very important (Rosecrans, 2022). Consider student groups that relate to a Gen Z learners' characteristics by offering synchronous meetings when taking asynchronous classes, and providing leadership and study abroad opportunities to support development and learning.
- *Offer community engagement opportunities* in online classes. Community engagement that makes lasting impacts on societal problems is crucial (Robbins, 2020). Incorporating these opportunities in class work will offer a better understanding of the curriculum, build employable skills, and provide a sense of purpose while learning course content.
- *Provide assessments that focus on individualization.* Gen Z likes flexibility and personalization (Supiano, 2023). Offering personality, online, or career assessments that identify individual characteristics enhances a sense of understanding and supports developmental opportunities in and out of the classroom (Cooper, 2014). Examples to consider are College Learning Effectiveness Inventory (CLEI) Focus2, Myers-Briggs, or SmarterMeasure.
- *Engage new learners after required programming.* After orientation, create recorded webinars, live virtual meetings, or office hours that help students to start off successfully in their educational

- journey and encourage learners to invite their support advocates to the live events or to watch the recordings. This provides an educational understanding for advocates to support learners.
- *Consider academic coaching options.* Academic coaching is a proactive service that offers conflict resolution, understanding how to succeed academically, and how to handle challenges such as time management. Gen Z learners experienced a pandemic during their developmental years, and it has caused them to “have the least positive outlook, the highest level of unmet basic needs, and the lowest levels of emotional and social well-being” (Wallace, 2023). Academic coaching combines motivation and encouragement by teaching life skills. Coaching is one resource that can help in supporting a sense of renewed confidence for Gen Z learners.
 - *Re-thinking how to explain learning is key.* “Some of the mistakes first-gen students make are common to undergraduates: They focus on re-reading and memorizing to absorb what they’re learning, rather than summarizing material in their own words, or quizzing themselves, which are more effective techniques. Horowitz suggests putting study tips into the syllabus and then reviewing them in class” (McMurtrie, 2019). Consider the question, how can faculty enhance expectations with best practices for learning in their syllabi and in their virtual classrooms.
 - *Providing generational learning for faculty.* Offering resources and a document with a summary of generational traits guides faculty in making positive changes in their courses and during office hours. Supiano (2023) shares “Everyone keeps telling professors to “meet students where they are” — even if it takes more time and effort. But where are they, exactly? Covid has shaped students’ lives, but not all in the same way. Some are living with health problems or have lost loved ones. Others are recovering from the isolation of the early pandemic or are making sense of the polarization it has deepened. Their social skills have grown rusty, their concentration limited.” Provide opportunities for faculty to learn generational differences and meet students where they are.

Right from the start of an educational journey, Gen Z learners need to learn about developmental opportunities that meet their individual needs. Encouraging faculty and staff to incorporate these suggestions to meet individual needs and be flexible for each individual learner will support student success and persistence. Once the connection is made between academics and learning, how does it connect to a learner’s future career goals? Connecting career goals with academic goals is the next consideration.

Degree Intent: Career Goals

Choosing a degree intent at any age can be challenging. Marrying together a chosen degree with labor market outcomes and future career goals will assist learners in reaching their educational goals.

“Students want to see clear connections between their education and labor market outcomes. This kind of visibility right from the start of a learner’s engagement with an institution helps keep them on track through their programs and supports their outcomes and direction after they graduate” (Cox, 2023).

At the application and recruitment stage, creating an intentional process to offer career and job market information will promote a positive relationship right from the beginning. Then, as a learner’s educational journey begins, build programming that empowers students to take control of building skills to meet career goals. There are many ways to connect virtually with students, both as a group and individually. In this venue, promoting career goals can be provided in many ways. Here are a few.

- *Programming that offers a connection between career goals and academic goals.* A common question from learners is “why do I need to take general education courses?”. Making a connection to transferable skills that are built from general education into the workplace will go a long way in supporting the importance of specific curriculum.
- *Create videos or live webinars that match degrees to specific career goals.* There are many resources that can be provided to show outcomes of specific degrees related to a career. Offer those resources in a convenient way for online learners. For example, the National Center for Education Statistics and the National Association of Colleges and Employers are great resources to use when discussing career goals related to the pursuit of a degree (website links to each are in the reference section).
- *Offer career services during the admission phase.* Creating a positive relationship through transparent interactions by sharing job market information will begin to build trust and ease the anxiety of choosing a major. Trovato (2023) asks, “Do graduates get jobs and careers in their chosen fields?”

- and suggests that “recruitment messaging alone will not be able to ease the uncertainty”, but starting at the recruitment phase is key.
- *Offer virtual federal work study positions that provide financial aid* to students while offering specific job responsibilities that build employable skills. A bonus for offering these positions is that hiring work study students will provide extra work capacity for staff members when assigning work that is not confidential and can be completed by a learner.

Gen Z learners have expressed concern over the value of higher education (Trovato, 2023). Connecting employable skills and academic goals is a way to show the value of higher education. Providing virtual programming and jobs that build employable skills will enhance their learning experience and assist them financially, another identified area of expressed concern. The next consideration, once learners understand academic, career, and developmental connections, is to provide a consistent sense of belonging and affinity throughout their time in higher education. How are you providing proactive opportunities for learners to connect inside and outside of the classroom? Consider implementing the next section of examples to promote a sense of belonging and affinity.

Sense of Belonging and Affinity

“An engagement gap between your institution and your learners will emerge if you lack a digital engagement infrastructure that meets students where they are. Do your students have no choice but to call, fax, or come to the campus to conduct basic tasks like registering for courses, accessing their transcript, or getting information? Or are you leveraging any technological advancement you can? Are you able to offer them an Amazon-like shopping experience? Does your website feed them relevant programs, services, or offerings so they don’t have to dig? Are you suggesting related courses or programs that might interest them” (Cox, 2023)? Great questions to ask when taking a holistic view of your current services related to affinity.

Traditional brick and mortar experiences have shown the value of affinity and belonging through student groups, student government, live social and academic events, and out of the classroom experiences, such as community service. Bringing these same ideas online can be as easy as identifying what learners need and want. Gen Z learners want asynchronous classes with synchronous interactions to fulfill engagement needs (D’Agostino, 2022). And they are very interested in engagement related to social justice and a long-lasting impact on improving their communities (Robbins, 2020). How can these be incorporated to keep learners engaged while providing a sense of belonging and affinity? Consider the following best practices.

- *Evaluate current programming and services for new students.* Does the programming and services meet the needs of *all* student populations? Consider the traits of both adult and Gen Z learners. Where are you finding a gap?
- *Communicate proactively and often.* Proactively communicating and building trust is critical to positive relationships with learners (Keystone Group, 2023). Gen Z learners want “an institution that gives them authentic communication and straightforward guidance. Trust is essential in any solid relationship, and this concept applies to the student-administration relationship on college campuses worldwide” (Sachs, 2021). Re-evaluate all communications that are sent to learners. How can they promote a more trusting and open relationship that provides encouragement to reach out to faculty and staff? Language is important!
- *Evaluate your digital infrastructure.* Are online learners able to have a seamless experience when trying to find an answer or to get help? Learners want a seamless experience without frustration (Pathify Magazine, 2021). Having a digital platform that will connect learners with their peers, staff, and faculty provides an increased commitment to an institution.
- *Foster programming that promotes open communication.* Innovative student development initiatives should be developed to meet the changing needs of Gen Z learners by encouraging individualization, flexibility, and a diverse perspective, all characteristics of this population of learners (Fisher, 2016, Supiano, 2023, Robbins, 2020).
- *Use technology to assist with manual processes and questions.* Chatbots or other forms of artificial intelligence will provide the quick answers, similar to the feeling of shopping on Amazon, a Gen Z learner is wanting. Additionally, ensuring your student website is up to date with easy navigation is important. Quentin Ruiz-Esparza shares “A superior user experience can help universities attract

learners to their programs and provide an education that is conducive to learners' needs and lives" (Cox, 2023). Both digital options provide an instant connection to the institution.

The pandemic has caused many higher education professionals to consider virtual options when connecting students. Just-in-time services will no longer be enough for Gen Z learners who want more. Proactive student support services that are provided often, and in many forms, will keep them engaged and promote persistence and retention (Online Education, n.d.). The more learners feel connected to an institution, the better chance they will continue and reach their goal of graduation.

Summary

Historically, adult learners have been the focus of online institutions when developing programming or providing resources. Since the pandemic, Gen Z learners have been choosing to earn credentials online at a higher rate than previously. If this trend continues, changes and additions are necessary to promote student success. There are clear similarities and differences between adult and Gen Z learners. Using the four focus areas of parent and/or guardian involvement, student development and learning, career connecting with academic goals, and affinity and belonging to identify the needs of individual learners and enhance or revise current offerings or to create new programming and services will provide learners attending higher education on the path to student success. Marrying the needs of adult learners and traditional-aged learners offers better services while not taxing staff capacity. The first step is to understand your student population, then address the gaps found based on current resources, services, and programming.

References

- Aslanian, C. (2022). The demands & preferences of online college students today. *Education Dynamics*. <https://www.educationdynamics.com/online-college-students-report-2022/>
- Allen, I. E., Seaman, J. E., & Seaman, E. A. (2018). Grade level: Tracking online education in the United States. *Online Learning Consortium*, (2-45). <https://onlinelearningsurvey.com/reports/gradeincrease.pdf>
- Chen, J. C. (2017). Nontraditional adult learners: The neglected diversity in postsecondary education. *Sage Open*. <https://doi-org.ezproxy.liberty.edu/10.1177/2158244017697161>
- Cooper, N. C. (2014). Academic self-efficacy: The cornerstone of freshmen success. *NACADA Clearinghouse of Academic Advising Resources*. <https://nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Academic-self-efficacy-The-cornerstone-of-freshmen-success.aspx>
- Cox, S. (2023). Modern education: Ultimate guide to meet students needs. *Modern Campus*. <https://moderncampus.com/blog/modern-education-ultimate-guide.html>
- D'Agostino, (2022, October). A surge in young undergrads, fully online. *Inside Higher Ed*. <https://www.insidehighered.com/news/2022/10/14/more-traditional-age-students-enroll-fully-online-universities>
- Dimock, M. (2019). Defining generations: Where millennials end and generation Z begins. *Pew Research Center*. <https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/>
- Donadel, A. (2023). With gen z students loving non-degree pathways, here's how higher ed leaders can adapt. *University Business*. https://universitybusiness.com/with-gen-z-students-loving-non-degree-pathways-heres-how-higher-ed-leaders-can-adapt/?mkt_tok=MTgwLUxTVi02NzIAAAGPKrGeBEIerHdSHsw35JB08CZwNTc-I6T-wUZVmgaJMMKeg9ej6S-0Kq8dXgbbe7GZOX-4FP75X-cP8WcC_vI8-ueCuhtrq_ExVY7xqr58ZyJsuMZX

- Fisher, A. (2016, August 14). Forget millennials. Are you ready to hire generation Z? *Fortune.com*. <https://fortune.com/2016/08/14/generation-z-employers/>
- Hittepole, C. (n.d.) Nontraditional students: Supporting changing student populations. A guide from chief academic offices & chief student affairs officers. *NASPA newsletter*. https://naspa.org/images/uploads/main/Hittepole_NASPA_Memo.pdf
- Institute of Education Sciences. (n.d.) National Center for Education Statistics. <https://nces.ed.gov/programs/coe/indicator/sbc/bachelor-degree-holder-outcomes>
- Javeed, S., Bruschke, K., & Chen, E. (2010). Bringing the message home: Teaching effective communication to students and parents. *NACADA Clearinghouse of Academic Advising Resources*. <https://nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Student-communication-with-parents.aspx>
- Kepic, G. (2006). Causes and implications of parental involvement in advising process. *NACADA Clearinghouse of Academic Advising Resources*. <https://nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Parent-involvement-in-advising.aspx>
- National Association of Colleges and Employers. (n.d.). NACE center for career development and talent acquisition. <https://www.nacweb.org/job-market/graduate-outcomes>
- Online Education (n.d.). Online student trends and success factors. <https://www.onlineeducation.com/guide/who-studies-online>
- Pathify Magazine. (2021, Fall). Keeping up with the student experience & expectations. <https://pathify.com/blog/keeping-up-with-student-experience-expectations/>
- Parents & Families Guide (2023-2024). *The Pennsylvania State University*. https://studentaffairs.psu.edu/sites/default/files/PP_ParentsandFamiliesGuide_Accessible.pdf
- Robertson, S. (2018, July 25). Generation Z characteristics & traits that explain the way they learn. *Just Keep Carving Paths*. <https://info.jkcp.com/blog/generation-z-characteristics>
- Robbins, R. (2020, June). Engaging gen zers through academic advising. *Academic Advising Today*, 43(2). <https://nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Engaging-Gen-Zers-Through-Academic-Advising.aspx>
- Sachs, J. (2021) What do students expect out of their colleges and universities? *Keystone Education Group*. <https://www.keg.com/news/what-do-students-expect-out-of-their-colleges-and-universities>
- Rosecrans, M. L. (2023). Connected student report: Insights into global higher education trends from over 2,600 students and staff. *Salesforce*. <https://www.salesforce.org/wp-content/uploads/2022/11/edu-connected-student-report-3rd-edition-11-14-22.pdf>
- Schwartz, T. (2023). We are the targets. *Inside Higher Ed*. <https://www.insidehighered.com/opinion/career-advice/teaching/2023/12/13/teaching-students-information-and-disinformation-literacy>
- Supiano, B. (2023, February). The changing classroom. *The Chronicle of Higher Education*. <https://www.chronicle.com/article/course-correction>
- Trovato, J. (2023). Redefining college value: Affordability, quality, and student perceptions in higher education. *Encoura*. https://encoura.org/redefining-college-value-affordability-quality-and-student-perceptions-in-higher-education/?utm_source=marketing-cloud&utm_medium=email&utm_campaign=WUC+2023-10-

31+Redefining+College+Value+Affordability%2c+Quality%2c+and+Student+Perceptions+in+Higher+E&utm_content=Continue+Reading&utm_id=352232&sfmc_id=10057543

Twadell, J. W. (2019). Educating parents about vitamin K in the newborn using knowles' theory of adult learning principles as a framework. *Critical care Nursing Quarterly* 42(2), 205-207.
doi:10.1097/CNQ.0000000000000256

Wallace, B. (2023). Gen Z & mental health: Solutions for higher ed leaders. *HigherEdJobs. Advice & News*. https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=3347&utm_source=08_14_2023&utm_medium=email&utm_campaign=InsiderUpdate&utm_content=1&VersID=1&SchedVersID=215

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Examining the Impact of an AI Literacy Course on Students' AI Literacy and Generative AI Perceptions

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Abstract

This study explores how an Artificial Intelligence (AI) Fundamentals course affects incoming undergraduate students' AI literacy and their intentions to use Generative AI for their academic studies. The results show that the course successfully raised awareness of AI (e.g., beware of over-reliance and hallucination) and institutional policies. Additionally, the positive correlations between the cost of AI use and intention of AI use indicated that undergraduates view AI as a necessity they need to adopt to take benefits, regardless of the personal or academic costs. We suggest that instructors focus on how AI can be used for critical thinking, rather than just basic task completion, to improve their learning.

Introduction

The rapid emergence of generative artificial intelligence (GenAI) has created both new opportunities and new challenges in higher education. As GenAI tools become increasingly accessible to students, institutions must move beyond simply reacting to concerns about academic integrity and instead focus on developing students' ability to use these technologies responsibly and effectively. While these tools offer new possibilities for learning, productivity, and creativity, they also raise important questions related to academic integrity, transparency, and responsible use. Recognizing both the potential and the challenges of GenAI, Georgia Southern University established the Use of Artificial Intelligence (AI) in Academic Contexts policy (Georgia Southern University, 2025) to provide clear guidance on the responsible, ethical, and transparent use of AI in academic work.

To support students' understanding of this policy and promote responsible engagement with AI technologies, the Office of Adult and Online Learning developed AI Fundamentals, a required AI literacy course for all incoming undergraduate and graduate students. Launched in January 2026, the non-credit fully online course introduces students to foundational concepts in AI, emphasizes the ethical and transparent use of AI in academic work, and helps students develop the critical thinking skills necessary to evaluate AI-generated content. By pairing institutional policy with structured AI literacy instruction, the course represents a proactive approach to preparing students to navigate an academic and professional environment increasingly shaped by artificial intelligence.

This article describes the development and implementation of the AI Fundamentals course and explores its early effects on students. In particular, it examines how undergraduate students' perceptions of AI literacy and GenAI use in academic contexts shifted after completing the course.

Conceptual Framework

We grounded this study in a framework that combines the Expectancy-Value Theory (EVT) with emerging constructs of AI literacy and institutional policy awareness. By combining these elements, we can better

understand not only if students have willingness to use GenAI but also how the educational context influences their responsible use.

2.1 Expectancy-Value Theory (EVT)

Expectancy-Value Theory is an established theory of motivation that suggests an individual's behaviors are the result of their expectations of success in the performance of the behavior (Wigfield & Eccles, 2000). For GenAI, Chan and Zhou (2023) developed an EVT-based survey instrument to clearly measure students' perceptions and predict their intentions to use GenAI.

The EVT has three dimensions: (1) Perceived value refers to the student's belief in the usefulness and benefits of using GenAI tools for their academic tasks. (2) Perceived cost encompasses the anticipated risks, negative consequences, or effort associated with GenAI use. (3) Finally, intentions to use represent the student's willingness or likelihood to adopt and actively integrate GenAI into their future learning.

2.2 The Role of the AI Fundamentals Course in Shifting Outcomes

Designed as a fully online, asynchronous and self-paced course, AI Fundamentals is structured to progressively build AI literacy without requiring prior technical expertise. Through an accessible, step-by-step design, the course introduces students how AI works, the risks of over-reliance, and the university's AI use policy. Students monitor their own learning through auto-graded quizzes and earn a digital badge upon successfully completing the modules.

Within this framework, the role of the AI fundamentals course is that it is a critical pedagogical intervention that redefines EVT's expected outcomes; instead of perceived risks causing students to avoid EVT, it helps students manage these costs and interact with it responsibly. According to the EVT, students balance perceived benefits and risks when deciding to use AI. Yet, without proper guidance, they tend to either use it blindly or avoid it completely. By providing students with an understanding of the technical capabilities, limitations, and policy guidelines with regard to GenAI, the course lowers their concerns and highlights its academic value. This can shift their mindset from careless experimentation to responsible, ethical use.

In this study, we aim to explore how students use GenAI, their perceptions of it, and how well they understand the university's AI policy after completing the AI literacy course.

The research questions in this study:

RQ1: To what extent do students report improved AI literacy after completing the required, self-paced AI literacy course?

RQ2: What are the students' perceptions of GenAI in terms of EVT-aligned constructs, specifically perceived value, perceived cost, and the intention of use after completing the course?

Methods

3.1 Research Design

This study employs a descriptive case study design to provide an in-depth exploration of student perceptions within a newly developed AI literacy course (Yazan, 2015). We approached the case holistically (e.g., context, participants, process, and outcome) by utilizing a mixed-methods approach to data collection. The quantitative survey data was collected to identify general tendencies, use frequencies and broader EVT-aligned perceptions. Complementing this, the qualitative insights from open-ended responses allowed us to dig deeper into students' specific experiences, providing rich context and explaining the nuances behind the numerical trends.

3.2 Research Context and Participants

The course, titled AI Fundamentals, is the first of three courses in the AI literacy series and the only required one. We applied the Know What, Know How, and Know Why (3WAI) framework (Bozkurt, 2024) to guide design

decisions and enable scalability across all three courses. Of the three pillars, AI Fundamentals is aligned with the Know What component. We focus on shared concepts, accurate mental models, and a foundation for responsible understanding. Using the backward design principle, we developed the course to be purposeful, aligned, and scalable. The course consists of four modules: understanding fundamental concepts, AI systems, the opportunities and risks of AI, and university AI policy and ethical use. The participants are newly enrolled undergraduate students registered for the AI literacy course in Spring at a public university in the United States.

3.3 Data Collection

Students will see an IRB-approved invitation message on the university LMS and will be provided with a consent statement before beginning the research survey. Students who consented completed one end-of-course online survey. The survey instrument is based on an established survey design for examining students' use and perceptions of GenAI. It included twenty-eight closed-ended Likert items and three open-ended questions.

3.4 Data Analysis

We analyzed survey responses using descriptive statistics (e.g., frequencies, means, standard deviations, and correlations). Open-ended responses were analyzed using deductive content analysis (Elo & Kyngäs, 2008) to identify common themes regarding perceptions of AI use in academic settings.

Results

This section represents the quantitative and qualitative findings of the study, organized by the research questions. Prior to analyzing theoretical constructs, participants' baseline experience with GenAI was assessed. The frequency analysis revealed a moderate level of prior engagement among the sample ($n = 24$). Half of the students reported using GenAI "occasionally" (50.0%, $n = 12$), while 12.5% ($n = 3$) used it "regularly." Conversely, a substantial portion of the sample had minimal to no prior experience, with 16.7% ($n = 4$) reporting "rarely" using these tools and 20.8% ($n = 5$) stating they had "never" used them. This variance in baseline experience underscores the necessity of the foundational course in establishing a uniform level of AI literacy.

Having established this diverse baseline, it was essential to verify the reliability of the instrument used to measure their perceptions. We calculated Cronbach's alpha (α) to confirm the internal consistency of the grouped survey items. As shown in Table 1, every construct exhibited strong reliability with scores well above the acceptable 0.70 threshold.

Table 1

Descriptive Statistics and Reliability of EVT Constructs

Construct	Number of Items	Mean (M)	Std. Deviation (SD)	Cronbach's Alpha
AI Literacy (limitations)	5	3.94	1.11	0.96
Perceived Value	5	3.9	1.05	0.95
Perceived Cost (Risks)	12	3.17	1.23	0.97
Policy Awareness	4	3.4	1.24	0.87

Note: Measured on a 5-point Likert scale where 1= Strongly Disagree and 5= Strongly Agree

4.1 RQ1: Improvements in AI Literacy and Policy Awareness

The first research question examined the extent to which students reported improved AI literacy and policy awareness after completing the AI Fundamentals course. As indicated in Table 1, participants demonstrated high levels of awareness regarding both the limitations of GenAI ($M = 3.94$, $SD = 1.11$) and institutional policies ($M = 3.90$, $SD = 1.05$). Students' qualitative responses addressed specific knowledge that they learned. One student said,

“I learned that generative AI works by finding patterns in large amounts of data to predict responses, not by truly thinking or understanding.”

4.2 RQ2: EVT-Aligned Constructs and Intention to Use

Our second research question explored students' perceptions of GenAI through the Expectancy-Value Theory (EVT) framework. According to Table 1, students perceived the costs/risks associated with GenAI (e.g., over-reliance, limited interaction with others while completing the coursework) slightly higher ($M = 3.40$, $SD = 1.24$) than its overall perceived academic value ($M = 3.17$, $SD = 1.23$). For example, one response about the cost of AI use is as follows: “AI is NOT always right. I shouldn't be over-reliant on it, and should source my own information through genuine research and by using the tools I have learned over time in grade school.”

We conducted non-parametric Spearman's rank-order correlations to determine how these perceptions affected students' intentions to use GenAI in the future. The results of this analysis are presented in Table 2.

Table 2

Spearman's Rank Correlation Matrix for EVT Constructs

Variables	1	2	3
1. Perceived Value	—		
2. Perceived Cost	.452*	—	
3. Intention to Use	.923***	.531**	—

Note: $N = 24$. * $p < .05$. ** $p < .01$. *** $p < .001$.

The analysis revealed that there is a positive and statistically significant correlation between Perceived Value and Intention to use ($r_s = 0.923$, $p < .001$). This aligns closely with traditional EVT models.

Interestingly, the data also showed a moderate, positive correlation between Perceived Cost and Intention to use ($r_s = 0.531$, $p = .008$). While EVT typically anticipates that a higher perceived cost lowers the intention to use a technology, the following qualitative response provides an important context for this divergence, “This course has helped me better understand both the benefits and limitations of GenAI, as well as the importance of using it responsibly. I am now more intentional about deciding when AI can be used as a learning aid, like brainstorming, studying, and just improving overall. Overall, I feel more confident using AI in ways that support my learning while still maintaining originality and accountability.”

Discussion and Implications

The results show that the AI Fundamentals course accomplished the goal of bringing awareness of GenAI and university policy to incoming undergraduate students. With high scores in knowledge of AI ($M = 3.94$) and Policy Awareness ($M = 3.90$), it is clear that students understand what GenAI can and cannot do, as well as the rules for using it (Chan & Hu, 2023). However, the relationship between students' perceptions of AI and their plans to use it differs from traditional findings in the literature. As expected, when students see high value in AI, they are very likely to use it ($r_s = 0.923$). But surprisingly, even when students perceive the costs and risks as high, such as losing social interaction or becoming too dependent on the tool, they still plan to use it ($r_s = 0.531$). In traditional learning theories, high costs often lead people to use a tool less (Ocado, 2025). These results suggest that students may feel they should take advantage of AI as the new standard, even if they recognize its downsides.

Meanwhile, given that the Perceived Value ($M = 3.17$) was lower than the Perceived Cost ($M = 3.40$), there is a risk that students are using AI to complete work quickly rather than to improve their learning (Bearman et al., 2025). Because students see the risks of AI but still intend to use it, instructors should focus on more than just “how to use” the tools. Instead of using AI solely to save time, assignments should demonstrate how AI can help students think deeply and critically (Chan & Hu, 2023). This implies that instructors should aim to develop courses that show students the high-value ways they can use AI tools to improve their learning rather than just replacing their own work (Yurt & Kasarci, 2026).

Conclusion

The AI Fundamentals course taught incoming students the basics of AI and the rules they need to follow. However, the data show an interesting trend: students plan to use AI despite their concerns about the risks. To mitigate the gap, universities should focus on demonstrating to students how AI can be a partner in learning, rather than merely a way to finish assignments easily and quickly. Researchers could also examine whether students who feel more confident in their skills use AI differently than those who are struggling (Yurt & Kasarci, 2026). Future studies should follow students over a longer period and use a larger sample size to observe how students' perceived value of and intention to use AI manifest in their behavior as they continue their academic studies and prepare for their future careers.

References

- Bearman, M., Tai, J., Dawson, P., Boud, D., & Ajjawi, R. (2024). Developing evaluative judgement for a time of generative artificial intelligence. *Assessment & Evaluation in Higher Education*, 49(6), 893–905. <https://doi.org/10.1080/02602938.2024.2335321>
- Bozkurt, A. (Ed.). (2024). Why generative AI literacy, why now and why it matters in the educational landscape?: Kings, queens and GenAI dragons. *Open Praxis*, 16(3), 283-290. DOI: 10.55982/openpraxis.16.3.739
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. *Educational Technology in Higher Education*, 20(43). <https://doi.org/10.1186/s41239-023-00411-8>
- Chan, C. K. Y., & Zhou, W. (2023). An expectancy value theory (EVT) based instrument for measuring student perceptions of generative AI. *Smart Learning Environments*, 10(1), 64. <https://doi.org/10.1186/s40561-023-00284-4>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Georgia Southern University. (2025). Use of Artificial Intelligence (AI) in academic contexts. <https://digitalcommons.georgiasouthern.edu/provost/51/>
- Ocado, M.K.G. (2025). More than skills: How AI literacy shapes student motivation in the age of Education 4.0. *Journal of Technology and Science Education*, 15(3), 679-698. <https://doi.org/10.3926/jotse.3748>
- Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81. <https://doi.org/10.1006/ceps.1999.1015>
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152. <https://doi.org/10.46743/2160-3715/2015.2102>
- Yurt, E & Kasarci, I. (2025). Exploring prospective teachers' intentions for Artificial Intelligence integration in education: The role of motivation. *AERA Open*, 11, <https://doi.org/10.1177/23328584251403990>
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Thriving Versus Surviving AI – An Instructor’s Perspective

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Abstract

Time has run out for online education to respond to the challenges posed by artificial intelligence (AI). To put it bluntly, the rapidly evolving technology has far outpaced higher education’s ability to respond to the challenges posed by AI. Some of these include students engaging in rampant plagiarism, students being falsely accused of plagiarism, and instructors becoming frustrated with their new role as the “AI Police”. All of which are accentuated in the online delivery method. The current challenges AI presents to education, especially online education, can be accurately described as a paradigm shift in the order of Thomas Kuhn’s *The Structure of Scientific Revolutions* (1962). Kuhn died in 1996, but he left us with a reliable lens through we can profitably view today’s phenomenon.

There is little doubt that Artificial Intelligence (AI) represents a true Kuhnian change, or paradigm shift. The development of artificial intelligence has certainly progressed through Kuhn’s Normal Science stage, Accumulated Anomalies stage, Crises stage, Scientific Revolution stage, and rests now securely in his Paradigm Shift stage. It is in this final stage, asserts Kuhn, that, after resistance, the new paradigm replaces the old and we find, in 2025, AI disrupting existing paradigms in almost every area of human life. AI is fast disrupting and rearranging day-to-day work, with many traditional jobs disappearing and many industries experiencing large-scale workforce reductions. Our personal lives are increasingly impacted by AI at every level. Large language models have recently implemented some guardrails in attempts at reducing personal reliance on AI for medical and psychological advice. Attorneys in several states have been sanctioned for generating AI legal briefs with fictional case references for courts. One state has even introduced legislation prohibiting its citizens from entering marriage contracts with AI-generated “persons.” The legal world is now grappling with previously unknown questions of who owns audio and visual AI-generated content. In academia, AI has already had a considerable impact.

Higher education administration is now benefiting from Artificial Intelligence (AI) tools in Enrollment Management and Admissions with AI predictive analysis, student assistance AI chatbots, and AI admission reviews. At the institutional level, AI is now embedded in most of the student-facing applications like Grammarly, Google, and Turnitin. AI’s proliferation seems to have progressed in an orderly fashion within academic institutions except in the classroom. For college teaching, it represents a disruptive force as it challenges many previously held assumptions by teachers on many levels.

A Review of The Traditional Online College Learning Model

Online college educational models may be summarized as consisting of:

1. Course Delivery is through an LMS (Learning Management System).

These are electronic repositories containing required instructional materials, instructions, and a repository for written assignments, quizzes, discussion boards, grade books, and necessary communication components.

2. It Has Asynchronous Access in a Week-by-Week Unit Structure.

In the online asynchronous model, students are expected to interact with the LMS in a flexible asynchronous format, subject to set weekly deadlines with grade penalties for late work. Some institutions have additional short synchronous “seminars” representing “live” class time.

3. It Features Instructor-Centered or Institution-Centered Design.

Student learning is instructor-centered, with instructors creating materials (PowerPoints, discussions, etc.).

Students then read, view, or listen to the content and then complete the required assessments. This is essentially a one-way model, with communication flowing from the instructor to the student. The instructor functions as a “facilitator” through their active participation in the course room, offering feedback and announcements or class emails. It is a repetitive weekly format.

4. It Has Heavy Reliance on Written Interaction.

Since there is no physical interaction between students and instructor or peer-to-peer, the academic conversation is relegated to graded written class discussion posts, graded written Dropbox assignments, graded exams, or graded quizzes. The instructor’s interaction with the student in this model is through feedback comments.

5. It Employs Standard Assessments.

Like traditional approaches, assessments are in the form of timed exams and quizzes, written essays and papers, and, in some instances, group project papers.

6. It Uses Pre-Recorded Lectures or Slides.

They use previously created materials rather than live lectures.

7. Due to Its Flexibility, It Offers Limited Real-Time Engagement.

Some limited real-time engagement is accomplished with tools like Zoom, Google, or Microsoft Teams. Such real-time engagement is limited as it is contrary to flexibility gained in asynchronous delivery.

8. It is Self-Paced Within Weekly Deadlines

Students manage their own time and can self-pace within the boundaries established for each work unit. This is attractive for working adults but problematic for students with poor time management skills.

9. Instructor Acts as Facilitator, Not Lecturer.

In the traditional online model, teaching is accomplished through graded assignments, graded class discussions, or graded quizzes; all previously prepared content. Feedback is usually given in the form of post-hoc comments to the student.

10. The Emphasis Is on Accessibility and Compliance

Such online courses are highly structured, employing standardized content and rubrics to meet prevailing requirements dictated by ADA, Universal Design for Learning, and state and federal rules for regular and substantive interaction.

In sum, it represents a very old pedagogical model that evolved from its traditional roots to utilize computers and the Internet to deliver college education primarily to working adults.

Cumulative Strains

It is possible to trace specific challenges facing the traditional online model even prior to the arrival of Artificial Intelligence (AI). An examination of the extant literature reveals five distinct periods.

2000-2008:

This period experienced fast growth in online programs but Internet connectivity was not consistently reliable. The Learning Management Systems of that era were rudimentary and struggled to support large enrollments or video content. Student interaction was accomplished by text-only discussion boards and Word or PDF documents.

2009–2014:

The arrival of the smartphone presented a major challenge to the status quo. Since existing online learning platforms were designed for desktop computers, as students increasingly began using their smartphones for coursework, they encountered content that was not mobile-friendly and devices that were not supportive, such as small smartphone screens versus desktop terminal screens. This contributed to increased student stress, higher dropout rates, and ongoing accessibility issues. An emerging research thread began into this phenomenon of mismatch between the online model and devices around 2012.

2015–2019:

This represented a period of strain for online learning. During this period, video-based instruction became the norm with large Zoom-style classes and the use of multimedia files. The increased bandwidth demand resulted in the need for more institutional IT support and marked disparities between those students with high-speed access and those lacking it, particularly low-income and rural students.

2020–2021:

This period was dominated by unprecedented stresses brought on by the COVID-19 pandemic. As in-person classes closed, traditional colleges were forced to adapt their offerings to fit an online format with varying degrees of success. Students accessed classes with a varying assortment of devices, and the period was marked by increased technology strain and system outages.

2022–Present:

With the introduction of artificial intelligence tools such as ChatGPT (2022), online education continues to face new challenges. Traditional educational assessment models no longer align with the technology students are increasingly using. Online learning models using exams, discussion posts, and essays have become particularly vulnerable to AI-generated content. Colleges struggle to create clear AI-use policies as the AI phenomenon grows at an increasing rate, while traditional AI-detection tools have been found unreliable.

Persistent Goals

The ascendancy of Artificial Intelligence (AI) availability and usage by students and faculty has created discomfort, misunderstanding, and fear within the teaching community. Debates range from ways to keep students from accessing and using AI tools in their work to reexamining our own value proposition as teachers in adult education, leaving some to question their roles within this new paradigm.

It is beneficial to step back a moment and reflect on unalterable goals surrounding adult education that inspire and motivate us to do what we do. These may be summarized as follows:

- We want students to acquire practical skills that they can use in their everyday lives. These include job skills, communication and interpersonal skills, problem-solving and decision-making skills. We want them to gain life management skills to enable their competence in daily lives.
- We want to support their career advancement and workplace mobility by preparing students for job promotion or leadership, a new career, valuable credentials, and acquiring needed technology skills to help increase their employability.
- We want to promote life-long learning habits in students that stimulate self-directed curiosity and intellectual development.
- We want students to feel capable of managing personal challenges and actively pursuing their goals through their own personal agency and self-efficacy.
- We want students to be better citizens and build stronger communities by understanding ethics, social issues, and democratic principles.
- We want to prepare students for a better quality of life and personal growth, including better health, social, and psychological literacy.
- The central question, therefore, should be: How can we, as educators, continue to effectively pursue these goals within this AI environment, given two unalterable tenets:
- Students will require AI skills increasingly going forward.
- Instructors will require increased knowledge and understanding of AI as it will increasingly become a major factor in our value proposition for our students.

While academia's response to Artificial Intelligence (AI) continues to evolve, there are specific steps instructors can immediately take to improve both student experiences and their own in this process.

The conversation should shift from "What the student can and can't do using AI" to "How can we, as educators, structure our work such that we accommodate AI-assisted work while pursuing the above goals and imparting to our students the values of originality, ethics, and academic integrity?"

The Process:

Artificial Intelligence itself, in its current state of development, offers some useful guidance. The authors began by posing the following question to three large language AI models, Open AI's ChatGPT-5, Google's Gemini, and Anthropic's Claude:

“How can college instructors create assignments that accommodate student use of AI tools while supporting originality, ethics, and academic integrity?”

The subsequent three responses were then synthesized through OpenAI’s ChatGPT-5 (OpenAI, 2025, ChatGPT-5 output), 2025; Google DeepMind, 2025, Gemini output, 2025; Anthropic, 2025, Claude output).

A summary of AI’s synthesis reveals the following:

Assignments that are dependent on student insight cannot be meaningfully automated by AI and are thus not as likely to encourage AI misuse (OpenAI, 2025; Google DeepMind, 2025; Anthropic, 2025).

Scaffolding techniques such as outlines, annotated bibliographies, drafts, revisions and reflective or process journals highlight the student’s developmental journey and reduce reliance on AI-generated text (OpenAI, 2025; Google DeepMind, 2025; Anthropic, 2025).

Teaching ethical AI literacy and critical AI evaluation skills prepares students for a world where AI competence is essential (OpenAI, 2025; Google DeepMind, 2025; Anthropic, 2025).

Designing assignments that require students to apply their discernment, situational awareness, and interdisciplinary thinking skills are beyond AI’s ability to automate and thus discourage student use of AI shortcuts (OpenAI, 2025; Google DeepMind, 2025; Anthropic, 2025).

Creating assignments that integrate AI rather than attempting to exclude it encourages students to make AI a part of their metacognition rather than a convenient method of completing work (OpenAI, 2025; Google DeepMind, 2025; Anthropic, 2025).

Specific Actions

Clarify Expectations Through Explicit AI Policies

Creating and communicating clear expectations and policies regarding AI use by students is foundational in achieving a clear understanding of what Artificial Intelligence (AI) use is acceptable in their work and what isn’t. These should be clearly outlined in assignment instructions, syllabi, and rubrics to avoid unintentional academic integrity violations as students today may assume available AI tools may be used without limitation or conversely, may be afraid to use AI at all fearing integrity violations. Policies should define specific uses of AI that are acceptable—such as grammar checking, brainstorming, or coding help—as well as those prohibited such as creating content in essays or creating answers for graded problems (Azevedo, Mallinson, & Wang, et al., 2024; Chan, C.K.Y., 2023; Li, Z., 2024; Mollick, E. & Mollick, L., 2023; Moya, et al., 2023; Tong, et al., 2025.)

Design Assignments That Require Human Judgment and Personalization

Assignments that require students to apply personal experience, their existing knowledge, or contextualize work within their own life worlds tend to reduce the risk of Artificial Intelligence (AI) -generated academic integrity breaches since AI cannot access students’ contexts, personal knowledge, or recent events. This can be accomplished by requiring students to connect the course material to their workplace, analyze their own original concepts, or specific field cases. It is further reinforced by having students create work in an iterative fashion using things like bibliographies, drafts, peer-review, and reflective exercises. Such approaches discourage the over-reliance on AI tools and encourage personal growth over time (Chang, D.H., et al., 2023; Ejjami, R., 2024; Estaphan, et al., 2025; Maghsudi, et al., 2021).

Teach Ethical AI Use as a Skill

Since Artificial Intelligence (AI) will increasingly be a part of students’ work and personal lives, it is academia’s responsibility to teach them how to use AI tools in a responsible and ethical manner. Going forward, students will need to learn how to critically evaluate AI-generated content, identify its inaccuracies, and properly attribute AI resources. Focusing on AI-literacy and incorporating it into instructions or lessons can help students recognize and understand AI’s limitations, biases, and fabricated references (Hutson, et al., 2023; Kit Ng, et al., 2021; Mujtaba, B., 2024; Soraya, Z., 2024). By using “process disclosure statements” students can be trained to describe their use of AI, justify their choices, and critically evaluate AI-generated content (Kasneci, et al., 2023) thereby transforming AI use into metacognitive exercises.

Use Assessment Structures That Promote Integrity

Assessment design plays a major role in either increasing or decreasing AI academic integrity concerns (DeLuca, et al., 2025; Evangelista, E. D. L., 2025; Finkel-Gates, A., 2025; Thite, et al., 2024). Using non-graded or oral assignments, and project-based learning has been shown to reduce academic dishonesty by focusing on content mastery rather than performance (Supiano, 2023). Instructors can confirm a student's understanding of material using oral defenses, live demonstrations, and interactive questions and answers. Rubric design that rewards originality, reasoning, and the student's ability to evaluate evidence rather than "surface level correctness" reduces the inclination to use AI (Liang, et al., 2023).

Encourage Transparency and Process Documentation

When students are required to document their work in writing, or by using logs, portfolios, or other evidence, it supports legitimate AI use and gives instructors insight into the students' progress. Reflection prompts—such as "How did AI help you improve your argument?" or "What limitations did you discover in the AI's responses?"—promote metacognition and responsible use. These structures shift emphasis from the product to the process, which naturally increases student ownership while decreasing the potential for misuse (Bahar, M. & Doleck, T., 2023; Chaudhry, M., 2023; Lund, et al., 2025; Mienye, I. & Swart, T., 2025).

Maintain Clear, Consistent, and Reinforced AI Use Policies

When instructors align Artificial Intelligence (AI) classroom policies with Institutional policies, students have a clearer understanding of what is acceptable and unacceptable with their AI usage (Gbadago, et al., 2025; Gonsalves, 2024).

Best practices include:

- Provide students with clear examples of both acceptable and unacceptable use.
- Model proper ethical attribution in own work.
- Reinforce consequences for repetitive AI misconduct.
- Ensure that policies are consistent across all assignments and timelines.

When students view expectations and consequences are fair, they are more prone to use AI responsibly.

Putting Theory into Practice

Purdue University Global's HU245 Ethics course serves as an example of a logical response to the challenges discussed. This course enjoyed high satisfaction rates from students and a strong track record of success. Yet the reliance on written assignments, which are traditional for philosophy courses, made this class a prime target for plagiarism fueled by artificial intelligence (AI). The rate of plagiarism reports skyrocketed, forcing the well-designed course to be revised. The following steps were taken to make the course more consistent with AI realities

- Discussion prompts were kept but changed to reflect current events. Instead of questions that could be easily answered by AI, students were asked to find current news articles (within the previous two weeks) and apply course concepts to those topics. Students were asked to provide screenshots of the news items and students could not use the same article used by another student.
- Short papers were replaced with objective quizzes. This course previously relied heavily on short (one page) concise ethical arguments. These were replaced with objective exams. Students were able to engage in practice exercises prior to attempting exams but exams were one attempt.
- Reading assignments were reorganized to be more consistent each week so students and instructors could focus on two chapters each week. This was especially important given the focus on objective chapter quizzes.

In sum, the course was designed to move away from easily Artificial Intelligence (AI) generated answers to discussion prompts that were more AI robust and timed objective quizzes which required student advanced preparation. It was deemed that techniques used in face-to-face courses such as in-class written exams and oral

exams were impractical for the size and scope of HU245 ethics. It was determined that the old system of reliance on written assessments was no longer supportive of academic rigor, student success, and accreditation considerations. Change is never easy but failure to change now will likely result in major problems for online programs later.

Conclusion

While instructors await future AI-related developments like institutional consensus on future curriculum, Artificial Intelligence (AI) approaches, or the arrival of future AI-detection tools, there are immediate things we can do to respond to today's AI classroom reality. AI is changing the adult education landscape, and instead of resisting these technologies, instructors can design assignments and assessments that leverage AI while reinforcing originality, ethics, and academic integrity. By implementing clear AI use policies, creating context-anchored assignments, ethical AI guidance, integrity-centered assessment structures, and process-focused documentation, instructors create a framework that both acknowledges AI and preserves the values of higher education. As AI technologies continue to evolve, our responsibilities to prepare our students within it will remain the same – to educate them to responsibly use it in both academic and professional contexts.

References

- Anthropic. (2025). *Claude* [AI assistant].
- Azevedo, L., Mallinson, D. J., Wang, J., Robles, P., & Best, E. (2024). AI Policies, Equity, and Morality and the Implications for Faculty in Higher Education. *Public Integrity*, 1–16. <https://doi.org/10.1080/10999922.2024.2414957>
- Bahar Memarian, Tenzin Doleck, Fairness, Accountability, Transparency, and Ethics (FATE) in Artificial Intelligence (AI) and higher education: A systematic review, *Computers and Education: Artificial Intelligence, Volume 5*, 2023, 100152, ISSN 2666-920X, <https://doi.org/10.1016/j.caeai.2023.100152>.
- Brookfield, S. D. (2013). *Powerful techniques for teaching adults*. Jossey-Bass.
- Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International journal of educational technology in higher education*, 20(1), 38.
- Chang, D. H., Lin, M. P.-C., Hajian, S., & Wang, Q. Q. (2023). Educational Design Principles of Using AI Chatbot That Supports Self-Regulated Learning in Education: Goal Setting, Feedback, and Personalization. *Sustainability*, 15(17), 12921. <https://doi.org/10.3390/su151712921>
- Chaudhry, Muhammad Ali; (2023) A Transparency Index Framework for Machine Learning powered AI in Education. Doctoral thesis (Ph.D.), UCL (University College London).
- Dirkx, J. M. (2006). Engaging emotions in adult learning: A Jungian perspective on emotion and transformative learning. *New Directions for Adult and Continuing Education*, 2006(109), 15–26. <https://doi.org/10.1002/ace.204>
- Ejjami, R. (2024). The Adaptive Personalization Theory of Learning: Revolutionizing Education with AI. *Journal of Next-Generation Research 5.0*, 1(1). <https://doi.org/10.70792/jngr5.0.v1i1.8> (Original work published November 13, 2024)
- Estaphan, S., Kramer, D., and Witchel, H. (2025). *Advances in Physiology Education* 2025 49:3, 633-639
- Gbadago, F., Masud, I., Iddris, F., Koomson, S., Poku, P., & Zoiku, S. (2025). Ethical dilemmas in teaching and assessment in higher education: a literature synthesis towards an integrative model for policy, practice and academic integrity. *International Journal of Ethics and Systems* 1–30. <https://doi.org/10.1108/IJOES-02-2025-0107>

- Gonsalves, C. (2024). Addressing student non-compliance in AI use declarations: implications for academic integrity and assessment in higher education. *Assessment & Evaluation in Higher Education*, 50(4), 592–606. <https://doi.org/10.1080/02602938.2024.2415654>
- Google DeepMind (2025). *Gemini* [AI model].
- Hutson, James and Ceballos, Jason, "Rethinking Education in the Age of AI: The Importance of Developing Durable Skills in the Industry 4.0" (2023). *Faculty Scholarship*. 494. <https://digitalcommons.lindenwood.edu/faculty-research-papers/494>
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and individual differences*, 103, 102274.
- Kit Ng, D. T., Lok Leung, J. K., Samuel Chu, K. W., & Qiao, M. S. (2021). AI Literacy: Definition, Teaching, Evaluation and Ethical Issues. *Proceedings of the Association for Information Science and Technology*, 58(1), 504-509. <https://doi.org/10.1002/pra2.487>
- Knowles, M. S., Holton, E. F., III, & Swanson, R. A. (2020). *The adult learner: The definitive classic in adult education and human resource development* (9th ed.). Routledge.
- Kuhn, T. (1962). *The structure of scientific revolutions*. The University of Chicago Press, Chicago.
- Li, Z. (2024). *Generative AI in Higher Education Academic Assignments: Policy Implications from a Systematic Review of Student and Teacher Perceptions* (Doctoral dissertation, Massachusetts Institute of Technology).
- Liang, P. P., Wu, Y., & Yang, D. (2023). GPT detectors are biased against non-native English writers. arXiv Preprint. <https://arxiv.org/abs/2304.02819>
- Lund, B., Orhan, Z., Mannuru, N.R. *et al.* (2025). Standards, frameworks, and legislation for artificial intelligence (AI) transparency. *AI Ethics* 5, 3639–3655 (2025). <https://doi.org/10.1007/s43681-025-00661-4>
- Maghsudi, S., Lan, A, Xu, J., Lan, J. and van der Schaar, M. "Personalized Education in the Artificial Intelligence Era: What to Expect Next," in *IEEE Signal Processing Magazine*, vol. 38, no. 3, pp. 37-50, May 2021. doi: 10.1109/MSP.2021.3055032.
- Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice*. Jossey-Bass.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Mienye, I. D., & Swart, T. G. (2025). ChatGPT in Education: A Review of Ethical Challenges and Approaches to Enhancing Transparency and Privacy. *Procedia Computer Science*, 254, 181-190. <https://doi.org/10.1016/j.procs.2025.02.077>
- Mollick, Ethan R. and Mollick, Lilach, Using AI to Implement Effective Teaching Strategies in Classrooms: Five Strategies, Including Prompts (March 17, 2023). The Wharton School Research Paper, Available at SSRN: <https://ssrn.com/abstract=4391243> or <http://dx.doi.org/10.2139/ssrn.4391243>
- Moya, B., Eaton, S. E., Pethrick, H., Hayden, K. A., Brennan, R., Wiens, J., ... Lesage, J. (2023). Academic Integrity and Artificial Intelligence in Higher Education Contexts: A Rapid Scoping Review Protocol. *Canadian Perspectives on Academic Integrity*, 5(2), 59–75. <https://doi.org/10.55016/ojs/cpai.v5i2.75990>

- Mujtaba, B. (2024). Clarifying Ethical Dilemmas in Sharpening Students' Artificial Intelligence Proficiency: Dispelling Myths About Using AI Tools in Higher Education. *Business Ethics and Leadership*, 8(2), 107-127. [https://doi.org/10.61093/bel.8\(2\).107-127.2024](https://doi.org/10.61093/bel.8(2).107-127.2024)
- OpenAI. (2025). ChatGPT-5 (Nov 15 version) [Large language model]. <https://chat.openai.com/chat>
- Soraya, Z. (2024). Ethical AI Learning and Social Skill Enhancement in Higher Education: A Systematic Review. *Proceeding International Conference on Religion, Science and Education*, 3, 403–411. Retrieved from <https://sunankalijaga.org/prosiding/index.php/icrse/article/view/1047>
- Supiano, B. (2023, February 15). How to make your assignments more “AI-proof.” The Chronicle of Higher Education. <https://www.chronicle.com>
- Tong, S. T., DeTone, A., Frederick, A., & Odebiyi, S. (2025). What are we telling our students about AI? An exploratory analysis of university instructors' generative AI syllabi policies. *Communication Education*, 74(3), 261–282. <https://doi.org/10.1080/03634523.2025.2477479>
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Ask the Experts: Student Involvement in Efforts to Better Support Distance Learners

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Abstract

This paper details the creation of a student-driven taskforce aimed at understanding the unique needs and interests of distance learning students within an undergraduate program. Through facilitated efforts, students developed questions, collected data, and developed specific recommendations for program improvement aimed at better supporting hybrid and fully-online learners.

Introduction

Understanding and attending to students' holistic needs is a foundational priority of higher education institutions and programs that view their obligation to learners as extending beyond the provisioning of knowledge. Narrowing the focus to distance learners necessitates a reevaluation of their expected needs, but neither a consistent identification of this population subset nor a person-centered exploration of their needs is lacking. Instead, the focus of creating clear definitions centers on distance learning, not distance learners. Most notably, the federal government defines distance education as:

education that uses one or more of the technologies listed in paragraphs (2)(i) through (iv) of this definition to deliver instruction to students who are separated from the instructor or instructors and to support regular and substantive interaction between the students and the instructor or instructors, either synchronously or asynchronously. (Institutional Eligibility Under the Higher Education Act of 1965, as Amended, 2025)

Other definitions of distance education generally are derived from the federal framing (Kerensky, 2023). As an example, the Southern Association of Colleges and Schools Commission on Colleges (2020) defines distance education as “a formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place” (p. 1). In each case the focus has been on the mechanistic actions that qualify learning as distance education, with less attention given to the students involved in the practice.

Virginia Commonwealth University (VCU), the setting for the research presented in this paper, published guidance on course modalities providing specific detail on when a class is identified as online, face-to-face, hybrid, or hyflex (Arroyo, 2023). Yet as with the definitions of distance education, this guidance is drawn from structural rather than humanistic viewpoints of online learning. The Bachelor of Science in Health Services (BSHS) program at VCU has grown in the six years since inception to provide in-person, online, and hybrid degree attainment pathways. Within the past two years, online course enrollment has rapidly grown, far outpacing the demand for in-person course sections. However, as the program began with only an in-person option, student services and the definition of “our students” were developed without an understanding of who is represented within the distance learning community or their needs and priorities. This development pathway created a potential gap between the program's perceived and actual understanding of distance learners and their needs.

Ensuring that efforts focused on supporting students both in and outside the classroom were in alignment with their needs and preferences, required a refined understanding of the distance learning population. To best understand the experience of our distance learning students, we turned to this group to develop and lead a research initiative. The result was the implementation of a student-driven taskforce in which student participants constructed and led efforts to understand the needs of their classmates.

Taskforce Development

The Online Student Experience Taskforce (OSET) formed to discover our students' experiences, preferences, and interests by engaging those very learners in the research process. The OSET, consisting of students within the program across academic years who have taken at least one online course, was given the charge to better understand the needs of BSHS online students in order to provide equitable, high quality resources, opportunities, and learning experiences to all students in the program. To meet the charge the OSET was tasked with

- collecting authentic and useful feedback from a significantly representative group of BSHS students about their online experiences, needs, and interests, and
- developing actionable recommendations for the BSHS leadership team that can be used to enact positive change for students in the program.

The timeline in figure 1 illustrates the milestones and key actions of the OSET broken into three stages.

Figure 1



In the initial formation stage program leadership members established the taskforce charge, objectives, active timeframe, and target composition. The framework clarified participant expectations and highlighted the aim and impact of the initiative, while purposely leaving the operational details undefined. Student taskforce members were

charged with determining the specific course of action to meet the objectives, allowing their experiences to hold greater influence on planning decisions and actions than those of the program leadership team.

Student leadership of the OSET truly took hold during the action stage. Students and one program staff member convened four times across the fall and spring semesters. The staff member's role was to facilitate the meetings, answer logistical/operational questions, and seek out requested resources. At the onset of each meeting, the staff member emphasized that the actions and decisions of the OSET fell on the shoulders of the student members. Subsequently, students were asked to share their experiences, ideate, and critically question the ideas and strategies proposed during each meeting. Much of the first semester was focused on establishing a collective understanding of what the taskforce wanted to understand about the students engaging in distance education courses. The resulting nine question survey focused on communication, peer engagement, and career development interests of distance learners.

Data collection took place early in the second semester, with taskforce members recruiting participants and promoting the survey to their personal networks. At the third meeting, members were provided with summarized and raw data from the survey. They then used the time prior to the fourth meeting to establish agreed upon themes and potential recommended data-informed actions. The fourth meeting concluded the work of the students on the taskforce, as they agreed upon specific recommendations and developed a final report to share with program leadership.

The third stage, implementation, shifted the focus back to program leadership. They reviewed the recommendations, then discussed the suggested actions with all program instructors during a program retreat. The following three months were used to develop and enact an implementation plan to begin in the fall semester of the subsequent academic year.

Discussion

Utilizing the OSET as a means to seek understanding of the experiences of distance learners and develop support recommendations allowed the BSHS program to develop an action plan that remained firmly grounded in the needs and perspectives of the target audience. Empowering a student-dominant coalition to carry out the charge, left program leadership feeling confident that the provided recommendations would be viewed as both valid and valuable among the larger student body. Aside from the benefit gained by the academic program, the taskforce provided participating students with opportunities to both take ownership of their academic program and to apply research skills to a problem of practice, creating a tangible work-relevant experience.

While positioning students as the primary driver of the research process delivered several benefits, it was not without challenges. First, the students were engaging with the action research process for the first time. Their lack of experience created a need to provide guidance and instruction about topics such as how to develop survey questions and how to construct themes. While serving as a mentor, the program staff member involved in the process ran the risk of taking leadership of the taskforce. This risk was mitigated by continually checking in with the group and reminding them of their positions and charge.

Consistent student participation throughout the two semesters presented a second significant challenge. While there was positive momentum initially, some task members dropped out along the way. The reduction in participation and communication resulted in more work falling on the remaining members and a decrease in voices adding feedback and input throughout the process. For future applications of the taskforce model, an increase in the number of students initially brought on the taskforce To address this drop off the number of students initially brought on to the taskforce will be increased.

The use of student-led taskforces to explore topics closely connected to the student experience presents great promise. Traditional committees and taskforces often have limited, or worse performative, representation. This arrangement can result in an overrepresentation of one student perspective or the student voice being limited by the power and volume of faculty and staff representatives. Implementing a student-driven taskforce prioritizes the views and perspectives of those closest to the topic of interest. The student taskforce approach is most appropriate to explore topics, challenges, and processes where it is critical that the work remains grounded in the student

perspective. The positive experience resulting from the formation of the OSET creates a strong foundation for future student-led, student-focused initiatives.

References

Arroyo, A. (2023, September 27). Guidance regarding course modalities. Office of the Provost. <https://blogs.vcu.edu/provost/2023/09/27/guidance-regarding-course-modalities/>

Institutional Eligibility Under the Higher Education Act of 1965, as Amended, 34 C.F.R. § 600.2 (2025). <https://www.ecfr.gov/current/title-34/subtitle-B/chapter-VI/part-600/subpart-A/section-600.2>

Kerensky, K. (2023). *Defining “distance education” in policy: Differences among federal, state, and accreditation agencies*. State Authorization Network a Division of WCET. <https://wcet.wiche.edu/resources/defining-distance-education-in-policydifferences-among-federal-state-and-accreditation-agencies/>

Southern Association of Colleges and Schools Commission on Colleges (2020). Distance education and correspondence courses [Policy brief]. <https://sacscoc.org/app/uploads/2019/07/DistanceCorrespondenceEducation.pdf>

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Grading with Consistency Across Sections Through Customized Rubrics: A Mixed-Methods Study

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Abstract

Grading consistency across instructors remains a persistent challenge in higher education, raising concerns about fairness, reliability, and transparency. This mixed-methods study examined whether customized assignment rubrics reduced grading variability and improved perceptions of equity in a graduate-level statistics course at Embry-Riddle Aeronautical University Worldwide. Using a quasi-experimental pre/post design, quantitative data were drawn from five identical assignments scored across sections before and after rubric implementation. Welch's ANOVA assessed mean differences across sections. Qualitative data were derived from end-of-course student evaluations. Prior to rubric adoption, statistically significant grading differences were observed in four of five assignments ($p < .05$). Post-implementation, significant differences were reduced to three assignments, and score ranges narrowed, indicating improved uniformity. Thematic analysis revealed improved perceptions of clarity, transparency, and feedback quality following rubric adoption. Although grading variation was not eliminated, customized rubrics enhanced inter-section reliability and strengthened perceptions of procedural fairness. Findings support structured assessment tools combined with faculty calibration as mechanisms for promoting equitable grading in distributed learning environments.

Keywords: rubrics; grading consistency; inter-rater reliability; grading equity; mixed-methods research

Introduction

Grading consistency refers to the degree to which instructors assign equivalent scores for comparable levels of student performance. In multi-section or distributed learning environments, inconsistent grading practices may undermine perceptions of fairness, weaken student trust, and diminish institutional credibility. When identical assignments yield substantially different mean scores across sections, students may interpret grading as subjective or inequitable.

Research links perceived grading unfairness to reduced motivation, diminished engagement, and threats to persistence (Chory-Assad, 2002; Tinto, 2012; Tyler & Blader, 2003). Rubrics are widely promoted as tools to enhance reliability, transparency, and alignment between learning outcomes and assessment criteria (Jonsson & Svingby, 2007; Brookhart, 2013). However, rubric effectiveness depends not only on design quality but also on consistent interpretation and application. Without calibration, rubric "indeterminacy" may persist (Sadler, 2009). Preliminary internal reviews of a graduate-level statistics course revealed noticeable variation in assignment means across sections. Informal faculty discussions suggested inconsistent or absent rubric use. This study therefore examined whether implementing customized rubrics across all assignments would reduce inter-section grading variability and improve student perceptions of fairness and clarity.

Literature Review

Rubrics function as structured matrices that articulate performance criteria and achievement levels. Empirical literature indicates that rubrics can enhance reliability, validity, and feedback quality when carefully designed and aligned with learning outcomes (Jonsson & Svingby, 2007). They also support formative assessment by clarifying expectations and guiding self-regulated learning (Nicol & Macfarlane-Dick, 2006). However, rubrics alone do not guarantee consistency. Instructors must interpret descriptors similarly and engage in norming or calibration sessions to reduce scoring divergence (Bloxham & Boyd, 2007). Institutional supports—including shared grading reviews

and rubric refinement—are critical for strengthening inter-rater reliability (HEQCO, 2020). Assessment variability across sections may function as a quality assurance indicator. Statistically significant differences in section means suggest potential inconsistency in grading practices rather than student ability alone. Consequently, variance analysis can inform faculty development and curriculum governance.

Methodology

Design

A mixed-methods quasi-experimental pre/post design was used. Quantitative analyses compared assignment means across sections before and after rubric implementation. Qualitative analysis examined student perceptions drawn from end-of-course evaluations. Triangulation strengthened interpretive validity. Participants included all students enrolled in a graduate-level statistics course during two terms (January 2025 pre-intervention; August 2025 post-intervention). Census sampling was used. Course content and assignments were identical across sections and terms. The study qualified as exempt institutional quality improvement research. Five homework assignments (2.2, 3.3, 5.2, 6.3, 7.3) were evaluated. Scores were recorded on a 0–100 scale in Canvas.

- **Pre-intervention:** Assignments were graded without customized rubrics; instructors were provided only total point values.
- **Post-intervention:** Customized rubrics were developed for each assignment, specifying performance criteria and point allocations. No other course variables were altered.

Data Analysis

Welch's ANOVA was selected to compare mean scores across sections due to unequal variances and group sizes. The null hypothesis tested equality of section means. Alpha was set at .05. Analyses were conducted separately for each assignment in both terms. End-of-course evaluation comments were analyzed using Braun and Clarke's (2006) thematic framework. Coding combined deductive categories (rubric clarity, feedback quality, expectation clarity, grading equity) with inductive pattern identification. Responses were anonymized and organized by term and section for cross-term comparison.

Results

Quantitative Findings

In the pre-intervention term, Welch's ANOVA indicated statistically significant differences across sections in four of five assignments (2.2, 5.2, 6.3, 7.3; $p < .05$). Only Assignment 3.3 showed no significant difference. Score ranges were wide, with mean differences exceeding 20–30 points in some cases, suggesting substantial grading variability. Following rubric implementation in the post-intervention phase, statistically significant differences were reduced to three assignments (2.2, 3.3, 7.3). Assignments 5.2 and 6.3 no longer demonstrated significant variation ($p > .05$). Additionally, overall score ranges narrowed, indicating compression of extreme grading differences. Overall, rubric adoption produced a 20% reduction in statistically significant disparities and decreased mean spread across sections. Although variation persisted in some assignments, findings suggest improved inter-section reliability.

Qualitative Findings

In the pre-rubric term, eighty-five students were enrolled across five sections; 10 evaluations were submitted (12% response rate). Dominant themes included lack of clear rubrics and grading criteria, perceived subjectivity and harshness, vague or insufficient feedback, misalignment between instructions and grading, and instructor tone concerns. Students frequently described grading as “confusing,” “unfair,” or “overly punitive.” Formatting errors were perceived as disproportionately penalized. Several comments referenced identical answers receiving different scores. The absence of explicit criteria was linked to stress and diminished trust.

In the post-rubric term, ninety-one students were enrolled across four sections; 12 evaluations were submitted (13% response rate). Dominant themes shifted toward improved structure and transparency, clearer expectations, more timely feedback, and mixed perceptions of grading severity. Many students reported that detailed rubrics clarified expectations and facilitated learning. APA reminders and structured criteria were cited as helpful. However,

some students continued to perceive grading as “all-or-nothing,” particularly when small errors resulted in large deductions. Feedback depth remained inconsistent across sections. Across both positive and critical responses, students acknowledged that clearer expectations reduced uncertainty and improved performance alignment.

Discussion

The quantitative findings indicate that customized rubrics modestly improved grading consistency. The reduction from four to three statistically significant assignments suggests partial but meaningful improvement. Assignments 5.2 and 6.3 demonstrated successful alignment and may serve as internal best-practice models. Persistent variability in assignments 2.2, 3.3, and 7.3 indicates that rubric presence alone is insufficient. Calibration workshops, shared grading exemplars, and rubric refinement may further reduce indeterminacy.

Qualitative findings reinforce the procedural justice framework. Pre-intervention dissatisfaction centered on ambiguity and perceived unfairness. Post-intervention responses reflected improved transparency, though grading severity and feedback depth remained areas for development. Importantly, instructor availability did not substitute for actionable feedback. Students—particularly those with limited statistical background—expected scaffolded guidance embedded within rubric commentary.

Recommendations

Based on quantitative and qualitative findings, the following actions are recommended:

1. Rubric Standardization: Develop assignment-specific rubrics aligned explicitly with learning outcomes.
2. Early Transparency: Provide rubrics at assignment launch to support self-assessment.
3. Calibration Sessions: Conduct periodic cross-section norming workshops to align interpretation.
4. Feedback Integration: Supplement rubric scoring with narrative comments specifying corrective steps.
5. Ongoing Monitoring: Incorporate variance analysis into routine program assessment dashboards.
6. Tone and Professionalism Review: Ensure written feedback supports student motivation and self-efficacy.

Assessment data should function not only as evaluative outputs but as quality assurance mechanisms guiding instructional governance.

Limitations

Findings are limited to one course within a single institution. Sample sizes per section may reduce statistical power; reliable variance detection typically requires 30–50 observations per group. Response rates for qualitative data were modest (12–13%), potentially limiting thematic breadth. Because this project functioned as internal quality improvement, results should be interpreted cautiously and replicated across disciplines for generalizability.

Conclusion

Customized rubrics improved grading consistency and enhanced student perceptions of transparency in a multi-section graduate statistics course. While statistically significant differences were not fully eliminated, variability decreased and score distributions compressed following rubric adoption. Students reported clearer expectations and improved structural alignment between assignments and grading criteria.

Rubrics are necessary but not sufficient tools for ensuring grading equity. Their effectiveness depends on shared interpretation, calibration, and consistent feedback practices. When combined with systematic faculty development, structured rubrics contribute meaningfully to equitable, credible, and pedagogically sound assessment in distributed higher education environments.

References

Ahea, M.M.A.B.; Ahea, M.R.K.; Rahman, I. The Value and Effectiveness of Feedback in Improving Students' Learning and Professionalizing Teaching in Higher Education. *J. Educ. Pract.*; 2016; 7, pp. 38-41.

- Bloxham, S., & Boyd, P. (2007). *Developing effective assessment in higher education: A practical guide*. Open University Press/McGraw-Hill Education.
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. ASCD.
- Brown, G. T. The past, present and future of educational assessment: A transdisciplinary perspective. *Frontiers in Education*; 2022; 7, 1060633. [DOI: <https://dx.doi.org/10.3389/feduc.2022.1060633>]
- Cambridge International Examinations. *Developing Your School with Cambridge: A Guide for School Leaders*; Director Education: Hong Kong, China, 2016.
- Chory-Assad, R. M. (2002). Classroom justice: Perceptions of fairness as a predictor of student motivation, learning, and aggression. *Communication Quarterly*, 50(1), 58–77. <https://doi.org/10.1080/01463370209385646>
- CSAI. Valid and Reliable Assessments. Update, CSAI, The Center on Standards and Assessment Implementation. 2018; Available online: <https://files.eric.ed.gov/fulltext/ED588476.pdf> (accessed on 24 March 2025).
- Furman, W. (2024). Rubric Design: A Designer's Perspective. *Journal of the Scholarship of Teaching and Learning*, 24(4) <https://doi.org/10.14434/josotl.v24i4.35789>
- García-Varela, F., Nussbaum, M., Mendoza, M., Martínez-Troncoso, C., & Zvi, B. (2025). ChatGPT as a Stable and Fair Tool for Automated Essay Scoring. *Education Sciences*, 15(8), 946. <https://doi.org/10.3390/educsci15080946>
- Glaser, R.; Chudowsky, N.; Pellegrino, J.W. *Knowing What Students Know: The Science and Design of Educational Assessment*; National Academies Press: Washington, DC, USA, 2001.
- Guskey, T.R. Addressing inconsistencies in grading practices. *Phi Delta Kappan*; 2024; 105, pp. 52-57. [DOI: <https://dx.doi.org/10.1177/00317217241251883>]
- Higher Education Quality Council of Ontario. (2020). *Guide to developing valid and reliable rubrics* (HEQCO). https://heqco.ca/wp-content/uploads/2020/06/Formatted_Rubric-Guide_FINAL.pdf
- Jonsson, A., & Svingby, G. (2007). The use of scoring rubrics: Reliability, validity and educational consequences. *Educational Research Review*, 2(2), 130–144. <https://doi.org/10.1016/j.edurev.2007.05.002>
- Leal-Ramírez, C., Echavarría-Heras, H. A., Villa-Diharce, E., & Haro-Avalos, H. (2025). A Study on the Consistency and Efficiency of Student Performance Evaluation Methods: A Mathematical Framework and Comparative Simulation Results. *Applied Sciences*, 15(11), 6014. <https://doi.org/10.3390/app15116014>
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. <https://doi.org/10.1080/03075070600572090>
- Palmer, N. Tools to Improve Efficiency and Consistency in Assessment Practices Whilst Delivering Meaningful Feedback. *Proceedings of the ICERI2022 Proceedings*; Seville, Spain, 7–9 November 2022; pp. 1069-1078.
- Sadler, D. R. (2009). Indeterminacy in the use of preset criteria for assessment and grading. *Assessment & Evaluation in Higher Education*, 34(2), 159–179. <https://doi.org/10.1080/02602930801956059>
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. University of Chicago Press.
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(4), 349–361. https://doi.org/10.1207/S15327957PSPR0704_07

Yorke, M. (2011). Summative assessment: Dealing with the measurement fallacy. *Studies in Higher Education*, 36(3), 251–273. <https://doi.org/10.1080/03075070903545082>

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From Pilot to Proof: Outcomes of the Faculty Women of Color Peer Mentoring Initiative

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Abstract

Faculty women of color often experience professional isolation, limited mentoring access, and diminished sense of belonging which represent challenges that are further intensified within online academic environments. This paper examines the outcomes from *Each One, Reach One*, a peer mentoring pilot designed to support faculty women of color through intentional, identity-affirming connections at an online institution. Using a mixed-methods approach, the study analyzes pre- and post-survey data alongside anecdotal participant reflections to assess changes in perceived belonging, professional confidence and growth. Findings suggest that structured peer mentoring contributed to increased connection, validation, and engagement among participants. Qualitative themes highlighted the value of community reduced isolation and strengthened professional self-efficacy. This paper discusses implications for designing professional development structures and scalable mentoring frameworks that promote belonging and sustained professional growth for faculty women of color in online institutions.

Keywords: peer mentoring, online higher education, faculty development, sense of belonging, mixed methodology, professional growth

From Pilot to Proof: Outcomes of the Faculty Women of Color Peer Mentoring Initiative

As awareness of the importance of diversity has increased in society, higher education has also begun to recognize the importance of supporting faculty of color. Specifically, a student's sense of belonging is important to their college experience and associated with their academic achievement (Ahn et al., 2020). Research has consistently shown that diverse faculty contribute to students' academic success and sense of belonging, particularly for students from marginalized backgrounds (Cuyjet, 2019). However, even with the clear benefits, higher education continues to face challenges supporting and retaining faculty of color which has significant implications for student outcomes.

Female faculty of color often face specific barriers, such as limited mentoring opportunities, bias, and isolation, which negatively impact their job satisfaction and retention rates (Davis, 2022; Gutiérrez y Muhs, Niemann, González, & Harris, 2012; Settles, et al., 2022; Turner et al., 2020). These challenges not only undermine faculty diversity efforts but also hinder the ability of colleges and universities to provide a supportive environment that fosters students' academic success and sense of belonging.

There is a pressing need to further examine and understand the importance of supporting faculty of color, specifically women faculty of color, and its direct impact on students' academic success and sense of belonging. The researcher responded to a challenge to support internal initiatives that supported marginalized populations with this research study.

Literature Review

The underrepresentation and marginalization of faculty women of color in higher education institutions has been widely recognized as a significant issue affecting both faculty diversity and student success. While several studies have explored the experiences of faculty women of color, there is a lack of research specifically focusing on strategies to support women faculty of color who are instrumental to student success on all college campuses, including virtual campuses.

The number of faculty women of color in higher education has not kept pace with the increasing racial and ethnic diversity amongst student populations. However, the absence of this diversity factor can impact student success as research indicates that diversity improves performance and outcomes, and all stakeholders benefit from its impact (Gomez, 2019 & Hammond, 2014). Studies show that the presence of diverse faculty promotes inclusive teaching practices and provides students with diverse perspectives (Hammond, 2014).

One of the ways to offset the marginalization that women of color who are faculty feel is for them to have a relationship with a peer mentor who identifies as they do (Handy et al., 2019). The experiences of faculty women of color are often blemished with intersecting forms of discrimination and bias. Lin et al., (2022) found that this experience, riddled with racial and gender bias, stereotypes, tokenism, and isolation is unique to faculty women of color. The impact is devastating and can affect their job satisfaction and effectiveness in the classroom and in the virtual setting there are unique challenges that center on technology, communication and isolation.

So, what can be done to create an inclusive culture for faculty women of color? What can virtual universities do to create safe environments for faculty women of color? Higher Education Institutions (HEI) that center equity in all their practices are needed in this country. Faculty need HEI's that see them in all their completeness. HEI's that can understand marginalized faculty members racialized experiences, resiliency, and persistence will demonstrate the cultural competency of an innovative professional learning community. Furthermore, by understanding how to support faculty women of color institutions support the 21st-century skills our global students will need to be global leaders (Khan et al., 2017).

Methodology

The methodology used included focus groups, professional development sessions, survey data and interviews. There were two focus group sessions. The professional development sessions met once a month for three months. These discussions were guided with semi-structured questions and open discussion. The survey data was gathered in pre and post surveys. Finally, interviews were used to explain, explore, and understand the faculty member's opinions, behavior, and experiences as an associate faculty member of color. The population of this study consisted of UAGC associate faculty who identified as a woman of color. The researcher planned for up to 10 faculty participants and ended with 15 participants who selected a pseudonym during intake process. Participants received a pre-set maximum of \$25 for their participation.

The interviews, focus groups and professional development sessions were conducted via zoom. To maintain confidentiality, the researcher created a private meeting, enabled the waiting room function, and established ground rules for participation (no screenshots and participants cannot record). In addition, the participants provided consent for cloud recording and transcript, and recordings which were stored on the Zoom Cloud and deleted upon receipt of transcript (Santhos, et al, 2021).

Transcripts were completed using a transcription service and the data was analyzed through thematic content analysis and narrative analysis. To maintain confidentiality, the researcher stored recordings on a password protected device in a password protected file. The researcher deleted all recordings upon completion of the study.

Research Questions

1. What effect does peer mentoring have on a woman of color faculty members' sense of belonging at a virtual university?
2. What effect do small group meetings have on woman of color faculty members' sense of belonging at a virtual university?
3. How do women of color faculty members speak about their work experience?
4. How do women of color faculty members speak about their peer mentoring experience?
5. How do women of color faculty members explain how they used the strategies they learned in peer mentoring?

Findings

The research explored the impact of peer mentoring on faculty women of color's sense of belonging at an online university which impacted their contributions to the university. Faculty women of color (FWOC) expressed their need for and demonstrated an increased sense of belonging. FWOC described strategies they learned and could use to navigate the online university climate. Finally, FWOC described ways they need to be supported and to feel an increased sense of belonging.

When the researcher surveyed the participants a year later half of the respondents responded. First, six of the eight respondents stated that they have made changes in their teaching practices and interactions with their peers. Next, 62.5% of respondents felt more connected to the university than before they participated in the study. A remarkable 75% of respondents stated that they have made progress towards their professional and/or career goals. Finally, half of the respondents stated that the networking components of the sessions were the most significant for them.

Limitations and Recommendations

The researcher was concerned that participation would be low as faculty women of color have limited time and may not be willing or able to participate. However, there was an overwhelming response to the study with thirty expressing interest and half completing all or part of the three-part data collection. The study culminated with participants sharing what they felt they could do in the workplace and what they felt they needed from their institution.

Recommendations are as follows:

1. Provide mentorship and sponsorship opportunities that are linked to service.
2. Provide opportunities for FWOC to present and publish with support.
3. Schedule virtual networking/support events.
4. Establish safe spaces for open dialogue.
5. Create inclusive policies and procedures.
6. Allow time for FWOC to grow through professional development opportunities.
7. Celebrate diverse perspectives and achievements of all faculty.

Conclusion

Faculty women of color are vital to the culture of higher education institutions. Their intersectional understanding of social issues and the compounding effects of race, gender and other identities enriches teaching, mentorship and collegial engagement for both students and colleagues. Despite their contributions often being overlooked and/or diminished faculty women of color continue to show up and sustain inclusive learning spaces. Belonging does not happen organically for them, so institutions must be intentional in their effort to create conditions where they can be seen and supported. Peer mentoring is a proven mechanism for transforming intent to impact and serves as an effective strategy for retention and engagement.

References

- Ahn, M. Y., & Davis, H. H. (2020). Four domains of students' sense of belonging to university. *Studies in Higher Education*, 45(3), 622-634.
- Cuyjet, M. J. (2019). Supporting faculty of color in colleges and universities: Implications for educational policy and practice. *Policy Insights from the Behavioral and Brain Sciences*, 6(1), 25-32.
- Davis, T. M., Jones, M. K., Settles, I. H., & Russell, P. G. (2022). Barriers to the successful mentoring of faculty of color. *Journal of Career Development*, 49(5), 1063-1081.
- Gomez, L. E., & Bernert, P. (2019). Diversity improves performance and outcomes. *Journal of the National Medical Association*, 111(4), 383-392.

- Gutiérrez y Muhs, G., Niemann, Y. F., González, C. G., & Harris, A. P. (2012). Presumed incompetent: The intersections of race and class for women in academia. University Press of Colorado.
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.
- Handy, T., & Fitzpatrick, T. (2022). How We Got Over: The Bridge of Caring between a Professor and Student. *Dialogues in Social Justice: An Adult Education Journal*, 7(1).
- Khan, N., & Forshaw, T. (2017). New Skills Now: Inclusion in the Digital Economy.
- Lin, P. S., & Kennette, L. N. (2022). Creating an inclusive community for BIPOC faculty: women of color in academia. *SN Social Sciences*, 2(11), 246.
- Santhosh, L., Rojas, J. C., & Lyons, P. G. (2021). Zooming into Focus Groups: Strategies for Qualitative Research in the Era of Social Distancing. *ATS Scholar*, ats-scholar.
- Settles, I. H., Jones, M. K., Buchanan, N. T., & Brassel, S. T. (2022). Epistemic exclusion of women faculty and faculty of color: Understanding scholar (ly) devaluation as a predictor of turnover intentions. *The Journal of Higher Education*, 93(1), 31-55.
- Turner, C. S. V., Myers, S. L., & Creswell, J. W. (2020). Exploring the experiences of faculty of color in higher education: Challenges and opportunities for moving forward. *Journal of Diversity in Higher Education*, 13
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Beyond Code and Strategy: Integrating Reflective Journaling in an Online Doctor of Science in Information Technology Program

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Abstract

Information technology professionals typically navigate their careers through technical competencies including coding, system architecture, cybersecurity protocols, and data analytics. The language of information technology is precise, objective, and solution-oriented while being steeped in technical writing standards. Yet when these professionals enter a specialized doctoral education program, they encounter a fundamental shift from being a knowledge consumer to knowledge producer. They shift from technical implementers to scholarly contributors. This transformation requires more than advanced technical skills; it demands metacognitive awareness, identity development, and the ability to navigate the ambiguity inherent in doctoral-level research. At a public university offering Georgia's only Doctor of Science in Information Technology (DSIT) program, faculty recognized this developmental challenge and embedded reflective journaling as a core pedagogical strategy woven throughout the program. Beginning in the introductory course, ITEC7000, and continuing through subsequent courses like ITEC7220 Technology Leadership Development, journaling is serving as a bridge between students' established professional identities and their emerging scholarly congruence. This article examines the design and implementation of journaling in the online DSIT program and the two face-to-face weeklong residency experiences that serve as bookends at the start and finish of the program. By drawing on student voices, the article highlights the unexpected benefits of reflective practice for IT professionals.

Theoretical Framework

Reflective practice in professional education at the doctoral level is common practice in programs across the world (Muir & Solli, 2022). These practices based on reflection and mindfulness draw heavily from Schon's concept of reflective practitioner and Mezirow's transformative learning theory (Sletto, et al., 2020). For doctoral students in technical fields, journaling serves multiple functions. Journaling develops metacognitive awareness (Pletcher, 2024). Journaling facilitates professional identity construction, reconstruction, and generation (Klefbeck, 2025). Journaling also creates space for cognitive and emotional processing required during intensive academic work. Through validation and standardization of self-reflection, journaling serves as the vehicle to give students permission to explore their own identity, questions, fears, and celebrations of success (Gao, et al., 2025). Unlike information technology master's level of education which emphasizes knowledge application, doctoral education in the information technology field requires students to generate new knowledge, a significant shift that can trigger imposter syndrome and identity dissonance, particularly for seasoned career professionals who are entering academia again after years of experience in the field (Bertello, 2025).

In distance learning context and in limited face-to-face designed programs like this one, students often lack the informal socialization opportunities of traditional campus-based programs, so structured reflection becomes even more critical (Ari, et al., 2022). Journaling creates a private space for students to process their experiences, confront doubts, and articulate emerging understandings without the pressure of formal writing assessment expectations or peer judgment. (Calle-Arango & Reyes, 2023).

Program Context

The Doctor of Science in Information Program is a 54-credit hour program which is highly competitive with only 20-24 applicants typically accepted into the program. There are two face-to-face required residency experiences. One is at the beginning of the program at the end of the initial course, ITEC7000. Students gather to

meet each other, learn about the program, and hone skills to support their learning journey ahead. Students progress through the program as a cohort, taking courses in sequence over three years (Sandoval, 2022). When the program was designed, the coursework was established with journaling woven throughout multiple courses (Rigole, 2019). Specific courses which focus on journaling are ITEC7000, Doctoral Seminar I; ITEC7220, Technology Leadership Development; and ITEC8950, Doctoral Seminar II. The instructor for these courses is consistently the same professor, and each course has been designed for journaling assignments to scaffold students' development from doctoral novices to confident scholar-practitioners (Mercer et al., 2025). It is important to denote that students have the autonomy to choose their journaling format. They can use traditional pen and paper, a journaling application, or a running Microsoft Word or Google document. This autonomy aligns with established research findings that format is not as important as productivity and reflection in the writing (Warr & Sampson, 2020).

Beginning the Program with Writing Fluency

ITEC7000 introduces students to doctoral-level expectations while building foundational habits and mindsets for success. Rather than diving immediately into technical trends, practices, and theory, the course prioritizes meta-level preparation through four structured journal entries and daily reflections during the culminating on-campus residency immersion week (Mercer, 2025). Journal Entry 1 asks students to reflect upon the course's textbook, *Atomic Habits* by James Clear. Students create their own toolkit of habit-formation strategies, recognizing that successful doctoral completion requires systems and routines, not merely motivation (Clear, 2018). This assignment establishes early that the doctoral journey demands intentional behavior change and consistency.

In Journal Entry 2, students reflect upon imposter syndrome while considering a growth mindset. These are critical constructs for doctoral students (Garcia Marrugo & Anson, 2025). Students are encouraged to articulate strategies to avoid imposter syndrome traps and foster growth mindset throughout the journey ahead. By naming these challenges explicitly at the program's outset, the course's journaling assignment normalizes the uncertainty and self-doubt that often accompany doctoral study (Stevens & Caskey, 2023). Journal Entry 3 engages students with the tension between immediate gratification and long-term goals. Students reflect on the statement, "success is the result of prioritizing long-term desire over short-term gratification." Students are encouraged to strategize ways to combine immediate rewards with long-term goals. This prompt acknowledges the sustained effort required for doctoral program completion while encouraging students to build sustainable motivation structures (Stojanović & Collins, 2025). The ITEC7000 course online activity concludes with Journal Entry 4 which focuses on goal-setting and accountability. Students articulate specific goals for their doctoral journey and identify accountability partners within their personal and professional lives. The entry encourages students to take ownership of their progress as others see them work through the program (Elmore, 2021).

Beyond these structured entries, students engage in daily journaling during the week-long face-to-face residency experience at the end of ITEC7000. Some days include specific prompts based on the day's activities while other days offer free-writing opportunities as a way to wrap up the day's activities. On Day 4, the final day of the residency experience in ITEC7000, students engage with Brian Solis's article, "The Great Awakening: Your personal and professional life is about finding and creating yourself" as a culminating reflection activity that synthesizes eight weeks of journaling and doctoral work preparation. This concluding writing prompt emphasizes that the doctoral journey is fundamentally about identity construction, deconstruction, and regeneration while exploring self-discovery themes that continue throughout the doctoral program. The combination of structured and open-ended reflection allows students to develop comfort and familiarity with the journaling process while maintaining flexibility for emergent insights and discoveries (Bertello, 2025).

Continued Journaling in the DSIT Program

Approximately one year into the program, students take a technology leadership development course, ITEC7220. This course continues with reflective practice established in ITEC7000. Journaling shifts from general doctoral preparation to specific leadership development, questioning, and exploration. There are three entries which build toward a comprehensive leadership development program (Mercer, 2025). The journal entries focus on leadership competencies, growth areas, and students conclude with a self-analysis of their skills in comparison to the skill sets outlined in David Epstein's *Range* (2019), the course textbook. Students are encouraged to continue their journaling on their own throughout the program to continue their learning journey of self-analysis. With the final

course in the program, ITEC8950, Doctoral Seminar II, students reflect upon their journey, their professional identities, and their personal identities (Mercer et al., 2025).

Student Experiences: Themes from Graduate Voices

As students near program completion, they are asked to provide advice to incoming cohort students. These reflections reveal several significant themes about the role of journaling in the Doctor of Science in Information Technology program experience.

Unexpected Value for Technical Professionals: Multiple students expressed initial skepticism about journaling in an IT program. One graduate noted, “When we started journaling in ITEC7000, I was not sure what I had gotten into. I was really expecting that we would be diving into AI tools, coding, cybersecurity, and more.” This expectation reveals a common assumption that doctoral education simply extends technical training to higher levels. Students discovered, however, that journaling provided essential skills, “Journaling is woven throughout this program, and it is a good thing. Would I do it on my own? Or have I done it on my own? No, but if the crisis arises or if I need to, I have the skillset to journal now.”

Cathartic Self-Reflection: For professionals accustomed to external problem-solving, turning analytical skills inward proved challenging but valuable. As one student observed, “Journaling did not come naturally to me as an IT professional. I usually deal with code, strategy, and compliance rules. Talking about myself wasn’t easy, but once I got into it, I can see that the process was cathartic and eye-opening.” The emotional processing facilitated by journaling helped students navigate the stress and uncertainty of expectations in doctoral-level work.

Writing Fluency Development: Perhaps one of the most surprising benefits was improving writing fluency. One graduate noted, “Who knew that I would become a better writer as part of an IT program? Honestly, I was just looking to graduate and be a better technical writer to get through my final project.” Regular, low stakes writing practice reduces writing anxiety, “Journaling increased my fluency. It also increased my ease with writing. I didn’t stare at the blank page in the same way when I started a fresh assignment. I just got started, and that’s very different from my previous graduate experiences when I had anxiety with a new assignment.”

Identity Transformation: The most profound theme involved professional identity reconstruction. A graduate noted, “I didn’t realize so much work would be on identity. I was pleasantly surprised that the professors and the coursework spent time making us identify who we are and how we progress through the degree program.” This intentional focus on identity proved essential. “I realized that I would no longer be the taker of knowledge, but I was expected to produce and share knowledge. Thank goodness the program focused on this because when I graduated, I knew I was not an imposter and I earned that right to put DSc after my name on LinkedIn.”

Discussion: Implications for Distance Learning Practice

These findings suggest several implications for distance learning administrators and faculty members who are designing online doctoral programs in technical fields. First, reflecting practice deserves intentional curricular space, even in and perhaps essentially in technically oriented programs. The assumption that IT professionals need only advanced technical training overlooks the metacognitive and identity work required for doctoral success and completion. Journaling provides structured opportunities for this development and sustainment. Secondly, sequencing matters. ITEC7000’s progression from habit formation to mindset development to goal setting creates a developmental scaffold. ITEC7220’s continuation of reflection one year later reinforces that professional development is ongoing, not a one-time event during orientation. Third, low stake writing practices yield unexpected benefits. Students developed writing fluency not through formal academic writing assignments but through regular informal journaling. This finding suggests reducing writing anxiety may be as important as establishing and sustaining writing conventions and expectations. Finally, addressing key concepts like imposter syndrome and identity explicitly rather than assuming students will navigate these issues independently, appears to support successful degree completion and confident professional integration of doctoral credentials.

Conclusion

Integrating reflective journaling into an online Doctor of Science in Information Technology Program challenges conventional assumptions about what IT professionals need from doctoral education. The evidence from student voices suggests that technical experience alone is insufficient; students require structured opportunities to develop metacognitive awareness, process identity shifts, and build sustainable habits for scholarly culminating work. For other programs, the model presented here offers a replicable approach: begin with foundational reflection in an introductory course, continue reflective practice in subsequent courses, and design prompts to scaffold from concrete skill building to abstract identity exploration. The investment in journaling yields dividends in student confidence, writing fluency, and successful navigation of the journey.

As one graduate summarized, journaling may not come naturally to IT professionals, but “once I got into it, it was a good thing for me.” This endorsement captures the essence of effective pedagogy through writing. Doctoral level education should create learning opportunities that allow for transformation through reflective journal writing.

References

- Ari, F., Vasconcelos, L., Tang, H., Grant, M. M., Arslan-Ari, I., & Moore, A. L. (2022). Program Evaluation of an Online Ed.D. in Learning Design and Technologies: Recent Graduates’ Perspectives. *TechTrends: Linking Research & Practice to Improve Learning*, 66(4), 699–709. <https://doi.org/10.1007/s11528-022-00744-7>
- Bertello, A. (2025). From stormy waters to navigable seas: How Phd students make use of coping mechanisms to deparalyze pragmatic paradoxes. *Academy of Management Learning & Education*, 24(3), 317–346. <https://doi.org/10.5465/amle.2023.0596>
- Calle-Arango, L., & Ávila Reyes, N. (2023). Obstacles, facilitators, and needs in doctoral writing: A systematic review. *Studies in Continuing Education*, 45(2), 133-151.
- Clear, J. (2018). *Atomic Habits*. Avery, an imprint of Penguin Random House.
- Elmore, R. L. (2021). Reflections on Mentoring Online Doctoral Learners through the Dissertation. *Christian Higher Education*, 20(1/2), 57–68. <https://doi.org/10.1080/15363759.2020.1852132>
- Epstein, D. J. (2019). *Range: Why generalists triumph in a specialized world*. Riverhead Books.
- Gao, Q., Hall, A., Bache-Wiig, G., Counts-Davis, A. C., Orija, M., & Osho, L. (2025). Cultivating the Well-Being of Ph.D. Students in Early Childhood Education Through Mindfulness. *Early Childhood Education Journal*, 53(7), 2517–2529. <https://doi.org/10.1007/s10643-024-01752-3>
- García Marrugo, A. I., & Anson, D. W. J. (2025). The Impact of an Online Doctoral Writing Group: Increased Confidence, Feedback Literacy, and Wellbeing. *Australian Review of Applied Linguistics*, 48(2), 273–296. <https://doi.org/10.1075/aral.24012.gar>
- Klefbeck, K. (2025). The Role of Reflection in Doctoral Education: An Integrative Review of Approaches to Supporting Well-Being and Developmental Growth. *Education Sciences*, 15(1), 99.
- Mercer, V., Lingelbach, K., & Sandoval, V. Z. (2025). Evaluations and outcomes of experiences of two cohorts in an information technology Doctor of Science program: A comparative analysis. *Issues in Information Systems*, 26(1), 217–231. https://doi.org/10.48009/1_iis_117
- Muir, T., & Solli, K. (2022). “And Thou Shall Find Your Path”: The Manifesto in Doctoral Writing Development. *Journal of Academic Writing*, 12(1), 68–85. <https://doi.org/10.18552/joaw.v12i1.817>

- Pletcher, B. (2024). "Where the Rubber Meets the Road": Providing Students with Rigorous Learning Experiences in a Curriculum and Instruction Doctoral Residency Seminar. *College Teaching*, 72(3), 207–215. <https://doi.org/10.1080/87567555.2022.2151969>
- Rigole, N. (2019) "Doctor of Science in Information Technology" proposal to academic affairs." [unpublished] Middle Georgia State University School of Computing, Department of Information Technology.
- Sandoval, Z. (2022) "Program requirements." [unpublished] Middle Georgia State University School of Computing, Department of Information Technology.
- Sletto, B., Stiphany, K., Futrell Winslow, J., Roberts, A., Torrado, M., Reyes, A., Reyes, A., Yunda, J., Wirsching, C., Choi, K., & Tajchman, K. (2020). Demystifying Academic Writing in the Doctoral Program: Writing Workshops, Peer Reviews, and Scholarly Identities. *Planning Practice & Research*, 35(3), 349–362. <https://doi.org/10.1080/02697459.2020.1748331>
- Stevens, D. D., & Caskey, M. M. (2023). Building a Foundation for a Successful Doctoral Student Journey: A Scholarship of Teaching and Learning Investigation. *Innovative Higher Education*, 48(3), 433–455. <https://doi.org/10.1007/s10755-022-09624-7>
- Stojanović, M., & Collins, R. A. (2025). Improving Doctoral Student Experience and Success in an Online Adult Education Program: A Needs Assessment of a Faculty-Led Doctoral Meeting Group. *Adult Learning*, 1. <https://doi.org/10.1177/10451595251390465>
- Warr, M., & Sampson, C. (2020). Achieving Critical Dialogue in Online Doctoral Programs: an exploration of student perceptions and experiences with multiple modalities. *TechTrends: Linking Research & Practice to Improve Learning*, 64(6), 860–867. <https://doi.org/10.1007/s11528-020-00499-z>
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NUDGE Students Toward Success

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Abstract

In an increasingly digital and cognitively demanding world, educational institutions are exploring innovative strategies to improve student engagement and success. This paper examines the role of electronic nudges (reminders) and their relationship to the theory of distributed cognition (Salomon, 1997). Drawing on insights from educational practitioners and psychological frameworks, the study highlights how small, technology-mediated interventions can significantly influence student behavior and learning outcomes across all methods of course delivery. The study leveraged the Learning Management Systems (LMS), as one of the key environments where cognition is extended and supported, and low-cost processes to test the impact of nudges. The findings suggest that integrating electronic nudges within distributed cognitive systems can lead to measurable improvements in participation, reduced drop, fail, and withdraw (DFW) rates, and increased student success.

Introduction

The landscape of higher education in the United States has changed drastically in the last several years (Lawrence et al., 2019). COVID-19 required schools to transition online overnight, and in many cases, they were underprepared to help students access academic and non-academic resources that they needed to be successful (Mary Christine Institute, 2023). The pandemic amplified mental distress especially for students of color, low-income, and those underrepresented as they “bore the brunt of COVID-19’s impact” (Mary Christine Institute, 2023). About 40% of students do not complete their degree in the US (Page et al., 2020; Palmer, 2024). This is coupled with students of low socio-economic status (SES) being the most vulnerable to dropping out and those that lack academic preparedness (Hanson, 2025).

Additionally, college students today are disengaged and procrastinate, impacting the propensity of them passing classes and gaining intellectual skills (Mintz, 2025). Research has shown a decrease in student engagement, which impacts students' persistence and graduation, across all higher education metrics including academic, research, extracurricular, civic, and career (Chirikov et al., 2025, EAB, 2024, Mowreader, 2025). Students study less outside of class, and they interact less with their instructors and peers (EAB, 2024, Mowreader, 2025). Many students intentionally miss exams or choose to purposely fail to complete assignments (Darroch, 2025). Traditional approaches to student engagement are often insufficient in addressing these challenges. This paper explores how electronic nudges serve as an effective mechanism to enhance engagement, regardless of modality (method of course delivery). Most nudge research in higher education has been online learning focused, little has been tested on the impact of nudging across modalities (face-to-face, on-campus, hybrid, and online) (Plak et al., 2023; Mohammadhassan et al., 2022; Brown et al., 2024). Additionally, it situates these interventions within the broader theoretical framework of distributed cognition, which emphasizes the role of external tools or artifacts in supporting human thinking and learning processes.

Electronic Nudges

Developed as a theoretical framework in economics, nudging uses subtle and indirect changes in an environment to change behavior and decision making (Thaler and Sunstein, 2008). Used in higher education to influence a student to complete a high-stakes task, electronic nudges for students are more than simple reminders. They are strategically designed prompts aimed at influencing behavior and encouraging active participation. These nudges can take various forms, including notifications, emails, and Learning Management System (LMS) alerts. When implemented thoughtfully, electronic nudges can bridge the gap between student intention and action, thereby improving engagement and retention.

Psychological Foundations

Students are expected to manage increasing volumes of information while balancing complex personal and academic responsibilities. This includes education technology that continues to evolve alongside an increasingly technology-rich environment. Distributed cognition provides a critical lens for understanding how learning occurs in modern environments (Hutchins, 1995). The theory posits that cognitive processes are not confined to the individual mind but are distributed across tools, technologies, and social contexts. In a tech-rich world, these distributed artifacts include our cell phones, software, and digital platforms to extend human cognitive capabilities. Increasingly in education, distributed cognition is evident in the widespread use of LMS, which serves as centralized hubs for information storage, communication, and task management.

Coupled with the framework of electronic nudging in higher education, this research used theories of negative reinforcement, where a behavior is strengthened or increased by removing or stopping a negative or annoying stimulus (Scollenberger, et al., 2025). Think of a seatbelt alarm. The function is to continue to make a noticeable noise until the driver makes it stop (buckles their seatbelt). For this research, the behavior targeted is on-time submission and submission rates in general. Negative reinforcement leverages cognitive biases such as procrastination and forgetfulness and can help students stay on track. By reducing cognitive load and decision fatigue, these prompts enable learners to focus more effectively on academic tasks.

Research Questions

Are students more likely to turn in assignments and turn them in on time if they receive nudges (proactive reminders via email or text message)? Do “nudges” for instructor-graded assignments impact DFW rates?

Methodology

The research project, called NUDGE (Notify Undergraduates about Due dates and Grades Electronically), enhances student engagement and success using negative reinforcement framework and distributed cognition theory. Automated text notifications prompt students to submit assignments. Two Quality Improvement Plans (QIP) pilots were conducted in 2025 at a broad-access regional university that serves over 16,000 students at both the undergraduate and graduate levels (University, 2026).

System Framework

Using D2L’s (Desire 2 Learn’s) Brightspace LMS platform API calls were utilized to gather specific course data including lists of assignments, due dates, and submission times. Structured Query Language (SQL) then linked to LMS, Student Information System (SIS), and user data. Once all data is collected, logic is then used to determine if a student needs a due date reminder (nudge). If the student has a submission listed for an assignment, no notifications are sent. If a submission is not found in the system, notifications are sent. Third-party software is used, along with scripts developed in-house to send messages. The technological principles of NUDGE were built with tools and resources already available, making it low-cost and scalable.

The student receives a message based on one of 3 factors (the assignment is due in 3 days, the assignment is due in 1 day, or the assignment is past due). If the student submits the assignment at any time during the notification range,

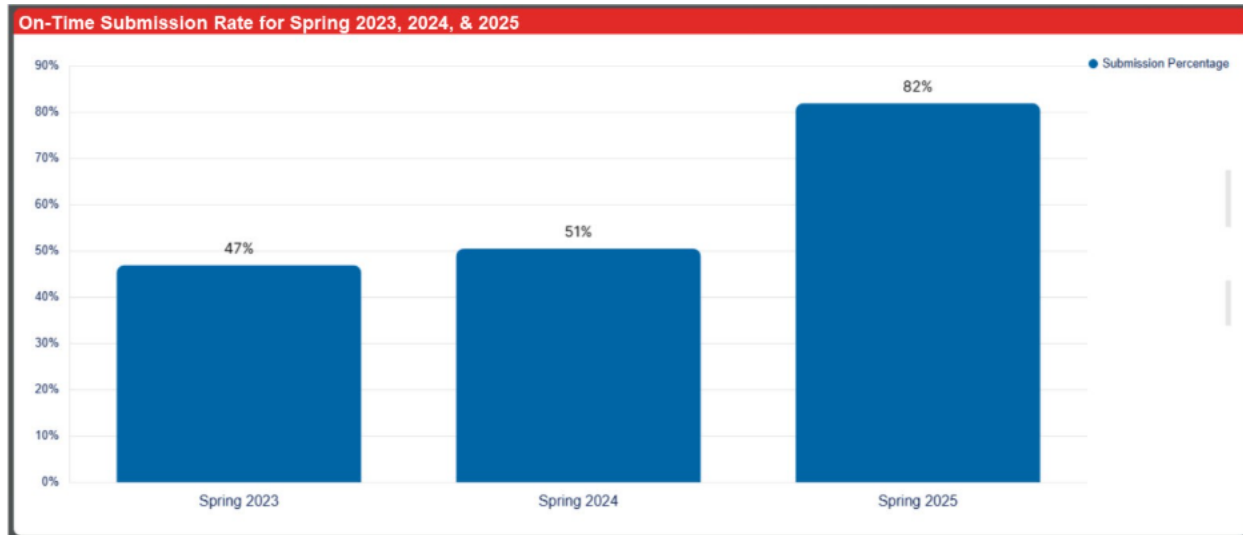
future notifications will not be sent. These notifications were designed to be supportive, not punitive. The notifications, via text:

- 3 Days Before Assignment is Due: Just a friendly reminder that {assignment name} in {Course Name and section} with {Instructor Name}, is due in 3 days. If you have already submitted the assignment, thank you for turning it in before the due date. Great job! Campus and Online resources {webpage link}.
- 1 Day Before Assignment is Due: Just a friendly reminder that {assignment name} in {Course Name and section} with {Instructor Name} is due tomorrow. If you have already submitted the assignment, thank you for turning it in before the due date. Great job! Campus and Online resources {webpage link}.
- 1 Day After Assignment is Due: Just checking on you! {Assignment Name} that was due yesterday was not turned in. Please consult the course policy and reach out to your instructor to discuss options. If you have already submitted the assignment, thank you. Great job! Campus and Online resources {webpage link}.

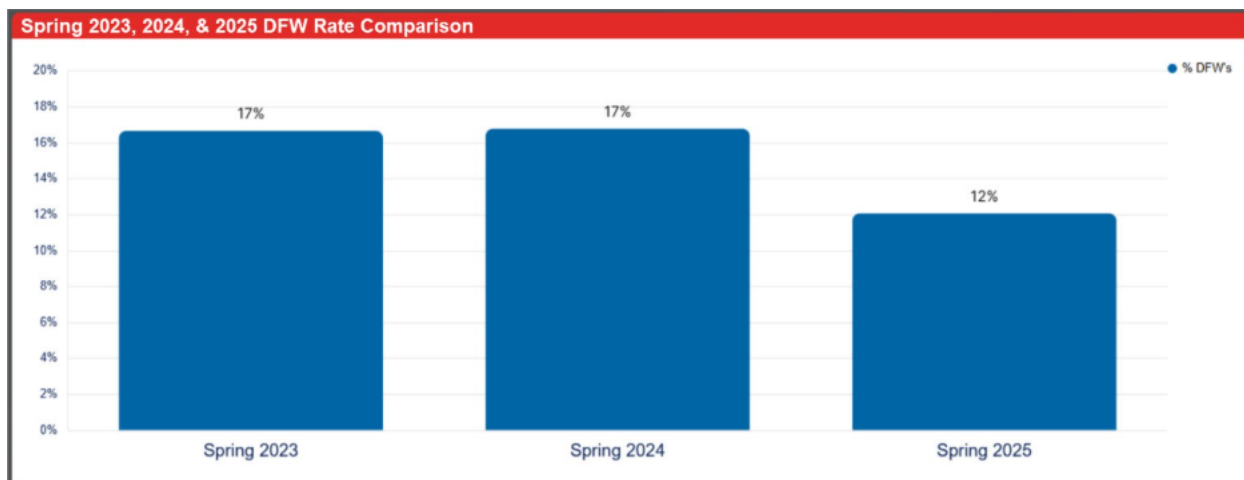
In the Spring 2025 pilot, there were 32 courses (27 unique instructors) and 1277 students. The courses were selected by the deans of each college. In the Fall 2025 pilot, there were 101 courses (62 unique instructors) and 3727 students. Again, deans were asked to select courses for the pilot. The increase in sample was to further test the impact of the results found in Spring 2025.

Results

Results from the weekly data from the Spring 2025 pilot showed that the pilot on-time submission rates significantly outperformed previous semesters. A chi-square analysis showed that this cumulative difference was not likely due to chance: $\chi^2 (1, N=7,765) = 17.90, p < .001$. A Chi-square test demonstrates that the difference in submission results between semesters was highly unlikely to be due to chance, $\chi^2 (4, N=66,418) = 2672.49, p < .001$. These results support the hypothesis that notifications significantly improved submission rates.



Using descriptive statistics, the DFW rates were positively improved in the Spring 2025 pilot compared to the past two Spring semesters and in the pilot group compared to the non-pilot group. See the graph below. To test the extent to which the differences in the descriptive statistics are not due to chance, a one-way analysis of variance (ANOVA) was conducted on Spring 2023, Spring 2024, and Spring 2025 GPAs. The results showed that the semester responsible for the significant difference identified in the omnibus test is Spring 2025, the semester in which the notification pilot study was implemented.



With the positive results in the Spring 2025 pilot, we ran a second pilot in Fall 2025 that tripled the size of the initial pilot. During Fall 2025, we shifted NUDGE communications from email to text messages to test if the impact would hold and increase due to using text messages, which students seem to respond to over email. With the expansion and delivery changes, on-time submission rates for Fall 2025 closely matched those of the Spring 2025 pilot. When comparing DFW rates from Fall 2024 to Fall 2025, there was a 2% decrease in DFW rates for comparable courses. This decrease suggests a correlation between NUDGE implementation and improved student engagement.

When comparing the Spring 2025 pilot to the Fall 2025, early submission rates increased by 13%. This compelling finding indicates that students are more likely to respond to nudges sent via text. This also speaks to the positive impact of negative reinforcement.

Discussion

As shown above, the integration of electronic nudges within distributed cognitive systems has significant implications for student outcomes, regardless of course modality. Students in face-to-face on-campus courses received these nudge messages as an added benefit to the interactions and support received when in class. The comparison of on-time submission rates with the past semester comparison groups (a set of comparable courses taught in each of the two past Spring semesters) also provides evidence that nudges do have an impact on if and when students submit their assignments. Additionally, the positive results in lowering the DFW rates in the pilots further indicate the impact of nudges.

By providing timely and targeted prompts, institutions can foster greater accountability, reduce missed deadlines, and promote consistent participation. These small interventions (which can be low-cost and scalable), when applied systematically, can lead to substantial improvements in both engagement and academic performance.

Student feedback from both the Alpha (Spring 2025) and Beta (Fall 2025) pilots indicates that students found the notifications helpful and would like for the NUDGE program to continue. In Spring 2025 (email notifications), 75% of students reported finding the “nudges” helpful. In Fall 2025 (text notifications), 83% of students reported finding the “nudges” helpful. The increased percentage of students finding the nudges helpful in Fall 2025 further supports the idea that students prefer text messages over email communication. For example, one participant mentioned, “I found it helpful because I work a full time job. Sometimes I forget what day it is because I work nights. These text messages are helpful for me...”.

Conclusion

In a fast-paced, globalized world, learners are constantly managing multiple streams of information. Electronic nudges function as external cognitive supports, aligning closely with the principles of distributed cognition. By

offloading memory and organizational tasks to digital systems, students can allocate more cognitive resources to learning and critical thinking.

Learning Management Systems represent a key site where distributed cognition operates. These platforms store course materials, deadlines, and communication channels, effectively acting as extensions of students' cognitive processes. Electronic nudges embedded within LMS environments enhance this functionality by actively guiding student behavior. Utilizing the LMS and other readily available tools and resources, universities can implement programs similar to this at a low cost.

This paper demonstrates that electronic nudges, when understood through the lens of distributed cognition, offer a powerful tool for enhancing student engagement. In an era characterized by information overload and competing demands, these digital interventions help students navigate their learning environments more effectively. As educational institutions continue to adopt technology-driven solutions, the strategic use of electronic nudges represents a promising pathway toward improved student success.

Future Research

Further empirical studies are needed to quantify the long-term impact of electronic nudges across diverse student populations. We are adding to the study with a Spring 2026 pilot, there were 174 courses (97 unique instructors) and 4411 students. Again, the courses represent all offered modalities: fully online, face-to-face on-campus, and hybrid courses. Our focus is on high DFW rate sections, and we are testing to see the impact of DFW rates when nudges are used.

Additionally, research exploring the optimization of nudge design and delivery could provide deeper insights into maximizing their effectiveness within distributed cognitive systems.

References

- Brown, A., Lawrence, J., Axelsen, M., Redmond, P., Turner, J., Maloney, S., & Galligan, L. (2024). The effectiveness of nudging key learning resources to support online engagement in higher education courses. *Distance Education*, 45(1), 83–102. <https://doi.org/10.1080/01587919.2024.2303491>.
- Chirikov, I., Douglass, J., & Thomson, G. (2025). The Multi-Engagement Model: Understanding Diverse Pathways to Student Success at Research Universities. *UC Berkeley: Center for Studies in Higher Education*. Retrieved from <https://escholarship.org/uc/item/3c27q1kd>.
- Darroch, J. (2025, May 30). *Students are less engaged; Stop blaming COVID*. Opinions: Views. Retrieved July 18, 2025, from <https://www.insidehighered.com/opinion/views/2023/05/30/students-are-less-engaged-stop-blaming-covid-opinion>.
- EAB (2024). *The Student Readiness Crisis: A Mandate for Change in Education and the Workforce*. Insight Paper. Retrieved September 18, 2025, from <https://chat.eab.com/The-Student-Readiness-Crisis-EAB>.
- Hanson, M. (2025). College Dropout Rates. Retrieved July 10, 2025, from <https://educationdata.org/college-dropout-rates#:~:text=43.1%20million%20Americans%20were%20college,unemployed%20than%20any%20degree%20holder>.
- Hutchins, E. (1995). *Cognition in the Wild*. A Bradford Book.
- Lawrence, J., Brown, A., Redmond, P., & Basson, M. (2019). Engaging the disengaged: Exploring the use of course-specific learning analytics and nudging to enhance online student engagement. *Student Success*, 10(2), 47-58. <https://doi.org/10.5204/ssj.v10i2.1295>.

- Mary Christie Institute (2023, January 11). *The Mental Health and Wellbeing of Young Professionals*. Mental and Behavioral Health. Retrieved September 18, 2025, from <https://marychristieinstitute.org/reports/the-mental-health-and-wellbeing-of-young-professionals/>.
- Mintz, S. (2025, June 25). *Re-Engaging Students in an Age of Distraction*. Columns: Higher Education Gamma. Retrieved July 10, 2025, from <https://www.insidehighered.com/opinion/columns/higher-ed-gamma/2025/06/26/why-students-tune-out-and-how-change>.
- Mohammadhassan, N., Mitrovic, A., & Neshatian, K. (2022). Investigating the effect of nudges for improving comment quality in active video watching. *Computers and Education*, 176. <https://doi.org/10.1016/j.compedu.2021.104340>.
- Mowreader, A. (2025, April 11). *Date: Students less involved on campus post-pandemic*. Student Success: College Experience. Retrieved July 18, 2025, from <https://www.insidehighered.com/news/student-success/college-experience/2025/04/11/fewer-students-engage-college-activities-after>.
- Palmer, K. (2024, April 10). Study: Nearly 40 Percent of Students Started, Never Finished College. Students: Academics. Retrieved July 3, 2025, from <https://www.insidehighered.com/news/students/academics/2024/04/10/study-half-students-started-never-finished-college>.
- Page, L. C., Lee, J., & Gehlbach, H. (2020). Conditions under which college students can be responsive to nudging. *EdWorking Papers*, No. 20-242. <https://cdn.niss.gsu.edu/app/uploads/2022/08/07232149/ai20-242-1.pdf>
- Plak, S., Van Klaveren, C., & Cornelisz, I. (2023). Raising student engagement using digital nudges tailored to students' motivation and perceived ability levels. *British Journal of Educational Technology*, 54, 554-580. <https://doi.org/DOI: 10.1111/bjet.13261>.
- Salomon, G. 1997. Distributed cognitions: psychological and educational considerations. Cambridge Cambridgeshire; New York: Cambridge University Press.
- Sollenberger, N. A., Cummings, L. R., Freitag, J., Trucco, E. M., Gomez, S., Giraldo, M., Muse, G., Mattfeld, A., McMakin, D. L. (2025). Associations between sleep health, negative reinforcement learning, and alcohol use among South Florida college students with elevated internalizing symptoms. *Alcohol*, 124, 23-34. doi:<https://doi.org/10.1016/j.alcohol.2024.04.006>.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: improving decisions about health, wealth, and happiness* / Richard H. Thaler, Cass R. Sunstein. Yale University Press.
- University of West Georgia. 2026. Just the Facts. https://www.westga.edu/administration/provost/iea/just-the-facts.php?gad_source=1&gad_campaignid=23647335513&gbraid=0AAAAABV8bk90YCKnIb77bY-b5CA9I9fu0&gclid=CjwKCAjwnZfPBhAGEiwAzg-VzKfxQFyo7cUdvCA6rlTkkRyCAWS5eoYh14-NtaD5QMmYQn-5q1b1YhoCeGMQAvD_BwE.
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Building and Leading Fully Online Campuses: Strategy and Data in Practice

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Abstract

Many institutions have expanded online course offerings, yet far fewer have built fully functioning online campuses with clear governance, consistent quality, and measurable outcomes. This paper presents a practitioner framework grounded in the author's experience establishing online operations across four institutional contexts: Lock Haven University of Pennsylvania, Ana G. Méndez Virtual Campus, TCC Connect Campus, and Lone Star College–Online. The framework centers on three areas of focus—governance and operating model, scalable stakeholder engagement, and data-informed strategy—enabled by a continuous improvement cadence that converts metrics into decisions and accountability.

Keywords: Leadership, strategic planning, online campus, practitioner framework, continuous improvement

Introduction

Across U.S. higher education, the development of fully functioning online campuses—units with their own governance authority, operational infrastructure, and sustained accountability for student outcomes—remains uncommon. Successive CHLOE reports document that while online enrollments have grown substantially, operational maturity remains unevenly distributed across the sector (Garrett et al., 2022; Garrett et al., 2023). Research on time-to-degree completion reinforces the urgency: Complete College America (2011) demonstrated that time itself is a central barrier to degree completion, and Witteveen and Attewell (2021) found that delayed time-to-degree significantly reduces post-college earnings. Fully online campuses, when designed with intentional scheduling and accelerated pathways, represent a promising structural response to these barriers. This paper addresses that gap from a practitioner-scholarship standpoint, distinguishing planned, purpose-built online campuses from the emergency remote teaching that characterized many institutions' pandemic response (Hodges et al., 2020).

The methodological tradition informing this work is Boyer's (1990) scholarship of application. The claims advanced here are derived from structured reflection on institutional evidence—enrollment data, success metrics, and operational outcomes—collected across four campus-building experiences spanning eighteen years. The author occupied a leadership role in each institution, which provides depth but also limits perspective to that of the decision-maker.

Area of Focus One: Governance and Operating Model

The most consequential decision in building an online campus is structural: Will it operate as a centralized entity with its own governance authority, or as a distributed coordination through existing departments? This choice shapes every downstream decision about staffing, curriculum, advising, and budget.

At Lock Haven University of Pennsylvania, the author merged the university's eCampus and Academic Technology operations into a single Office of Academic Technology—a newly created unit reporting to the Provost. This consolidation required building a departmental structure, budget framework, and governance infrastructure from the ground up. The Academic Technology Advisory Committee became the vehicle for cross-functional alignment. Between Spring 2008 and Spring 2011, online enrollment grew by 57%, faculty participation increased by 42%, and course offerings grew by 37%. A full LMS migration completed in six months—transferring 2,200 students without service interruption—validated the consolidated model's operational capacity (Morales, 2020).

At Ana G. Méndez Virtual Campus in Puerto Rico—established in 2009 as the institution’s first fully virtual university at the graduate level—the author built a fully online operation from the ground up within a private, MSCHE-accredited system, offering competency-based graduate programs through a dual-language instructional model. The governance lessons from Lock Haven proved directly transferable, even as the regulatory, cultural, and linguistic context demanded substantial adaptation.

At TCC Connect Campus, established in 2014 as the first fully online campus in Texas, the centralized model created a standalone entity with distinct accountability structures (Morales, 2023; 2024). At LSC-Online, launched in 2022 within the Lone Star College System, the campus operates within a multi-campus system requiring continuous alignment with system-level policies while preserving operational coherence.

Area of Focus Two: Scalable Stakeholder Engagement

Building a high-performing online campus requires sustained engagement with faculty governance bodies, academic departments, student services, and workforce partners. Faculty engagement is both the highest-leverage and most frequently underinvested dimension: online instructors report lower institutional affiliation and less access to professional development than ground-based counterparts (Richardson et al., 2024; Baran & Correia, 2014).

At Ana G. Méndez, the author introduced a faculty coaching initiative as a deliberate strategy to improve assessment, retention, and faculty performance (Morales, 2019). This model—which operationalized the Community of Inquiry framework’s teaching presence (Garrison et al., 1999)—proved sufficiently effective to become a core component at TCC Connect, where it was integrated into a structured ten-step quality assurance process (Kirkpatrick & Morales, 2024). Research confirms that structured interventions that increase instructor presence significantly improve student retention (Rosser-Majors et al., 2022). Online enrollment at the Virtual Campus grew 75% in AY 2011–2012, validating the institutional capacity built to serve it. Stakeholder engagement must also be designed to scale; frameworks such as Quality Matters provide structured standards that maintain rigor as enrollment grows (Quality Matters, 2022).

Area of Focus Three: Data-Informed Strategy

The distinction between a data-rich institution and a data-informed one is not semantic. A data-informed online campus is one where outcome gaps are identified at the course level within a semester, and every intervention is traceable to a data signal that triggered it. The minimum viable KPIs include course success rates, term-to-term retention, and early-course momentum indicators—each owned by a designated decision-maker with authority to act.

At TCC Connect, eLearning enrollments grew 37% from Fall 2021 to Fall 2024 while success rates followed a dip-and-recovery trajectory: from 76.4% in Fall 2021 to 74.4% in Fall 2022 as enrollment surged, then recovering to 76.8% by Fall 2024—with retention steady at 89–90% throughout (Table 1). Quality was temporarily stressed by growth, and the continuous improvement cadence provided the mechanism for recovery. Wintermester sections consistently achieved 86.6–88.9% success rates, and monthly-start courses improved from 77.0% to 83.1%—scheduling formats that directly address the time-to-degree barriers documented by Complete College America (2011) and Witteveen and Attewell (2021). Non-punitive data use is essential: when data is positioned as a shared diagnostic rather than an evaluative instrument, faculty participation in quality improvement increases.

Table 1. TCC Connect Campus eLearning Enrollment, Success Rates, and Retention (Fall Terms)

Semester	Enrollments	Success Rate	Retention Rate
Fall 2021	24,430	76.4%	90%
Fall 2022	27,483	74.4%	89%
Fall 2023	29,059	74.8%	90%
Fall 2024	33,518	76.8%	90%

Source: Tarrant County College Institutional Research, (2025).

A Continuous Improvement Cadence

The three areas of focus require a continuous improvement cadence—a structured cycle in which governance decisions are revisited, stakeholder relationships are strengthened, and data findings are converted into interventions on a predictable schedule. Kotter’s (2007) emphasis on building short-term wins into organizational change is especially applicable: online campus leaders who establish measurable improvement milestones in the first year create the momentum necessary for longer-term transformation.

When the author assumed the inaugural presidency of LSC-Online in 2022, the campus was already delivering quality online education. Across 23 disciplines and three academic years, LSC-Online achieved a 77.9% overall success rate—outperforming the system-wide online average by 2.9 points and the face-to-face average by 1.3 points (LSCS AIR, 2025). In 15 of 23 disciplines, LSC-Online ranked first system-wide for online success rates (Table 2). The leadership charge is to drive these outcomes higher, close performance gaps when they lag, and scale the operation—contact hours grew from 55,504 in Fall 2022 to 198,090 in Fall 2024—without sacrificing instructional rigor.

Table 2. LSC-Online Success Rates vs. LSCS System Online and Face-to-Face, AY 2022–25 (Selected Disciplines)

Discipline	LSC-Online	LSCS Online	LSCS F2F
Chemistry	86.5%	72.2%	69.2%
EDUC 1300	80.8%	70.5%	81.0%
BCIS	74.1%	63.9%	77.4%
Education	80.7%	71.0%	78.7%
English	74.5%	66.1%	67.6%
Accounting	90.7%	83.5%	85.0%
Government	88.6%	82.0%	77.1%
COSC	77.5%	71.5%	70.2%
Psychology	81.4%	80.4%	76.0%
Overall	77.9%	75.0%	76.6%

Source: LSCS Analytics & Institutional Research (AIR), (2025).

An Emerging Dimension: Artificial Intelligence Across the Three Areas of Focus

Generative AI has introduced a dimension to online campus leadership that runs through all three areas of focus. Alier et al. (2024) characterize this trajectory as a shift from deceptive to disruptive—AI capabilities have reached a threshold that challenges assumptions about instruction, assessment, and academic integrity. With respect to governance, AI requires new policies on acceptable use, tool evaluation protocols, and clear decision authority. With respect to stakeholder engagement, the author’s experience suggests a framework organized around four faculty roles: AI as instructional tool, thought partner, designer, and consultant. With respect to data strategy, AI introduces new analytical capabilities alongside risks—such as algorithmic bias, opacity, and the temptation to automate decisions that require human judgment (Masih et al., 2025). For online campuses, where the student experience is entirely technology-mediated, a proactive and transparent approach to AI integration is essential.

What Transfers and What Does Not

The three areas of focus are logically transferable: governance creates authority, stakeholder engagement creates ownership, and data-informed strategy creates accountability. What does not transfer is the specific form each takes. Two community colleges in Texas, a private graduate university in Puerto Rico, and a public university in Pennsylvania require governance structures, faculty engagement models, and data systems reflecting their distinct accreditation environments, labor contexts, and student populations. Online campuses fail not for lack of technology but for lack of intentional leadership design.

Conclusions

This paper presents a practitioner-grounded framework for building and leading fully online campuses, organized around governance, stakeholder engagement, and data-informed strategy, supported by a continuous improvement cadence. The framework is grounded in eighteen years of institutional evidence across four online campus operations. The field needs frameworks that bridge scholarly literature with the operational realities of leading online campuses at scale. Future work should examine how this framework applies in international contexts, particularly as institutions across Europe and Latin America develop online campus infrastructure consistent with regional digital education goals.

References

- Alier, M., García-Peñalvo, F., & Camba, J. D. (2024). Generative artificial intelligence in education: From deceptive to disruptive. *International Journal of Interactive Multimedia and Artificial Intelligence*, 8(5). <https://reunir.unir.net/handle/123456789/16211>
- Baran, E., & Correia, A. P. (2014). A professional development framework for online teaching. *TechTrends*, 58(5), 95–101. <https://doi.org/10.1007/s11528-014-0791-0>
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Carnegie Foundation for the Advancement of Teaching.
- Complete College America. (2011). *Time is the enemy: The surprising truth about why today's college students aren't graduating... and what needs to change*. Complete College America. <https://www.luminafoundation.org/files/resources/time-is-the-enemy.pdf>
- Garrett, R., Simunich, B., Legon, R., & Fredericksen, E. E. (2022). *CHLOE 7: Tracking online learning from mainstream acceptance to universal adoption*. Quality Matters and Encoura Eduventures Research.
- Garrett, R., Simunich, B., Legon, R., & Fredericksen, E. E. (2023). *CHLOE 8: Student demand moves higher ed toward a multi-modal future*. Quality Matters and Encoura Eduventures Research.
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *EDUCAUSE Review*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Kirkpatrick, K., & Morales, C. (2024, July). Ten steps to quality assurance in distance education. *Journal of Distance Learning Administration*, 27(2). <https://ojdla.com/articles/ten-steps-to-quality-assurance-in-distance-education>
- Kotter, J. P. (2007). Leading change: Why transformation efforts fail. *Harvard Business Review*, 85(1), 96–103.
- Lone Star College System Office of Institutional Research (LSCS AIR). (2025). *LSC-Online student success rates: AY 2022–23 through AY 2025–26 (partial)*. Internal Chancellor-level validated report. Lone Star College System.
- Masih, J., Kumar, R., & Singh, P. (2025). Artificial intelligence in higher education: Opportunities and implications for teaching and learning. *International Journal of Educational Technology*, 22(1), 1–15.
- Morales, C. R. (2019). Expanding access to higher education through a virtual campus: The state of the practice. In *INTED 2019 Proceedings* (pp. 367–372). IATED Academy. <https://doi.org/10.21125/inted.2019.0171>

- Morales, C. R. (2020). A systemic approach to design and develop online programs. *International Journal of Learning and Teaching*, 6(2), 58–61. <https://doi.org/10.18178/ijlt.6.2.58-61>
- Morales, C. R. (2023). A centralized online campus access increases student success. In B. Bouchey, E. Gratz, & S. Kurland (Eds.), *From grassroots to the highly orchestrated* (pp. 88–106). Online Learning Consortium Press.
- Morales, C. R. (2024). Institutional readiness to digital education: Championing 10 years of student and faculty success. *HETS Online Journal*, 14(2), 198–210. <https://doi.org/10.55420/2693.9193.v14.n2.275>
- National Student Clearinghouse Research Center. (2024). *Persistence and retention: Fall 2022 entering cohort*. <https://nscresearchcenter.org/persistence-retention/>
- Quality Matters. (2022). *QM higher education course design rubric standards, 7th edition*. Quality Matters.
- Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2024). Instructors' perceptions of online teaching: What we know and what we need to know. *Online Learning Journal*, 28(1).
- Rosser-Majors, M. L., Rebeor, S., McMahon, C., Wilson, A., Stubbs, S. L., Harper, Y., & Sliwinski, L. (2022). Improving retention factors and student success online, utilizing the Community of Inquiry framework's instructor presence model. *Online Learning*, 26(2), 6–33.
- Witteveen, D., & Attewell, P. (2021). Delayed time-to-degree and post-college earnings. *Research in Higher Education*, 62(2), 230–257.
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Lessons Learned: Implementing Simple Syllabus in a Complex University Ecosystem

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Abstract

This paper examines the initial university-wide implementation of Simple Syllabus, a centralized platform designed to improve syllabus management, consistency, and accessibility. The rollout highlighted both the challenges and opportunities involved in large-scale system adoption, particularly in relation to faculty workflows and academic compliance. Findings emphasize the importance of staff preparation, early coordination across technical and administrative teams, structured planning, faculty engagement, and consistent communication throughout the process. These practices contributed to a smooth transition at Kennesaw State University (KSU) and may support more effective and user-centered implementations at other institutions.

Introduction

Implementing a new campus-wide platform is rarely without challenges, particularly when it directly impacts faculty workflows and academic compliance. Simple Syllabus is a centralized, template-driven platform that enables instructors to quickly personalize and publish interactive class syllabi while ensuring that the components required to be publicly available are published automatically. It offers institutions a centralized platform for syllabus management, consistency, and accessibility; however, a first-time, university-wide rollout requires thoughtful planning and coordination. This paper explores the initial implementation of Simple Syllabus at a university level, highlighting both early successes and challenges. Special attention is given to the role of staff preparation prior to faculty training and how proactive efforts can help mitigate issues and support a smoother transition.

Background and Purpose

Syllabus management at many institutions is often decentralized, inconsistent, and difficult to audit. The adoption of Simple Syllabus aimed to address these challenges by standardizing syllabus elements, improving accessibility, and ensuring compliance with institutional and accreditation requirements.

The purpose of this implementation was not only to introduce a new tool but also to establish a sustainable process that faculty could adopt with minimal disruption. Recognizing that faculty engagement is critical to success, the implementation team prioritized preparation efforts behind the scenes before introducing the platform broadly.

Some of the departments involved in this rollout were the Curriculum Office, University Information Technology Services; including the infrastructure engineering group, the Registrar's office, and the Digital Learning Innovations (DLI) office, which consisted of instructional designers who were responsible for training design and facilitation related to Simple Syllabus. The implementation team consisted of various members from each department.

Staff Preparation and Pre-Implementation Strategy

A key factor in the success of this implementation was the emphasis on staff preparation prior to faculty-facing training. Conversely, one of the most significant lessons learned was that preparation must extend beyond internal testing to include a deep understanding of the broader institutional environment.

Successful implementation requires studying the systems, teams, and structures that intersect with the tool. This includes understanding organizational hierarchy, roles, and interdependencies between systems. In this case, particular attention was needed for how Banner data interacts with other platforms, including the learning management system (Desire2Learn/D2L) and Simple Syllabus. Early in the process, relationships between these systems were not fully evident, which introduced unexpected challenges.

The implementation team quickly realized the need to both learn and unlearn existing assumptions. This iterative learning process involved understanding Simple Syllabus functionality and deciphering how it interacts with Banner and D2L. The team also had to determine how the Simple Syllabus dashboard appeared when accessed at the institution by different audiences versus navigating administrative dashboards independently. Each system and access point introduced its own nuances, requiring adjustments in approach and expectations.

Unfamiliarity in how data transferred between systems, particularly how Banner data synced with Simple Syllabus and D2L, highlighted the importance of early collaboration with technical and infrastructure engineering teams. More in-depth consultations with Banner and IT teams would have provided valuable insight into data structures, load processes, and system behaviors. For example, assumptions about how data would mirror across systems did not always align with reality. This required additional troubleshooting and adaptation from all teams involved.

Despite these challenges, the testing phase remained critical. The instructional design team simulated faculty use cases, when they could, identified areas of confusion, and developed solutions before they became widespread issues. Documentation was created alongside this process, including step-by-step guides, walk-through videos, troubleshooting resources, and frequently asked questions. Aligning documentation with real-world testing scenarios ensured the materials were practical and user focused.

Training Preparation and Collaboration

Faculty training was introduced with a strong foundation in place. Training sessions were designed to be clear, concise, and supportive, emphasizing both the benefits of the platform and practical guidance for use. Despite preparation efforts, some challenges still emerged during early adoption. Faculty varied in their levels of technical comfort and willingness to adopt new systems. Common concerns included time constraints, unfamiliarity with the platform, and uncertainty about expectations.

Additionally, the implementation team recognized that instructional designers and support staff do not always experience systems in the same way as faculty, course coordinators, or administrators. To bridge this gap, partnerships with faculty became essential. Faculty collaborators provided insight into real-world use cases and, in some instances, worked alongside the team in sandbox environments to test workflows and demonstrate processes. These collaborations helped identify issues that may not have been visible otherwise and led to practical, last-minute adjustments to training materials that improved the overall experience for faculty.

Faculty Engagement Through Webinars and Drop-In Support

A critical component of the Simple Syllabus implementation was the development of structured training opportunities designed to support faculty with varying levels of familiarity and comfort with new technology. To meet these diverse needs, the instructional design team offered a combination of virtual live webinars and in-person flexible drop-in support sessions. These formats provided both guided instruction and individualized assistance, helping to create a more inclusive and supportive training environment.

The webinar series served as the primary method of introducing faculty to Simple Syllabus. These sessions were designed to walk participants through key features of the platform, including syllabus creation, template usage, and compliance requirements. Emphasis was placed on clarity, practical application, and the ability for faculty to follow along in real-time. By offering multiple sessions at different times, the team increased accessibility and allowed faculty to engage at their convenience.

In addition to webinars, face-to-face drop-in sessions offered by the DLI, on both of KSU's campuses, were established to provide more personalized support. These sessions allowed faculty to ask questions, troubleshoot specific issues, and receive one-on-one guidance tailored to their individual needs. This format proved particularly valuable in reducing cognitive overload and supporting faculty who needed additional time or assistance beyond structured training.

To further support faculty, training recordings and supplemental instructional videos were developed, allowing participants to revisit content as needed. Given the absence of established use cases or prior implementation models, much of the training approach evolved in real-time. This required ongoing communication, responsiveness, and adaptability from the instructional design team.

Together, these training strategies contributed to meaningful faculty engagement and measurable outcomes. Over two semesters, 280 faculty members, attended Simple Syllabus webinars and completion badges. These badges served not only as a marker of progress but also as a motivator, reinforcing engagement, and providing a sense of accomplishment.

Challenges and Lessons Learned

While the implementation was ultimately successful, several challenges provided valuable learning opportunities. One of the most significant lessons was the importance of comprehensive collaboration across all stakeholder groups. Engaging Banner teams, technical staff, and vendors from the beginning is essential to understanding system integrations and avoiding misalignment.

Managing complexity across multiple systems presented challenges. Variations in how courses, programs, and sections are structured, and how they interact across Banner, D2L, and Simple Syllabus, introduced inconsistencies that required ongoing adjustment. A structured project plan with clearly defined scope, roles, timelines, and risk mitigation strategies would strengthen implementation processes.

Communication was identified as an area for improvement. While stakeholders were informed throughout the process, opportunities exist to improve transparency, streamline messaging, and clarify responsibility distribution. Providing consistent and complete information to all participants is critical in large-scale implementations.

This implementation also highlighted the need to account for operational factors when introducing new tools. In addition to technical training, consideration should be given to workload, communication processes, and overall user experience across teams.

Key Takeaways for Future Implementations

The implementation process identified several practices that may support similar initiatives at other institutions.

Develop a comprehensive understanding of the full ecosystem, including data systems, integrations, and organizational structures. Early coordination with technical and administrative teams supports alignment and integration planning.

Prioritize preparation activities, including testing, documentation, and scenario planning. The development of use cases in advance can support implementation and training efforts.

Incorporate end-user engagement throughout the process. Early faculty participation can provide input on individual college needs, usability, and help identify gaps in advance of full implementation.

Establish a robust, structured project plan with clearly defined roles, timelines, and risk mitigation strategies to guide the implementation process.

Maintain consistent and transparent communication throughout the rollout. Provide multiple training and support options to address a range of user needs.

Conclusion

The initial university-wide implementation of Simple Syllabus highlighted both the complexities and requirements associated with large-scale system adoption. The approach to staff preparation, process adjustments, and faculty support contributed to the overall successful implementation of the platform.

The implementation process further demonstrated the importance of structured planning, cross-functional collaboration and coordination, and consistent communication. Application of these practices can support improved efficiency, effectiveness, and user experience in future implementations.

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Simulate to Stimulate: Designing Purposeful Play Across Generations

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Abstract

As online classrooms continue to evolve, educators face the challenge of engaging learners across multiple generations with varying technological fluency and expectations. This paper explores how simulations and gamified storytelling can cultivate purposeful play that promotes connection, creativity, and critical thinking. By integrating narrative design with experiential learning, instructors can transform online environments into interactive spaces that bridge generational gaps and inspire meaningful engagement. Practical examples demonstrate how storytelling frameworks and simulation tools enhance motivation, collaboration, and reflective learning, offering a replicable model for creating more humanized, immersive, and impactful distance education experiences.

Introduction

Online learning environments continue to evolve in response to rapid technological advances, shifting student demographics, and changing pedagogical expectations. Today's classrooms include students from multiple generations, including Baby Boomers, Generation X, Millennials, and Generation Z, with each bringing unique motivations, learning preferences, and levels of technological fluency. This dynamic creates both opportunities and challenges for educators striving to design meaningful learning experiences that engage all learners.

To address these challenges, educators must move beyond static content delivery toward interactive, experiential, and emotionally resonant learning. Gamified storytelling and simulations can be forms of purposeful play, providing powerful tools for fostering creativity, empathy, and critical thinking in distance learning (Ferreira et al, 2025). This paper explores how narrative design and simulation-based instruction can humanize the online learning experience, bridge generational gaps, and inspire engagement across digital platforms.

Generational Differences in Digital Learning

Generational diversity significantly impacts how students interact with technology and perceive online education (Lai & Hong, 2015). Baby Boomers often value structure, clear expectations, and instructor presence, while Generation X learners appreciate flexibility and self-direction. Millennials prefer collaboration and feedback-rich environments, and Generation Z, the first fully digital generation, expects immediacy, interactivity, and visual engagement.

These varying expectations highlight the importance of instructional strategies that can flexibly adapt to multiple learning styles and comfort levels with technology. Gamification and simulations offer precisely this adaptability: they can scaffold learning for digital newcomers while offering dynamic, interactive challenges for digital natives (Ferreira, et al, 2025). By creating shared experiences grounded in story and participation, simulations provide common ground for all learners, regardless of generational identity.

Theoretical Framework: Purposeful Play and Experiential Learning

The concept of purposeful play draws on contemporary game-based learning principles, emphasizing that deep learning emerges when learners engage in meaningful, immersive activities that encourage exploration, reflection, and problem-solving. Simulations and storytelling operationalize this cycle by allowing learners to experience complex concepts within authentic contexts and reflect on their decisions and outcomes (Chernikova et al., 2020; Wang et al., 2024).

Similarly, self-determination theory provides insight into the motivational power of gamification (Wang et al, 2024). It suggests that learners are most engaged when their needs for autonomy, competence, and relatedness are met. Gamified simulations, through challenge, feedback, and collaboration, satisfy these needs and transform passive learning into active discovery (Gao, 2024; Türkan & Karakuş, 2025).

When educators design simulation-based tasks that are playful yet purposeful, they create learning spaces where curiosity thrives. Learners are encouraged to experiment, fail safely, and apply abstract theories to tangible scenarios, bridging the divide between intellectual understanding and emotional experience.

Storytelling as a Bridge for Empathy and Engagement

Narrative is one of humanity's oldest and most effective teaching tools. Storytelling captures attention, provides structure to complex information, and fosters emotional connection. In digital learning, story-driven design humanizes technology by framing learning as a shared journey rather than a solitary task.

Research demonstrates that narrative transportation, the feeling of being immersed in a story, enhances both memory retention and empathy (Thomas & Grigsby, 2024; Green, 2021; Krause-Galoni & Mazzocco, 2023). When students assume a character role or make decisions within a simulated storyline, they are not merely absorbing content but living it. For example, a leadership simulation might position a student as a manager navigating ethical dilemmas, requiring empathy and situational judgment. Through this process, learners engage cognitively and affectively, deepening comprehension and reflection.

Storytelling also provides a mechanism for inclusivity across generations. While younger learners may connect with interactive, multimedia narratives, older learners often appreciate context, meaning, and personal relevance. Well-crafted stories unite these needs, enabling a shared sense of purpose and engagement (Chernikova et al., 2020).

Simulation as a Catalyst for Experiential Learning

Simulations replicate real-world systems and decisions in a controlled, low-risk environment (Chernikova et al., 2020). They allow learners to explore consequences, test hypotheses, and apply theory in practice. In distance education, simulations have been shown to enhance motivation, collaboration, and problem-solving. For example, a business strategy course might use a market simulation where teams compete to manage virtual companies. A leadership course might use an interactive scenario involving crisis communication or team morale. These simulations immerse learners in complex systems that mirror authentic professional challenges. Importantly, simulations also accommodate generational learning differences. Visual learners benefit from graphical interfaces and interactive dashboards; reflective learners value the debriefing discussions that follow simulated exercises. This adaptability creates equity in engagement and allows every student to find a personal entry point into the learning experience.

Practical Applications in Distance Education

1. **Branching Scenarios:** Tools such as H5P, Articulate Rise, or Twine allow instructors to build branching scenarios where learners make decisions that lead to different outcomes. For instance, in a leadership module, students might face ethical dilemmas where each choice alters the storyline. This model supports critical thinking and demonstrates the real-world impact of decision-making.
2. **Role-Based Simulations:** Platforms like Capsim or Harvard Business Publishing Simulations enable learners to assume professional roles (e.g. executives, analysts, or educators) and manage evolving challenges. This approach supports authentic, applied learning and fosters collaboration through shared missions.
3. **Narrative-Based Case Studies:** Incorporating storytelling into traditional case studies through multimedia (videos, dialogues, reflection journals) engages multiple senses and learning preferences. This hybrid form maintains academic rigor while adding emotional depth.
4. **Reflective Debriefs:** After each simulation, debriefing discussions, whether synchronous or asynchronous, allow learners to reflect, connect theory to practice, and share insights across generational lines. Reflection transforms activity into knowledge, reinforcing the experiential learning cycle.

Designing for Purposeful Play

Purposeful play balances structure and freedom. Educators must design simulations that are challenging but achievable, imaginative yet grounded in learning outcomes. Effective simulation design includes:

1. Clear objectives: Define what cognitive, emotional, or behavioral outcomes are expected.
2. Meaningful context: Align the simulation's narrative with professional or real-world relevance.
3. Feedback loops: Provide immediate and constructive feedback to sustain engagement.
4. Collaborative mechanics: Encourage teamwork to simulate authentic communication and problem-solving.
5. Reflection opportunities: Integrate journaling, peer discussion, or instructor feedback to close the learning loop.

By weaving play into purpose, educators can transform online learning from an information exchange into an experience that stimulates curiosity, empathy, and lifelong learning.

Bridging Generational Engagement through Empathy

Empathy is the key to connection across generations. Research in digital pedagogy suggests that emotionally intelligent learning design enhances satisfaction and reduces attrition. Purposeful play fosters empathy by inviting learners to inhabit different roles and perspectives. When a simulation requires learners to balance competing needs, such as profit versus sustainability, nurturing both cognitive flexibility and moral reasoning is beneficial (Gao, 2024).

This emotional dimension of learning not only humanizes distance education but also supports the development of transferable soft skills, including collaboration, ethical leadership, and cross-cultural understanding. Through storytelling and simulation, educators can build bridges between technological fluency and human connection.

Challenges and Considerations

While simulations and gamified storytelling offer immense potential, they also present challenges (Almeqdad et al., 2023). Time constraints limited technical support, and steep learning curves for both instructors and students can hinder adoption. Accessibility is another concern. Simulations must adhere to universal design principles to ensure equitable participation (Moriña et al., 2025).

Moreover, educators should be cautious of “gamification for its own sake.” Without purposeful alignment to learning objectives, game mechanics risk trivializing content. The goal is not entertainment but engagement with meaning. Thoughtful integration ensures that technology remains a vehicle for learning, not a distraction.

Conclusion

The evolving landscape of online education necessitates teaching strategies that transcend generational divides and foster deeper human connections. Simulations and storytelling provide a compelling pathway toward this goal. By combining purposeful play with narrative-driven design, educators can create immersive learning experiences that stimulate curiosity, promote empathy, and foster critical thinking among learners of all ages.

Ultimately, “simulating to stimulate” is not just a metaphor. It is a model for transforming digital learning into an arena of creativity, connection, and purposeful growth. When we design with story, empathy, and play in mind, we move closer to realizing the full potential of education in the digital age.

References

- Almeqdad, Q. I., Alodat, A. M., Alquraan, M. F., Mohaidat, M. A., & Al-Makhzoomy, A. K. (2023). The effectiveness of universal design for learning: A systematic review of the literature and meta-analysis. *Cogent Education*, 10(1), 2218191. <https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2023.2218191>
- Chernikova, O., Heitzmann, N., Stadler, M., Holzberger, D., Seidel, T., & Fischer, F. (2020). Simulation-based learning in higher education: A meta-analysis. *Review of Educational Research*, 90(4), 499–541. <https://doi.org/10.3102/0034654320933544>
- Ferreira, J., Pinto, T., Reis, A., Rocha, T., & Barroso, J. (2025). Game-based learning and gamification: A duo revolutionizing education. TECH-EDU 2024 Conference. *Springer Nature*. https://link.springer.com/chapter/10.1007/978-3-032-02672-9_17
- Gao, F. (2024). Advancing gamification research and practice with three underexplored ideas in self-determination theory. *TechTrends*, 68, 661–671. <https://link.springer.com/article/10.1007/s11528-024-00968-9>
- Green, M. C. (2021). Transportation into narrative worlds. In *Entertainment-Education Behind the Scenes* (pp. 87–101). Springer. https://link.springer.com/chapter/10.1007/978-3-030-63614-2_6
- Krause-Galoni, R., & Mazzocco, P. (2023). Storytelling and narrative persuasion. In *The Cambridge Handbook of Consumer Psychology* (pp. 28–52). Cambridge University Press. <https://www.cambridge.org/core/books/cambridge-handbook-of-consumer-psychology/storytelling-and-narrative-persuasion/3AB132C34C98AC968689A58FA4449802>
- Lai, K. W., & Hong, K. S. (2015). Technology use and learning characteristics of students in higher education: Do generational differences exist? *British Journal of Educational Technology*, 46(4), 725–738.
- Moriña, A., Carballo, R., & Doménech, A. (2025). Transforming higher education: A systematic review of faculty training in UDL and its benefits. *Teaching in Higher Education*. <https://www.tandfonline.com/doi/pdf/10.1080/13562517.2025.2465994>
- Thomas, V. L., & Grigsby, J. L. (2024). Narrative transportation: A systematic literature review and future research agenda. *Psychology & Marketing*. <https://onlinelibrary.wiley.com/doi/pdf/10.1002/mar.22011>
- Türkan, E. S., & Karakuş, Y.T. (2025). A systematic review of the effects of gamification in online learning environments on learning outcomes. *Open Praxis*, 17(1), 166–183. <https://openpraxis.org/articles/10.55982/openpraxis.17.1.692>
- Wang, Y., Wang, H., Wang, S., Wind, S. A., & Gill, C. (2024). A systematic review and meta-analysis of self-determination-theory-based interventions in the education context. *Learning and Motivation*, 87, 102015. https://selfdeterminationtheory.org/wp-content/uploads/2024/06/2024_WangWangEtAl_MetaEdu.pdf

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Teaching with AI, Not Against It: A Thinking Partner Framework for Working Adult Learners in Compressed Online Formats

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Abstract

Working adult learners in online graduate programs face challenges that make strict AI bans both impractical and unhelpful. This paper introduces the Thinking Partner Framework, a practical approach to AI integration developed and refined across six semesters of graduate research methods courses serving approximately 440 K-12 educators. Instead of treating AI as a problem to be detected, the framework positions AI as a Socratic partner that helps students learn while still requiring them to think for themselves. Five design principles—transparency, process documentation, authentic assessment, scaffolded autonomy, and metacognitive reflection—guide the framework’s implementation. The paper includes practical tools such as sample prompts, documentation templates, and examples illustrating the difference between using AI for answers and using it as a thinking partner. Observations from practice, including a 96% checkpoint completion rate and evidence of students transferring Socratic techniques to their own classrooms, suggest promise, though more rigorous research is needed. This framework gives distance education administrators a practical option beyond simply banning or allowing AI.

Keywords: artificial intelligence, adult learning, distance education, Socratic method, academic integrity, compressed courses

Introduction

When we talk about artificial intelligence in education, we often find ourselves trapped in a debate that misses the point. The conversation fixates on whether students will use AI to cheat, as if the key challenge is one of enforcement. But for working adult learners—the teachers, nurses, managers, and professionals who pursue graduate degrees while holding down full-time jobs and raising families—this framing is misguided.

For these students, AI tools serve a different purpose than they do for traditional undergraduates. Many working adults enroll to build real skills, even at personal cost, and limited time means they need to make every moment of learning count. When a professional uses an AI tool late at night after family responsibilities, it is often to make the most of their learning time, not to avoid work. The real issue is not whether people will use AI—they already do at work and in school. The challenge is whether we design learning experiences that help students use AI effectively, or leave them to figure it out alone.

This paper argues for a fundamental shift in the way we think about AI in education. It presents the Thinking Partner Framework, a practical approach developed and implemented across multiple course iterations that offers distance education administrators an alternative to the prohibition-versus-permission binary currently dominating

institutional AI responses. When AI is used thoughtfully and guided by principles of adult learning, it can make education better, not worse. AI can help students learn more by providing explanations tailored to their specific knowledge gaps. It can prompt deeper thinking by asking follow-up questions that human instructors, constrained by class sizes and time pressures, cannot offer at scale. It can provide immediate, substantive feedback on drafts—the kind of formative feedback that research consistently shows accelerates learning but remains scarce in most school environments. But achieving these benefits requires intentional design. We cannot simply layer AI onto existing pedagogies and expect positive outcomes, nor can we rely exclusively on prohibition and detection. Instead, we must ask how AI can serve learning rather than subvert it.

Because disciplines, students, and institutions differ, a universal solution is not practical. Instead, we offer a process that can be adapted to local needs, starting with the key question: Who are our students, and what do they need? Too often, AI discussions emphasize administrative issues rather than students' real experiences. Our approach reverses this, beginning with students' constraints, motivations, and goals, and then considering policies.

AI in Education: Current Landscape and a Different Framework

The Current Landscape

ChatGPT's debut in November 2022 thrust generative AI into the educational spotlight, prompting institutional responses ranging from outright bans to cautious integration. The 2025 EDUCAUSE AI Landscape Study found that 57% of educators now view AI as a strategic priority, up from 49% in the prior year (Robert & McCormack, 2025). A recent study found that 94% of the top 50 U.S. universities had faculty guidelines emphasizing course-specific AI policies (An et al., 2025).

Academic integrity dominates institutional concern. Universities have classified submitting AI-generated content as violating honesty policies because it fails to constitute "original work" (Luo, 2024). Detection tools have proliferated, though their reliability remains contested, leading instructors to seek alternative methods for verifying originality (Moore & Lookadoo, 2024). Beyond integrity, researchers have raised legitimate questions about skill development: Will students improve as writers if AI assists their drafting? Will they develop logical reasoning if AI handles corrections? These concerns deserve attention, but they rest on assumptions about student-AI interaction that may not hold universally.

Research on AI detection tools illustrates the challenges of a surveillance-based approach. Weber-Wulff and colleagues (2023) tested fourteen tools and found they were not consistently accurate or reliable. They often missed AI-generated content, and the error rates were high enough to be concerning. Turnitin, seen as one of the better options, caught most unedited AI text, but still missed about a quarter. More concerning, Liang et al. (2023) found these tools often flagged writing by non-native English speakers and neurodivergent students, groups already facing extra challenges in higher education. These biases, combined with limited accuracy, suggest that detection-based approaches create an adversarial dynamic between students and institutions that is both unreliable and potentially harmful—particularly for already-marginalized populations. This evidence forms the basis for the transparency-centered alternative developed later in this paper.

Research synthesis reveals diverse applications of human-AI collaboration in higher education. Bond et al. (2024), in a meta-review of 138 secondary studies, identified key domains where AI facilitates learning: intelligent tutoring systems, adaptive learning environments, chatbots for engagement, and automated feedback approaches. These frameworks shift the conversation from "how do we stop AI use?" to "how do we design learning experiences that improve rather than replace student cognition?"

The Missing Population

Despite growing literature on AI in higher education, remarkably little addresses the distinctive situation of working adults in graduate programs. University policies, faculty integrity concerns, and pedagogical frameworks overwhelmingly assume a traditional undergraduate: young, full-time, primarily focused on learning in residential or synchronous settings, with ample time for extended engagement with course materials. Research indicates that students often remain uncertain about when they may use generative AI due to unclear or inconsistently

communicated regulations (Jiang et al., 2025). These challenges may prove particularly acute for first-generation and minority learners, who face what researchers term an “AI literacy divide”—disparities in technological capital and prior exposure that create additional barriers (Hadar Shoval, 2025).

Working adult learners occupy a fundamentally different position regarding AI tools. Their motivation is often learning, not avoidance—many have already invested substantial time and money in the education they chose voluntarily. They want efficiency: strategies to maximize learning within limited time. They already use AI professionally and understand its capabilities and limitations from direct experience. And they possess professional judgment to critically evaluate AI outputs rather than accepting them uncritically. Policies designed to prevent undergraduate cheating may prove ill-suited for graduate programs serving working professionals.

What remains missing is a framework for AI integration grounded in adult learning principles and the realities of distance education (Adarkwah, 2024). The framework proposed in this paper begins by rethinking what AI is for in educational contexts.

Answer Machine Versus Thinking Partner

Our argument rests on a distinction most institutions have yet to make: the difference between AI as an answer machine and AI as a thinking partner. The dominant view regards generative AI primarily as an answer provider. A student poses a question—“write this essay,” “solve this problem”—and receives a finished output. The student’s role reduces to formulating the query and accepting the response. This paradigm drives integrity concerns: if AI provides the answer, what does the student learn? (Bittle & El-Gayar, 2025). While this characterization describes genuine patterns of AI use, it represents only one possibility, and faculty concerns about AI dependency often encompass subtler forms of over-reliance than simple answer-seeking.

Another model positions AI not as an answer source but as a conversation partner, facilitating structured dialogue. In this mode, AI questions, challenges reasoning, surfaces assumptions, and guides learners toward their own conclusions. The outcome is not a finished product but a thinking process that leaves the learner better equipped to handle similar problems independently. This distinction connects to the longstanding emphasis on questioning and dialogue in Socratic pedagogy. Recent research supports this approach: Fakour and Imani (2025) found that ChatGPT can function as a Socratic tutor engaging in dialogues that promote critical thinking. Favero et al. (2025) compared a Socratic chatbot, designed to pose thought-provoking questions rather than provide immediate answers, against conventional chatbots. Learners interacting with the Socratic tutor scored significantly higher than those using standard chatbots ($p < .001$), suggesting that structured questioning promotes deeper thinking even in brief AI interactions.

The Thinking Partner Framework

Theoretical Foundations

Building on the distinction between answer machine and thinking partner, we propose a framework positioning AI as a thinking partner for working adult learners. This framework draws on three interconnected theoretical traditions: social constructivism, adult learning theory, and reflective practice.

Illustration: Answer Machine vs. Thinking Partner

AI as Answer Machine	AI as Thinking Partner
<i>Student:</i> What’s the difference between qualitative and quantitative research?	<i>Student:</i> What’s the difference between qualitative and quantitative research?
<i>AI:</i> Quantitative research uses numerical data and statistical analysis to test hypotheses. Qualitative research uses non-numerical data like interviews and observations to explore phenomena in depth...	<i>AI:</i> Before I explain, I’d like to understand what you already know. Can you think of a question about your classroom that could be answered with numbers? And another that couldn’t?
Outcome: Student receives information to memorize.	<i>Student:</i> Like... how many students passed the test versus why some students struggle with fractions?

AI: Exactly. You’ve just identified the core distinction. What kind of data would you need to answer each question? And what could each type of answer tell you that the other couldn’t?

Outcome: Student constructs understanding through guided discovery.

Vygotsky’s Zone of Proximal Development offers a central lens. Cai, Msafiri, and Kangwa (2025), in a systematic review of 158 empirical studies, found that AI tools assist learners in individualizing self-assessment, improving motivation, and providing learning support that leads to better academic performance. An AI designed as a thinking partner operates precisely in this zone: providing sufficient support to keep students engaged with challenging material while requiring them to perform the cognitive work of constructing knowledge. The thinking partner model also corresponds to constructivist principles, positioning students as active builders of knowledge (Wibowo et al., 2025). Social constructivism’s emphasis on human interaction raises important questions about AI as a learning partner; human discourse includes emotional attunement and shared cultural understanding that AI lacks. Yet for working adults with limited access to peers or study groups, AI may offer cognitive engagement otherwise unavailable. One pilot study found that students receiving both AI and human tutoring scored higher on critical thinking assessments than those with AI alone (Gurung et al., 2025).

Adult learning theory provides additional grounding. Knowles’s (1984) foundational principles of andragogy emphasize that adults are self-directed, bring substantial prior experience to learning, are motivated by relevance to their professional lives, and prefer problem-centered over content-centered approaches. Adarkwah (2024) extends these principles into the generative AI era, arguing that AI-infused adult learning must honor adult learners’ autonomy and experience while leveraging technology to support self-directed engagement. The Thinking Partner Framework aligns with each of these principles: it respects learner autonomy by offering AI as a resource rather than a requirement, leverages professional experience through context-specific prompts, connects learning to workplace application, and centers on real problems rather than abstract content delivery. The framework also draws on the broader tradition of transformative learning, which suggests that dialogue—including dialogue with AI—can prompt the critical reflection necessary for perspective transformation, particularly when learners encounter ideas that challenge their existing frames of reference.

This scaffolding is especially valuable for adults managing demanding schedules. Consider a K-12 teacher pursuing her Master’s degree who encounters unfamiliar statistical concepts. Without support, she might spend hours struggling with textbook explanations ill-suited to her background. A thinking partner enables conversations that pinpoint specific misunderstandings and connect new concepts to her existing knowledge—not by providing answers, but by presenting a clearer path to figuring things out herself.

Reciprocal Transparency

A core mechanism of the Thinking Partner Framework is reciprocal transparency—the recognition that documentation of AI use creates learning opportunities flowing in both directions. When students document their AI interactions, they develop metacognitive awareness of their own learning processes. When instructors review these documented interactions, they gain unprecedented insight into student thinking—where misconceptions arise, how understanding develops, and which concepts require additional instructional attention.

This reciprocity distinguishes the Thinking Partner Framework from simple disclosure requirements. Traditional AI policies ask students to acknowledge AI use; reciprocal transparency asks them to show their learning. A student who documents how a Socratic dialogue helped clarify the distinction between correlation and causation has done more than comply with a policy; they have created evidence of genuine learning while simultaneously helping their instructor understand how similar students might struggle with similar concepts.

For working adult learners, reciprocal transparency matches professional practice. These students already document their work in professional lives—lesson plans, patient notes, project reports. Documenting learning processes extends this professional habit into academic work.

Five Design Principles for AI-Integrated Learning

The thinking partner framework carries direct implications for course design. This section presents five interconnected principles that guide instructors in building courses where AI integration supports rather than undermines learning. These principles translate the theoretical foundations above into concrete design choices: they specify how students should be taught to engage AI as a Socratic partner, how learning processes become visible and assessable, and how assessments are structured so that AI-as-answer-machine cannot succeed.

Principle	Core Concept	Implementation
1. Transparency	Make AI use visible and productive rather than banned or hidden	Clear syllabus language; assignment-level guidance; reciprocal documentation
2. Process Documentation	Assess how students think, not just what they produce	Checkpoint submissions; AI dialogue transcripts; reflection prompts
3. Authentic Assessment	Connect to professional practice where AI collaboration is the norm	Context-specific applications; real-time defense of reasoning; workplace problems
4. Scaffolded Autonomy	Progressively develop independent judgment about AI use	Early prompting templates; fading structure; culminating autonomous work
5. Metacognitive Reflection	Build awareness of learning processes and AI collaboration strategies	Learning journals; AI use analysis; transfer planning

Transparency over prohibition makes AI use visible and productive. Research on AI policymaking consistently shows that clarity about expectations works better than ambiguity or punishment (Chan, 2023; Moore & Lookadoo, 2024). At the assignment level, transparency means specifying what kind of AI interaction is expected. Students need explicit instruction in how to engage AI as a Socratic partner rather than an answer source. The ability to use AI tools as cognitive scaffolds rather than shortcuts represents exactly the kind of AI literacy professionals will need throughout their careers.

Process documentation shifts assessment focus from products to processes. When students engage with AI thinking partners, their interactions can be recorded and evaluated, providing richer insight into learning than final products alone. Research on AI-resistant assessment emphasizes “Process-Product Assessment Models” that evaluate decisions students make during human-AI interaction (Awadallah Alkouk & Khlaif, 2024). Black and Tomlinson (2025) found that when students documented their AI use, most distinguished clearly between AI-assisted editing and their own contributions.

Authentic assessment designs tasks resembling professional work, where AI collaboration is becoming the norm. Research demonstrates that contextualization provides real protection for assessment integrity, connecting course concepts to specific professional situations that generic AI cannot address (Balducci, 2024). When students must apply learning to their own contexts or defend reasoning in real-time dialogue with instructors, generic AI responses fall short.

Scaffolded autonomy recognizes that effective AI use is a skill requiring development. Early AI interactions receive substantial instructor guidance, while later work demands increasingly independent decision-making. Research indicates that unstructured use may not foster deep engagement, while structured implementation paired with reflective practices may enhance analytical and reasoning skills (Cai et al., 2025).

Metacognitive reflection makes explicit that AI-integrated education should include reflection on learning itself. Research shows that students skilled in metacognition use AI tools more effectively, maintaining an appropriate balance between AI assistance and independent thinking (Xu et al., 2025).

The five principles work together as a system. Transparency sets clear expectations. Process documentation shows evidence of learning and builds reflection. Authentic assessment links AI use to real professional tasks. Scaffolded autonomy helps students develop good judgment over time. Metacognitive reflection ensures learning goes beyond the course. Together, these principles also redefine academic integrity: when learning processes are visible and documented, integrity becomes alignment between claimed and actual processes rather than a matter of surveillance and detection. A student who accurately documents AI use and demonstrates genuine

understanding maintains integrity even if AI provided substantial assistance. A student who claims independent work while concealing AI use lacks integrity regardless of product quality.

These design principles cannot stop all misuse. A student who wants to use AI just for answers will still find ways. The goal is not perfect enforcement, but to create learning experiences where using AI as a thinking partner is the best and most effective choice.

Implementation: Graduate Research Methods for K-12 Educators

The framework comes to life through a series of graduate research methods courses designed for K-12 educators pursuing Master's degrees. These courses operate under constraints that shape every design decision: they run for just six weeks, they are entirely asynchronous, and the students are simultaneously full-time teachers and graduate students.

The Six-Week Compressed Format

The six-week format is not a pedagogical preference but an institutional reality for working adults. These students cannot commit to fifteen-week semesters without experiencing strain that leads to withdrawal. Research on compressed formats yields generally positive findings. Price (2024) found that students in accelerated courses perform at least as well as those in traditional-length courses on effort-based assessments, though topic mastery assessments showed performance decline. Holzweiss, Polnick, and Lunenburg (2019) reported positive outcomes in online compressed programs, noting that the format creates focused intensity beneficial for highly motivated adult learners. The key insight is that compressed formats require purposeful redesign rather than mere compression (Vlachopoulos et al., 2019).

AI integration supports this redesign by extending instructional presence into spaces traditional instruction cannot reach. Teachers who have been grading their own students' papers until 10 PM do not bring optimal cognitive resources to learning new research methods. AI dialogue can support learning through patient, non-judgmental questioning—available whenever the student can work, adapting to their pace, and never showing impatience with repeated questions. This support supplements instruction rather than replacing it.

The Relevance Challenge in Required Courses

Research methods is a required course, not an elective, and this distinction shapes every design decision. Working adults who voluntarily enroll in graduate programs do not necessarily see research methods as relevant to their professional goals—many enter expecting a hurdle to endure rather than a skill to acquire. This motivational challenge is well documented in adult learning theory: Knowles (1984) emphasized that adults engage most deeply when they perceive direct relevance to their work, yet required courses impose content that students have not chosen and may not immediately value. The thinking partner framework addresses this challenge directly. Because Socratic prompts are designed to begin from the student's own professional context—"I'm developing a research question about [topic] in my classroom"—students encounter course concepts through problems they already care about rather than through abstract textbook exercises. A teacher exploring whether a reading intervention works in her classroom is learning research design, even if she enrolled expecting the course to be irrelevant. AI as a thinking partner amplifies this effect: it can tailor every exchange to the student's specific situation, making a required course feel personally applicable in ways that generic lectures or discussion boards cannot. The student feedback reported later in this paper—teachers using evaluation frameworks in IEP meetings, applying critical analysis to district mandates, adopting Socratic techniques with their own students—demonstrates that when required courses are designed around professional relevance, students do not merely endure them; they carry the learning forward.

The Research Consumer Orientation

The fundamental pedagogical shift becomes clear from the first module: students are learning to become intelligent research consumers, not researchers. This distinction matters because conventional research methods instruction carries assumptions borrowed from doctoral education—sampling theory, design controversies, epistemological frameworks—that serve aspiring scholars while burdening practitioners who want to evaluate and apply published research in their classrooms. The consumer orientation redefines competence. Students need to locate relevant literature, judge study quality and significance, understand methodological strengths and limitations, and apply findings to practice.

The contested research on AI detection tools illustrates precisely why the research consumer orientation matters. When institutions adopt detection-based policies, they make consequential decisions affecting students' academic futures. Yet the research base is nuanced. An educator who cannot critically evaluate these studies—who cannot assess methodological limitations, recognize when findings may not generalize, or weigh conflicting evidence—is poorly equipped to advocate for appropriate policies in their own institutions. The K-12 teachers in our courses will sit in faculty meetings where administrators propose AI detection mandates. They will hear vendor claims about accuracy rates. The capacity to read the primary research, identify its strengths and limitations, and translate findings into context-appropriate practice is not a lesser form of research competence. It is the form of research competence these professionals most urgently need.

AI integration supports this reorientation in three interconnected ways:

AI-Assisted Literature Exploration. Working teachers rarely have access to comprehensive research databases at their schools. AI assistance can reduce the time required to identify relevant literature from hours to minutes. But efficiency gains mean little if students accept AI-generated summaries uncritically. The course design pairs exploration opportunities with structured critical evaluation: students locate sources and compare AI summaries against actual abstracts and methodology sections, documenting discrepancies.

Socratic Dialogue for Research Paradigms. The Socratic protocols developed for these courses feature extended conversations beginning with what students already know. Rather than defining qualitative research abstractly, dialogue prompts students to consider questions from their own experience: What kinds of questions can numbers answer? What can't numbers tell you? A student wrestling with validity concepts at 11 PM can engage in a clarifying conversation rather than waiting for an instructor's response.

Progressive Feedback on Student Work. The six-week timeline creates challenges around revision cycles. AI-assisted feedback addresses this compression problem. Escalante, Pack, and Barrett (2023) found no significant difference in learning outcomes between students receiving AI feedback and those receiving human tutor feedback. Students receive rapid structural feedback on drafts while instructors provide evaluative feedback requiring disciplinary judgment. Crucially, the design requires students to document feedback received, actions taken in response, and reasoning behind accepting or rejecting suggestions.

Sample Socratic Prompts

Purpose	Prompt Template
Concept Clarification	"I'm trying to understand [concept]. Instead of defining it for me, help me figure it out by asking me questions about what I already know and where I'm confused. Start by asking what I think [concept] means."
Research Design Thinking	"I'm developing a research question about [topic] in my classroom. Guide me through thinking about methodology by asking questions—don't tell me what approach to use. Help me discover which approach fits my question."
Article Evaluation	"I just read a study about [topic]. I want to evaluate its quality. Ask me questions that help me think critically about the methodology, sample, and conclusions. Challenge my initial impressions."
Application to Practice	"I want to apply [research finding] to my [grade level/subject] classroom. Help me think through implementation by asking about my specific context, potential obstacles, and how I might know if it's working."

Checkpoint Documentation Template

Students submit checkpoint documentation at key points during each module:

AI Interaction Checkpoint

1. What concept or task were you working on?
2. What did you ask the AI? (Paste your initial prompt)
3. What was confusing or unclear before the conversation?
4. How did your understanding change during the dialogue?
5. What follow-up questions emerged? What remains unclear?
6. How might you apply this understanding in your classroom?

Observations from Practice

The framework has been implemented and progressively refined across six semesters of graduate research methods courses, serving an average of 73 students per semester (approximately 440 students total). Earlier iterations established the core Socratic approach and transparency principles; later iterations added the structured scaffolding, prompt templates, and checkpoint documentation described in this paper. What follows represents systematic observations drawn from instructor field notes, review of student checkpoint submissions, and analysis of course evaluations rather than formal research findings. These observation methods, while not constituting controlled research, provide a structured basis for the patterns reported below.

Students vary considerably in how they approach AI assistance. Some engage with Socratic dialogue as intended: wrestling with questions, documenting confusion, and returning to concepts multiple times before achieving understanding. Others optimize for efficiency, finding the fastest path through required interactions. This pattern is neither surprising nor necessarily problematic. Adults managing full-time teaching, families, and graduate school engage in rational triage, allocating limited cognitive resources to meet competing demands. Instead of trying to predict which students will fully engage, we design for a wide range of engagement. The framework aims to make deeper engagement clearly more rewarding, so students who use Socratic dialogue learn more than those who just want quick answers. Even students focused on efficiency still learn something. We cannot force every student to go deep, but we can make it appealing.

Across the six semesters, checkpoint documentation completion rates averaged 96%, though the depth and reflectiveness of submissions varied. Student responses on checkpoint assignments ranged from 300 to 600 words, with later iterations—which included more explicit scaffolding and prompt templates—tending toward the higher end of that range and producing noticeably more substantive reflections. Average grades across all assignment attempts ranged from 57% to 96%. The most common pattern of AI interaction observed in checkpoint submissions was an initial direct question followed by increasingly dialogic exchange—suggesting that many students naturally shifted toward the thinking partner mode once they experienced its value.

Final grades may appear inflated because the course design allows students to correct and resubmit assignments as many times as needed to achieve the highest possible score. This policy is intentional: it prioritizes mastery over penalty and aligns with the framework's emphasis on process over product. Additionally, the increasing accuracy of student work across resubmissions suggests that AI use—while not formally tracked—likely contributes to improved performance. From a learning standpoint, this is not problematic: repeated engagement with the material, regardless of whether the student consults AI, a textbook, or a peer, results in greater exposure to course content and deeper understanding.

The most encouraging observations involve students connecting course learning to their work. One special education teacher described using AI-assisted literature searches to find research supporting a specific intervention she wanted to recommend at an IEP meeting. A middle school science teacher applied the critical evaluation framework to assess a district-mandated curriculum program, ultimately presenting her analysis to her principal. Several students have reported using Socratic questioning techniques with their own students.

Student Feedback

Direct student feedback, gathered through course evaluations and informal written reflections, has been mixed in instructive ways. Students appreciate that AI assistance is available at 10 PM when they can finally work after putting their children to bed. They value AI dialogue's non-judgmental quality—they can ask “basic” questions without embarrassment.

Representative student comments from course evaluations:

“I can ask the same question five different ways without feeling stupid. That’s not something I’d do in a discussion board where everyone can see.”

— Elementary teacher, first-generation graduate student

“The Socratic approach was frustrating at first. I just wanted to know what validity meant. But by the end, I actually understood it instead of just memorizing a definition.”

— High school English teacher

“I used this same approach with a student who was struggling with thesis statements. Instead of telling her what was wrong, I asked questions. It worked.”

— Middle school reading specialist

Critical responses reveal legitimate concerns. Some students express frustration that the Socratic approach “won’t just give me the answer”—surfacing precisely the tension between efficiency and learning the methodology is designed to foreground. Others worry about AI accuracy, having encountered fabricated citations in other contexts. This skepticism represents exactly the critical AI literacy the course aims to develop.

Challenges and Adaptations

Implementation has required ongoing adjustment. Early iterations provided insufficient structure for AI interactions, resulting in shallow engagement. Students uncertain what “productive” AI use looked like defaulted to direct questions and accepted direct answers—precisely the pattern the course design sought to prevent. Subsequent versions introduced more explicit scaffolding: specific question stems, required follow-up sequences, and checkpoint prompts clarifying expectations.

Students arrive with widely varying AI experience. Some use ChatGPT daily; others have never engaged with generative AI. This variance requires differentiated support, challenging to provide within compressed timelines. AI integration can also inadvertently diminish perceived instructor involvement. When students receive immediate AI responses, instructor feedback may seem unnecessary or delayed. Sustaining clear distinctions between AI and instructor roles requires explicit communication—students must understand not only what AI can do but what it cannot, and why instructor expertise remains essential.

Limitations

These observations carry major limitations. They emerge from routine teaching practice rather than systematic research, lack comparison groups or standardized measures, and reflect courses taught by one instructor at one institution. They may be subject to bias, as the instructor who designed AI integration is also evaluating its effects. All data were collected from existing course records without student identification; because the data were de-identified and drawn from normal educational practice, Institutional Review Board approval was not required. Access equity represents a limitation we have not adequately addressed. While working adults generally have smartphones and internet access, the quality of that access varies considerably. A student completing coursework on a phone screen during a lunch break faces different constraints than one with a laptop and reliable home internet. We have not collected data on how access differences affect engagement with AI-integrated assignments. Future implementations should examine these questions directly, building equity assessment into course design rather than hoping the problem does not exist.

Implications for Distance Learning Administrators

Policy: From Prohibition to Purposeful Integration

The dominant institutional response to generative AI has been prohibition, framing AI use as an integrity threat requiring detection and punishment. For programs serving working adults, prohibition-focused policies create three interrelated problems. First, they prove unenforceable—working professionals use AI routinely in their careers and will continue to do so. Second, prohibition prevents learning—when AI use is forbidden, students cannot develop the competencies they need professionally. Third, detection-focused approaches carry the documented biases discussed earlier, disproportionately harming non-native English speakers and other already-marginalized populations.

Alternative policy frameworks emphasize transparency over prohibition. These policies ask not “Did you use AI?” but “How did you use AI, and what did you learn from it?” Clear guidance on prohibited uses remains important—submitting AI-generated work without documentation, using AI for assessments designed for independent completion, and misrepresenting AI contributions all violate integrity. But the offense is deception, not tool use.

Actionable Recommendations for Administrators

- 1 Replace prohibition-focused AI policies with transparency-focused alternatives.** Shift from “Did you use AI?” to “How did you use AI, and what did you learn?” Require documentation rather than ban usage.
- 2 Invest in faculty development that includes hands-on AI experience.** Faculty cannot teach effective AI use without having used AI themselves. Provide time, resources, and communities of practice for ongoing development.
- 3 Redesign assessment to emphasize process documentation.** When AI can produce polished products, product-only evaluation provides less information about learning. Require students to show their work and explain their reasoning.
- 4 Create communities of practice for ongoing peer learning.** AI capabilities evolve rapidly. Training appropriate for 2024 will be outdated by 2026. Establish ongoing structures for faculty to share successes, troubleshoot challenges, and develop collective expertise.
- 5 Discontinue reliance on AI detection tools.** These tools are unreliable, biased against non-native speakers, and pedagogically counterproductive. They position faculty as investigators rather than partners in learning.
- 6 Address equity considerations proactively.** Students in rural areas or low-income communities may have unequal access to AI tools. Consider institutional AI access, orientation resources, and differentiated support structures.

Practical mitigation strategies for equity exist but require institutional commitment. Programs might provide institutional AI access through site licenses, ensuring all students can use the same tools regardless of personal resources. Orientation modules can assess students’ technology situations and provide differentiated onboarding for those less familiar with AI tools. Assignments can be designed around freely available AI platforms rather than premium features. In our implementation, we have relied on freely available tools and avoided assignments requiring paid features, but we have not systematically assessed whether access disparities affect engagement or outcomes. Administrators adopting similar approaches should build equity assessment into their implementation from the start rather than treating it as an afterthought.

Faculty Development and Scaling

Policy changes without faculty support produce paper compliance rather than pedagogical transformation. Faculty need AI literacy themselves—understanding what AI can and cannot do, recognizing common failure modes like hallucination, and developing effective prompting skills. Faculty cannot teach students to use AI well without having used it themselves. They need pedagogical redesign support through instructional design consultation, course development grants, or reduced teaching loads during redesign phases. Faculty benefit from communities of practice, sharing successful approaches, troubleshooting challenges, and developing collective expertise.

Development must be ongoing rather than one-time; AI capabilities evolve rapidly, and training appropriate for 2024 will be outdated by 2026.

Administrators reasonably ask whether these approaches can scale. Faculty expertise and readiness vary; scaled implementation requires differentiated approaches, with institutions identifying and supporting early adopters, then facilitating diffusion as successful examples emerge. Assessment at scale creates challenges—process documentation generates work that instructors must review, creating workload challenges that institutions must address through appropriate course sizes, grading support, or technology-assisted evaluation. Some elements require instructor customization, particularly the Socratic prompts, which work best when fitted to specific course content. Other elements, such as checkpoint templates and transparency language, could be standardized across programs. Initial adoption requires significant investment—approximately 15–20 hours for course redesign plus regular adjustments based on student feedback.

The fundamental point remains: adult learners in distance education need preparation for AI-integrated professional practice. That preparation comes through thoughtful integration, not prohibition.

Conclusion and Future Research Directions

This paper has presented the Thinking Partner Framework as a practical alternative to the prohibition-versus-permission binary that dominates institutional AI responses. Drawing on six semesters of implementation with approximately 440 working adult learners, the framework demonstrates that AI can be integrated into graduate education in ways that support rather than undermine learning—when guided by clear design principles and grounded in adult learning theory. Surveys consistently show that AI tool adoption is widespread among working professionals across fields (Robert & McCormack, 2025), and graduate education should prepare students to use these tools thoughtfully rather than pretending they do not exist.

The framework presented here offers a different perspective. Rather than viewing AI as a threat requiring detection and punishment, it positions AI as a thinking partner to be leveraged and evaluated. Rather than designing assessments that AI cannot complete, it creates learning experiences helping students develop competencies for working with AI effectively. Rather than demanding students pretend AI does not exist while completing academic work, it invites them to document their AI use and reflect on what they learn from it.

The initial observations presented here suggest promise but do not provide evidence sufficient for confident recommendation. More rigorous research is needed across several dimensions. Learning outcome comparisons should examine whether students in AI-integrated courses learn as much or more than those in traditional formats, using controlled comparisons with validated assessments focused on outcomes most relevant for working adults—research application, critical evaluation, and professional transfer. The checkpoint submissions students complete generate rich data about how students interact with AI tools; systematic analysis could reveal patterns of effective versus ineffective AI use, common misconceptions in AI interaction, and developmental trajectories in AI literacy. Longitudinal studies following graduates through their careers would provide evidence about long-term professional impact that course-level assessment cannot capture.

Equity and access questions are particularly urgent. Our implementation has not systematically examined whether students with limited internet access, older devices, or less AI experience engage differently with the framework. The assumption that working adults have sufficient technology connectivity may mask significant variation: reliable home internet versus mobile-only connectivity, current devices versus aging hardware, familiarity with AI tools versus first-time exposure. For programs serving first-generation graduate students, students from under-resourced school districts, or students in rural communities, these questions are not academic—they determine whether AI integration expands opportunity or reinforces existing inequities. Research examining differential outcomes across student populations and comparative studies of faculty development models would help institutions allocate resources effectively.

The challenge AI brings to education is not mainly about technology. It is about our beliefs on the purpose of education. If education is only about proving students can work alone, then AI is a significant problem. But if education is about helping people think critically, creatively, and ethically in any situation, then AI is an opportunity.

Working adult learners already live and work in a world full of AI. Graduate education should help them think well in this environment, rather than ignoring the reality they face. This study invites distance learning administrators to shift their focus: instead of asking how to stop AI use, ask how to encourage good thinking in a world where AI is everywhere. The framework shared here is just one approach—imperfect and still developing. As more institutions and disciplines take on this challenge, better solutions will appear. Finding these answers is the task ahead.

Author's Note on AI Use

Consistent with the transparency this paper advocates, Claude (Anthropic) served as a thinking partner throughout the development of this manuscript, helping refine organization and prose. The authors drafted all sections, developed the framework and its theoretical foundations, and formulated all substantive claims, interpretations, and conclusions. AI assistance was used primarily for structural feedback on draft sections and for improving sentence-level clarity. No substantive content—including the framework design, literature review analysis, observations from practice, or recommendations—was generated by AI.

References

- Adarkwah, M. A. (2024). GenAI-infused adult learning in the digital era: A conceptual framework for higher education. *Adult Learning*, 36(3), 149–161. <https://doi.org/10.1177/10451595241271161>
- An, Y., Ghimire, A., Xie, Z., & Edwards, J. (2025). Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration. *International Journal of Educational Technology in Higher Education*, 22, Article 10. <https://doi.org/10.1186/s41239-025-00507-3>
- Awadallah Alkhouk, W., & Khlaif, Z. N. (2024). AI-resistant assessments in higher education: Practical insights from faculty training workshops. *Frontiers in Education*, 9, 1–9. <https://doi.org/10.3389/feduc.2024.1499495>
- Balducci, B. (2024). AI and student assessment in human-centered education. *Frontiers in Education*, 9, Article 1383148. <https://doi.org/10.3389/feduc.2024.1383148>
- Bittle, K., & El-Gayar, O. (2025). Generative AI and academic integrity in higher education: A systematic review and research agenda. *Information*, 16(4), Article 296. <https://doi.org/10.3390/info16040296>
- Black, R. W., & Tomlinson, B. (2025). University students describe how they adopt AI for writing and research in a general education course. *Scientific Reports*, 15, Article 8799. <https://doi.org/10.1038/s41598-025-92937-2>
- Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., Negrea, V., Oxley, E., Pham, P., Chong, S. W., & Siemens, G. (2024). A meta systematic review of artificial intelligence in higher education: A call for increased ethics, collaboration, and rigour. *International Journal of Educational Technology in Higher Education*, 21(1). <https://doi.org/10.1186/s41239-023-00436-z>
- Cai, L., Msafiri, M. M., & Kangwa, D. (2025). Exploring the impact of integrating AI tools in higher education using the Zone of Proximal Development. *Education and Information Technologies*, 30, 7191–7264. <https://doi.org/10.1007/s10639-024-13112-0>
- Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International Journal of Educational Technology in Higher Education*, 20, Article 38. <https://doi.org/10.1186/s41239-023-00408-3>
- Escalante, J., Pack, A., & Barrett, A. (2023). AI-generated feedback on writing: Insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, 20, Article 57. <https://doi.org/10.1186/s41239-023-00425-2>

- Fakour, H., & Imani, M. (2025). Socratic wisdom in the age of AI: A comparative study of ChatGPT and human tutors in enhancing critical thinking skills. *Frontiers in Education*, 10, 1–12. <https://doi.org/10.3389/feduc.2025.1528603>
- Favero, L., Pérez-Ortiz, J. A., Käser, T., & Oliver, N. (2025). Enhancing critical thinking in education by means of a Socratic chatbot. *Communications in Computer and Information Science*, 2519 CCIS, 17–32. https://doi.org/10.1007/978-3-031-93409-4_2
- Gurung, A., Lin, J., Gutterman, J., Thomas, D. R., Houk, A., Gupta, S., Brunskill, E., Branstetter, L., Aleven, V., & Koedinger, K. (2025). Human tutoring improves the impact of AI tutor use on learning outcomes. In *Artificial Intelligence in Education: Proceedings of the 26th International Conference* (pp. 393–407). Springer. https://doi.org/10.1007/978-3-031-98459-4_28
- Hadar Shoval, D. (2025). Artificial intelligence in higher education: Bridging or widening the gap for diverse student populations? *Education Sciences*, 15(5), Article 637. <https://doi.org/10.3390/educsci15050637>
- Holzweiss, P. C., Polnick, B., & Lunenburg, F. C. (2019). Online in half the time: A case study with online compressed courses. *Innovative Higher Education*, 44(4), 299–315. <https://doi.org/10.1007/s10755-019-09476-8>
- Jiang, Y., Xie, L., & Cao, X. (2025). Exploring the effectiveness of institutional policies and regulations for generative AI usage in higher education. *Higher Education Quarterly*, 79(4), Article e70054. <https://doi.org/10.1111/hequ.70054>
- Knowles, M. S. (1984). *Andragogy in action*. Jossey-Bass.
- Liang, W., Yuksekgonul, M., Mao, Y., Wu, E., & Zou, J. (2023). GPT detectors are biased against non-native English writers. *Patterns*, 4(7), Article 100779. <https://doi.org/10.1016/j.patter.2023.100779>
- Luo, J. (2024). A critical review of GenAI policies in higher education assessment: A call to reconsider the “originality” of students’ work. *Assessment and Evaluation in Higher Education*, 49(5), 651–664. <https://doi.org/10.1080/02602938.2024.2309963>
- Moore, S., & Lookadoo, K. (2024). Communicating clear guidance: Advice for generative AI policy development in higher education. *Business and Professional Communication Quarterly*, 87(4), 610–629. <https://doi.org/10.1177/23294906241254786>
- Price, J. A. (2024). Effectiveness of compressed online undergraduate courses. *Decision Sciences Journal of Innovative Education*, 22(4), 218–232. <https://doi.org/10.1111/dsji.12319>
- Robert, J., & McCormack, M. (2025, February). *2025 EDUCAUSE AI Landscape Study: Into the Digital AI Divide*. EDUCAUSE. <https://library.educause.edu/resources/2025/2/2025-educause-ai-landscape-study>
- Vlachopoulos, P., Jan, S. K., & Lockyer, L. (2019). A comparative study on the traditional and intensive delivery of an online course: Design and facilitation recommendations. *Research in Learning Technology*, 27, 1–13. <https://doi.org/10.25304/rlt.v27.2196>
- Weber-Wulff, D., Anohina-Naumeca, A., Bjelobaba, S., Foltýnek, T., Guerrero-Dib, J., Popoola, O., Šigut, P., & Waddington, L. (2023). Testing of detection tools for AI-generated text. *International Journal for Educational Integrity*, 19, Article 26. <https://doi.org/10.1007/s40979-023-00146-z>
- Wibowo, S., Wangid, M. N., & Firdaus, F. M. (2025). The relevance of Vygotsky’s constructivism learning theory with the differentiated learning primary schools. *Journal of Education and Learning*, 19(1), 431–440. <https://doi.org/10.11591/edulearn.v19i1.21197>

Xu, X., Qiao, L., Cheng, N., Liu, H., & Zhao, W. (2025). Enhancing self-regulated learning and learning experience in generative AI environments: The critical role of metacognitive support. *British Journal of Educational Technology*, 56(5), 1842–1863. <https://doi.org/10.1111/bjet.13599>

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They Deserve Training Too!

Online Program Development Training for Deans and Chairs

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Abstract

Academic Program Leaders (APL), including department chairs, associate deans, and deans, are essential to the successful development of fully online programs. However, APLs may lack academic training or direct experience with online instructional design, online pedagogy, online course quality assurance, and federal requirements for online/distance education. This paper describes the development of a training and resource course to help APLs be able to explain the course development process and the roles involved in online course development, articulate their responsibilities during online program planning process, identify specific ways that they can support the faculty subject matter experts and instructional designers in the course development process, evaluate an online template course for program alignment and discipline requirements and facilitate communication between the instructional design team and faculty teaching the course during deployment.

Introduction

When it comes to the development of courses for online programs, publications, presentations, and training tends to focus (rightly) upon the needs and responsibilities of faculty and instructional designers (ID). However, academic program leaders (APLs), including department chairs, associate deans, and deans, are also essential to the successful development of fully online programs. Their decisions and actions can have a positive or negative impact upon faculty, instructional designers, and students. This is especially true at our institution—a large midwestern public university—since the first point of contact for the development of fully online programs is between the APL and the Chief Online Learning Officer (COLO). The APL is the origin point, which means they play a critical role in tone-setting in this process—a role that they may not be trained for.

While APLs have responsibility for hiring, assignment teaching load, and evaluation of online faculty (McHaney & Spire, 2014), the rise of online learning in higher education has been accompanied by increased regulation (e.g., regular and substantive interaction) and concerns about student privacy, academic integrity, digital accessibility, student retention, and instructional quality, all of which are areas of concern to administrators (Dowd, 2026; Downs, 2022; Piña & Martindale, 2025).

During the COVID-19 pandemic crisis specifically, it became obvious that most faculty were ill-prepared for the switch to online learning and emergency remote teaching (Garrett, et al., 2020; Hodges, et al., 2020). Compared to faculty APLs have even fewer resources, literature, and training available to them regarding online education (Piña, 2023). Many APLs who are called to oversee online programs and courses may lack academic

training or direct experience with online instructional design, online pedagogy, online course quality assurance, and federal requirements for online/distance education. They are often obligated to learn on-the-job, often with little or no training.

In this article, we describe how we have built a bridge between our Online and Extended Learning Unit and our institution's APLs by creating a self-paced training and resource course designed specifically for academic leaders who oversee fully online programs at our institution. The course guides APLs through the process, knowledge base, and responsibilities for online program and course development.

Course Development Process

Piña (2021) described three models for online course development (Table 1 below).

Table 1: Models for Online Course Development

Model	Characteristic
Autonomy	The faculty member is solely responsible for all course development (Hawkes & Coldeway, 2002)
Partnership	The faculty member partners with an instructional designer--the faculty member serving as the subject matter expert (SME) (Xu & Morris, 2007)
Team	The faculty member serves as SME with a design and development team that may include instructional designers and other technical design and development professionals (Hixon, 2008).

Our Online and Extended Learning Unit has offered professional development programs to train and assist faculty in developing their own online courses. Data gathered from courses developed out of these programs indicated that it was not uncommon for a faculty member to take a year and a half to complete the development of an single online course. Further, although a Quality Matters course evaluation process was freely available to faculty, very few chose to have their courses evaluated, so there was no consistent quality assurance for online courses. Based on this context, the institution's new strategic plan included goals for online program growth that would necessitate establishing the ability to develop online courses at scale and at a more consistent level of quality.

Due to staffing constraints, a team model for development was not feasible, so a partnership model was chosen, in which a faculty SME partners with an instructional designer. Our institution also chose to implement a master course model, where courses were built using a common design template to provide a common structure, navigation and layout (Aspillaga, 2016; Borgmenke, et al., 2013). A master course includes all content necessary within the course for a qualified faculty member to teach the course (Hill, 2012; Piña, 2021). We have adopted the term "online template course" to refer to these courses to avoid negative connotations of the term "master."

Faculty SMEs were chosen by the APL and received a subject matter expert contract, which gave them responsibility to develop and select the course curriculum, assignments, and assessments, while the ID would build the course in the Canvas learning management system (LMS), format the content for optimal delivery in the LMS, and configure the assignments, assessments, tools and other LMS settings.

As a result, course development time was reduced to one 15-week semester per course, inclusive of all course development and a three-layer course evaluation process, including the SME, an additional ID, and the APL. This is a marked improvement over the year and a half timeline described in our professional development data. APLs were happy to have better quality courses developed at a faster rate and grateful that this partnership eliminated the need for the academic program to generate the up-front development costs, as the SME stipends and IDs were paid for by the Online and Extended Learning (OEL) Unit.

When initially preparing support materials for this partnership, our team's focus was on documenting the benefits to the APL, to advertise the process and secure new programs. However, a piece was missing. Our instructional design

team created a SME training course to prepare faculty to work with IDs to develop online template courses but offered no concrete guidance for the APL. When considering the models in Table 1, the partnership model (our chosen model) only highlights the partnership between IDs and SMEs—yet the APL is also an essential partner in this process.

Development of the Online Program Leaders Training and Resource Course

While the faculty SME training prepared the faculty for their new role of building courses that could be taught by other faculty, the APLs were being asked to select the SMEs, support the course development procedure, assess whether online template courses would be ready for deployment, and guide faculty through the deployment of these new courses. It became clear that the APLs needed training, too.

A series of design team meetings were held to formulate the learning objectives, parameters, and course content for an APL training course. The meetings included Courtney Cox, Evan Brown, and Stephanie Wilson (instructional designers), Nichol Brown (instructional design graduate assistant), Linda Summers (Assistant Director of Online Education), and Anthony Piña (Chief Online Learning Officer). Drawing upon the experience of these team members in developing, implementing, and evaluating online programs over the past two decades (Piña 2021, 2023), it was determined that the APLs should be able to:

- Explain the course development process and the roles involved in that process.
- Articulate their responsibilities as program leadership during the program planning process.
- Identify specific ways that they can support the SMEs and IDs in the course development process.
- Evaluate a template course for program alignment and discipline requirements in the assessment phase.
- Facilitate communication between the ID team and faculty teaching the course during deployment.

Furthermore, it was decided that the training should be self-paced and able to be completed in less than 3 hours, with no formal assignments or assessments to be completed. APLs would have continual access to the course and its materials so that it could be used as a resource site after training was completed. The design and development of the course was completed by Nichol Brown, Stephanie Wilson, Courtney Cox and Evan Brown, with input and review from Linda Summers and Anthony Piña.

Online Program Leaders Training and Resource Course

The course is delivered via the Canvas Learning Management System. Other platforms were considered, such as a shared folder of relevant documents, forms, and processes. However, it was important for us to model the use of the LMS, especially for APLs who may not be currently teaching or regularly enter the LMS environment. The course is structured around five modules that include training and resources for all phases and responsibilities of the online program and course development. Each module is described below.

Module 1: The Course Development Process & Roles

The first module provides an overview of the roles and expectations for the APL, the SMEs, the IDs and the COLO throughout the process of online course development. The APL receives an orientation to the concept of ready-to-teach online template courses--known commonly as master courses (Hill, 2012; Piña, 2021) and the advantages of partnering with the Online and Extended Learning Team (OEL) on course and program development, including:

- Courses are ready-to-teach for new faculty and adjunct faculty; however, faculty maintain the ability to modify courses to meet their needs.
- Courses are compliant with university standards and federal requirements for online education.
- Courses meet WCAG accessibility requirements.
- Courses make use of the tools and capabilities of the Canvas LMS.

- Faculty workload is reduced, as the SME is responsible only for course content, while the ID builds the course, formats the content, assures accessibility of the content, and configures assignments, assessments, gradebook, 3rd party integrations, and other course settings.
- Course development is scalable and occurs up to three times faster than when faculty build courses on their own.
- A three-tiered course quality assurance procedure is built into the course development process.
- The SME stipends and ID salaries are paid for by the Online and Extended Learning Unit, so there are no up-front costs to the academic department.

Figure 1 below provides an overview of the online template course development process, which serves as a guide for the remaining four modules. Please note that this figure uses the abbreviation OPL rather than APL, as Online Program Leader is the preferred term at our institution.

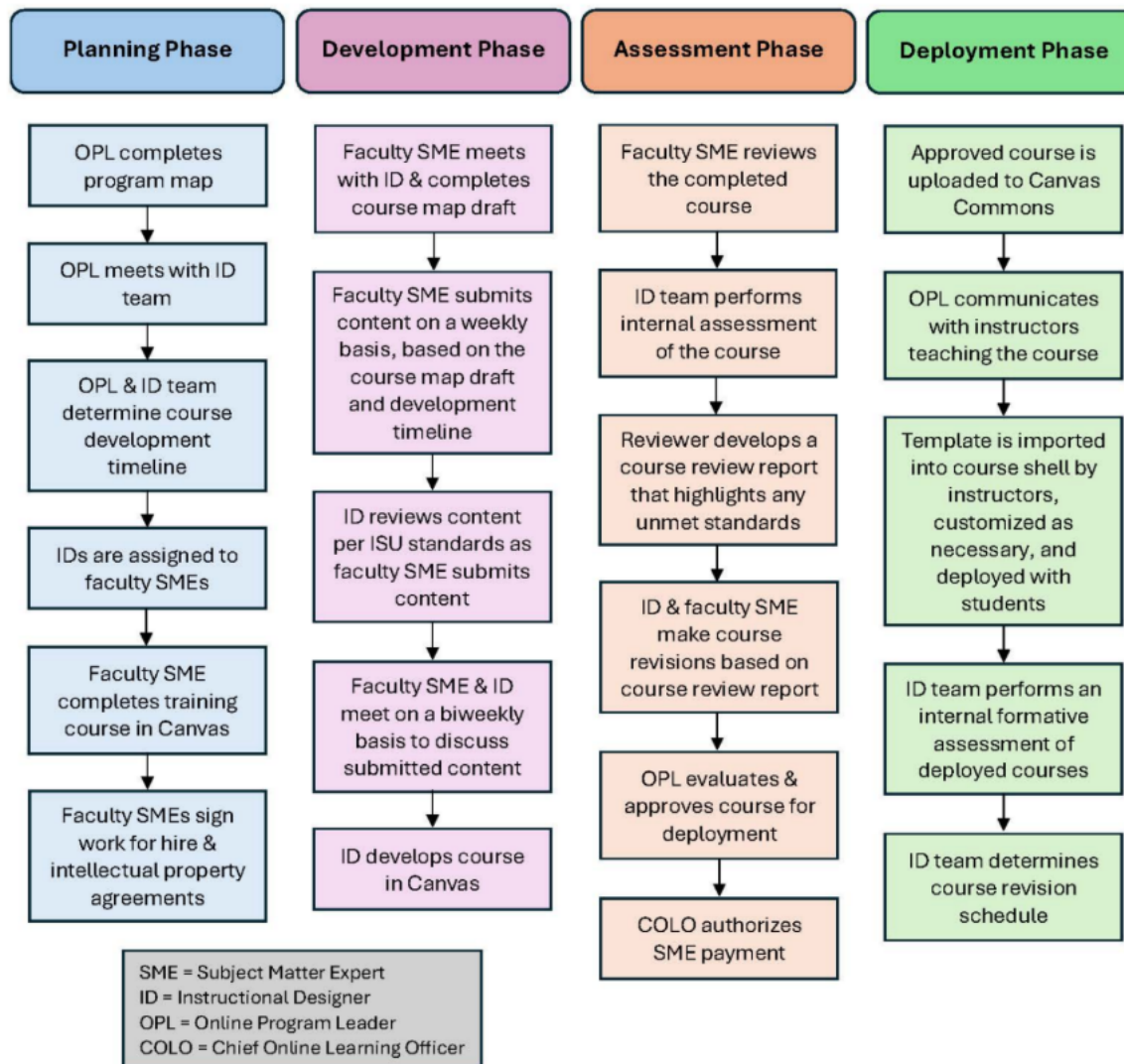


Figure 1: Online Template Course Development Process

Whenever possible, materials were shared between the SME training course and the APL training course, to ensure consistency in messaging regarding the process and the respective responsibilities of any stakeholders. This is especially important because, as the initial point of contact and the party who “hires” the Online and Extended Learning Unit to develop these courses alongside the selected SMEs, the APL is responsible for setting the tone for this entire relationship. They are the bridge between the SMEs and the IDs. With this in mind, Figure 1 is not only

used in the APL training course, but also the SME training course. The SME training course at our institution was primarily developed by a former member of the team, Alyssa Herman.

Module 2: Your Role in the Planning Phase

In the second module, APLs are guided through the process of creating a program map, which includes program-level student learning outcomes, the designation of program courses that are aligned to each outcome, a timeline for each course development, special instructions for accreditation, compliance or other outside requirements, and involvement of other departments' courses in the program. The training also provides guidance and recommendations to the APL to aid in the selection of effective SMEs.

Module 3: Your Role in the Development Phase

Although APLs are not involved in the day-to-day aspects of online course development, they receive periodic progress reports from the ID to keep them aware of how the process is advancing. In the rare occasion where APL intervention may be necessary (e.g., if the SME is not delivering content according to the agreed upon schedule, is not delivering content that meets the minimum standards, or no longer communicating with the ID), the module provides guidance and recommendations for how the APL might proceed (e.g. offering assistance, delaying the course development to another semester, identifying a replacement SME).

Module 4: Your Role in the Assessment Phase

One of the most important roles for the APL in the course development process is course evaluation (Martin & Kumar, 2018). The online template course development process includes a three-level course evaluation to ensure that quality standards and compliance requirements are met. The first level is an assessment completed by the SME. The second level is an internal OEL assessment conducted by an ID who is different than the ID assigned to the course. This level includes eight categories:

- Course Structure
- Course Information
- Course Support
- Objectives
- Learning Materials
- Interaction
- Assessment
- Accessibility

After the first and second level assessments are complete and any required modifications have been made, the final assessment is done by the APL, who is provided with teacher/faculty permissions within the online template course. The APL is provided with guidance for completing the Online Template Course Leadership Approval Form, which has four sections:

- *Consistency with academic unit* (the course goals, objectives, and content are consistent with those established by the academic unit and—if applicable—with corresponding face-to-face courses).
- *Consistency with accreditation and other requirements*.
- *Flagged standards* (any items from the internal review or the OPL review that may need attention).
- *OPL approval* (1-approved to be implemented, 2-approved when flagged standards have been met, or 3-requires modification and an addition review by APL).

Module 5: Your Role in the Deployment Phase

Once the course development has been completed and the course has been approved by the APL, it is ready to be deployed. The online template course master is designed to be “pristine,” i.e., instructors and students are not enrolled in the course master. This is to facilitate future updates and redevelopment of the course master without

having faculty or student data in the master. A copy of the course master is placed in Canvas Commons to allow individual instructors to access and import the content into their courses.

In the last module, the APL is provided with guidance for communicating the nature of the online template courses to their faculty, the editing privileges given to faculty in these template courses, and the expectations for what faculty members will need to update in their courses before teaching the course (included in the Instructor Course Update Checklist available in each course in Canvas). Finally, guidance is provided to APLs to assist in determining when online template courses need to be considered for redevelopment and contact information for any questions or concerns.

Conclusion

The partnership model for course development (Xu & Morris, 2007) implies a two-way partnership, between the SME and the ID. In our team's experience developing online template courses for fully online academic programs, it became clear that, while we are using the partnership model, this implication of a two-way partnership was doing a disservice to our academic program leaders, who are an essential part of this process. The online program development training for academic leaders provides valuable orientation and training for department chairs, associate deans, and deans. It clarifies APL roles, provides needed guidance and continues to be a go-to resource for those who oversee fully online degree and certificate programs. Perhaps more importantly, the existence of this training acknowledges the key role of the APL in course development. They deserve training too; let's give it to them.

References

- Aspillaga, M. (2016). *Standardized templates help improve accessibility and usability enhancing transfer of knowledge*. https://www.qualitymatters.org/sites/default/files/presentations/_standardized_templates_help_improve_accessibility_aspillaga.pdf
- Borgemenke, A. J., Holt, W. C., & Fish W. W. (2013) Universal course shell template design and implementation to enhance student outcomes in online coursework. *Quarterly Review of Distance Education* 14(1), 17-23.
- Dowd, C. (2026). *What week two of ahead rulemaking on accountability measures means for digital learning*. WCET Frontiers. <https://wcet.wiche.edu/frontiers/2026/01/21/what-week-two-of-ahead-rulemaking-on-accountability-measures-means-for-digital-learning/>.
- Downs, L. (2022). *Regular and substantive interaction update: Where do we go from here?* WCET Frontiers. <https://wcet.wiche.edu/frontiers/2022/11/08/regular-substantive-interaction-update-where-do-we-go/>.
- Garrett, R., Legon, R., Fredericksen, E. E., & Simunich, B. (2020). *CHLOE 5: The pivot to remote teaching in spring 2020 and its impact, the changing landscape of online education, 2020*. Quality Matters. <https://qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-project>.
- Hawkes, M., & Coldeway, D. O. (2002). An analysis of team vs. faculty-based online course development. *Quarterly Review of Distance Education* 3(4), 431-442.
- Hill, P. (2012). *The master course: A key difference in educational delivery methods*. <https://eliterate.us/the-master-course-a-key-difference-in-educational-delivery-methods/>.
- Hixon, (2008). Team-based online course development: A case study of collaboration models. *Online Journal of Distance Learning Administration* 11(4).
- Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020, March 27). *The difference between emergency remote teaching and online learning*. EDUCAUSE Review. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>.

Martin, F., & Kumar, S. (2018) Frameworks for assessing and evaluating e-learning courses and programs. In A. A. Piña, V.L. Lowell & B. R. Harris (Eds.) *Leading and managing e-learning: What the e-learning leader needs to know* (271-280). Springer.

McHaney, R. W., & Spire, L. (2014). Fewer snags for the department chair. *Distance Education Report* 18(17) 5-6.

Piña, A. A. (2021). Managing the course development process. In L. D. Cifuentes (Ed.) *A Guide to Administering Distance Learning* (141-173). Brill Publishing.

Piña, A. A. (2023). Managing and evaluating online programs. In S. Wa-Mbaleka, L. Casimiro & K. Thompson (Eds.) *The Sage Handbook for Online Higher Education* (504-513). Sage Publishing.

Piña, A. A. & Martindale, T. (2025). Regular and substantive interaction in online courses: Why it matters for administrators. *Online Journal of Distance Learning Administration* 26(2).

Slaughter, D. S., & Murtaugh, M. C. (2018). Collaborative management of the e-learning design and development process. In A. A. Piña, V.L. Lowell & B. R. Harris (Eds.) *Leading and managing e-learning: What the e-learning leader needs to know* (253-270). Springer.

Xu, H., & Morris, L. V. (2007). Collaborative course development for online courses. *Innovative Higher Education* 32(1), 35-47.

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Academic Coaching in Online Educational Settings: Implications for Practice

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Abstract

The expansion of online graduate education has led to increased reliance on academic coaches as a scalable support mechanism for student success. This article examines best practices for integrating academic coaches into online learning environments, with particular emphasis on ethical grading, professional responsibilities, communication practices, and faculty collaboration. Findings indicate that academic coaches serve as essential instructional partners when guided by clear expectations, strong ethical frameworks, and targeted professional development. Implications for practice include the need for structured training, consistent evaluation systems, and alignment with institutional standards to ensure quality, equity, and student success in online higher education.

Introduction

The continued growth of online graduate programs has transformed instructional delivery in higher education, necessitating innovative support structures to meet the needs of diverse and geographically dispersed learners. One such structure is the integration of academic coaches, who provide instructional, administrative, and relational support within online courses. Academic coaches play a critical role in facilitating communication, supporting assessment processes, and enhancing student engagement.

As institutions increasingly adopt academic coaching models, there is a growing need to establish clear expectations, ethical standards, and best practices that guide their work. The effectiveness of academic coaches depends not only on their technical skills but also on their adherence to professional ethics, their ability to collaborate with faculty, and their commitment to student-centered practices. This article explores the essential components of effective academic coaching in online higher education and provides recommendations for institutional implementation.

Ethical Foundations of Academic Coaching

Ethical practice is a cornerstone of effective academic coaching, particularly in the context of grading and evaluation. Ethical grading requires objectivity, consistency, and alignment with established rubrics and institutional policies. Academic coaches must ensure that all assessments are conducted without bias and reflect the intended learning outcomes of the course.

Beyond the technical aspects of grading, ethical practice contributes to the development of a culture of trust and accountability within online learning environments. Students rely on transparent and fair evaluation processes to understand their progress and to remain engaged in their coursework. When academic coaches uphold ethical standards, they reinforce academic integrity and promote equitable learning experiences.

Academic integrity is a critical component of ethical grading. Academic coaches must model honesty, fairness, and responsibility while addressing issues such as plagiarism and academic dishonesty. Their actions influence student perceptions of institutional credibility and contribute to the maintenance of rigorous academic standards.

Character and Professional Expectations of Academic Coaches

The effectiveness of academic coaches is closely tied to their professional dispositions and character. Key attributes include responsibility, accountability, integrity, honesty, patience, and collaboration. These traits support the development of positive relationships with both students and faculty while ensuring adherence to institutional expectations.

Responsibility and accountability are essential, as academic coaches are tasked with managing grading timelines, responding to student inquiries, and providing accurate and meaningful feedback. Failure to meet these responsibilities can disrupt course flow and negatively impact student outcomes.

Collaboration with faculty is another critical expectation. Academic coaches must align their practices with course objectives, grading standards, and instructional goals established by the faculty member. This alignment ensures consistency across course sections and contributes to a cohesive learning experience.

Integrity serves as the foundation for all professional behaviors. Academic coaches must consistently demonstrate ethical decision-making and maintain trust with stakeholders. These professional expectations are not merely desirable qualities, but essential competencies required for effective practice.

The Role of Feedback in Student Success

High-quality feedback is one of the most significant contributions academic coaches make to student learning. Effective feedback is timely, specific, and actionable, providing students with clear guidance on how to improve their performance. Feedback should be aligned with course rubrics and learning objectives, ensuring that students understand both their strengths and areas for growth.

Generic or vague feedback limits student development and may lead to confusion or disengagement. In contrast, detailed and individualized feedback supports deeper learning and encourages student persistence. Academic coaches must take care to tailor their responses to each student's work, highlighting specific elements of success and offering constructive suggestions for improvement.

The manner in which feedback is delivered is equally important. Feedback should be communicated in a respectful and supportive tone that fosters trust and encourages continued engagement. Academic coaches must remain mindful of their language, ensuring that their comments promote growth rather than defensiveness.

Faculty and Academic Coach Collaboration

Effective integration of academic coaches requires strong collaboration between faculty and instructional support personnel. While academic coaches often manage grading and communication tasks, faculty retain ultimate responsibility for course design, content, and assessment standards.

To ensure alignment, institutions should implement structured processes that facilitate collaboration, including pre-course planning meetings, ongoing communication, and periodic check-ins throughout the course. These interactions allow faculty to clarify expectations, address potential challenges, and provide guidance to academic coaches.

Inter-rater reliability practices are particularly important in courses with multiple academic coaches. By engaging in shared grading exercises and comparing results, academic coaches and faculty can identify discrepancies and establish consistent grading standards. This process enhances fairness and reduces variability in student evaluation.

Communication and Student Support

Effective communication is a critical component of academic coaching in online environments. Academic coaches serve as primary points of contact for many students, making their communication practices central to the student

experience. Clear, timely, and professional communication helps reduce uncertainty and fosters a sense of connection within the online learning environment.

Responsiveness is especially important. Prompt replies to student inquiries and timely feedback on assignments contribute to student satisfaction and engagement. Academic coaches must also ensure that their communication is inclusive and respectful, recognizing the diverse backgrounds and experiences of online learners. Ethical communication involves more than clarity; it requires empathy and consideration of students' perspectives. Academic coaches should strive to create supportive interactions that encourage participation and promote academic growth. By modeling professionalism and respect, they contribute to a positive and equitable learning environment.

Student Perceptions and Instructional Impact

Student perceptions provide valuable insight into the effectiveness of academic coaching practices. Evidence from student feedback indicates that academic coaches significantly enhance the online learning experience through their responsiveness, feedback quality, and supportive interactions.

Students consistently report that timely communication and detailed feedback improve their understanding of course content and increases their confidence in completing assignments. Personalized support and encouragement are particularly valued, as they help students navigate the challenges of online learning while balancing professional and personal responsibilities.

Academic coaches also contribute to student success by providing technical and procedural support, clarifying assignment expectations, and assisting with course navigation. These contributions allow students to focus on learning rather than administrative challenges.

Overall, the presence of effective academic coaches is associated with increased student satisfaction, improved engagement, and stronger academic performance. These findings reinforce the importance of academic coaches as integral members of the instructional team.

Implications for Practice

Institutions seeking to implement or enhance academic coaching models should consider several key recommendations:

1. **Structured Training and Professional Development**
Academic coaches should receive comprehensive training that addresses ethical practices, feedback strategies, and communication skills.
2. **Clear Role Definition and Expectations**
Clearly defined responsibilities help ensure consistency and reduce ambiguity in academic coaching practices.
3. **Ongoing Collaboration with Faculty**
Regular communication and alignment with faculty support consistent instructional delivery and assessment practices.
4. **Use of Data for Continuous Improvement**
Institutions should collect and analyze student feedback and performance data to evaluate and refine academic coaching models.
5. **Emphasis on Ethical Standards**
Policies and procedures should reinforce the importance of fairness, transparency, and academic integrity in all coaching activities.

Conclusion

Academic coaches play a vital role in supporting student success in online higher education. Their contributions extend beyond administrative support to include instructional guidance, relational engagement, and ethical leadership. When guided by clear expectations, strong professional standards, and effective collaboration with faculty, academic coaches enhance the quality and effectiveness of online learning environments.

As online education continues to expand, institutions must prioritize the development of academic coaching models that emphasize ethical practice, high-quality feedback, and meaningful student engagement. By doing so, they can ensure that academic coaches serve as effective instructional partners and contribute to the overall success of students and programs alike.

Disclosure Statement

This manuscript is derived from previously developed scholarly work authored by the same contributors in a book chapter focused on academic coaching in online higher education. The current article has been substantially revised, synthesized, and adapted to meet journal publication standards and audience expectations.

Portions of the manuscript were developed with the assistance of artificial intelligence (AI) tools to support organization, clarity, and language refinement. All content has been reviewed, edited, and approved by the author(s), who assume full responsibility for the accuracy, integrity, and originality of the work. The use of AI tools did not replace scholarly judgment, interpretation, or the authors' intellectual contributions.

References

- Allen, I. E., & Seaman, J. (2017). *Digital compass learning: Distance education enrollment report 2017*. Babson Survey Research Group.
- Bolliger, D. U., & Martin, F. (2018). Instructor and student perceptions of online student engagement strategies. *Distance Education*, 39(4), 568–583. <https://doi.org/10.1080/01587919.2018.1520041>
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. ASCD.
- Kouzes, J. M., & Posner, B. Z. (2023). *The leadership challenge* (7th ed.). Jossey-Bass.
- Mackay, M. (2017). Evidence of professional learning: a closer look at development in practice. *International Journal of HRD Practice, Policy and Research*, 2(2), 7-19.
- Marzano, R. J. (2007). *The art and science of teaching*. Alexandria, VA: ASCD.
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, 11(3), 219–232.
- Noddings, N. (2012). *The caring relation in teaching*. Oxford University Press.
- O'Connor, K. (2007). *A repair kit for grading: 15 fixes for broken grades*. Pearson.
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–189.
- Watkins, H. E. & Williams, R. F. (Eds.). (2026). *Academic Coaching in Modern Online Education*. IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-2582-8>

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A Case Study of Faculty Perceptions of Collaborative Sessions for Student Practicum Experiences in a Fully Online Education Counseling Program

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Abstract

Fully online counselor education programs face ongoing challenges in providing clinically meaningful, supervision-adjacent learning experiences while meeting practicum hour requirements. National University's School Counseling program addresses this need through weekly synchronous Zoom collaborative sessions facilitated by faculty. These sessions count toward required practicum hours but are intentionally nonprescriptive in structure and facilitation. This qualitative single-case study explored how faculty interpret and implement these sessions and how students experience them as practicum-aligned learning opportunities. Data were collected through faculty questionnaires, faculty interviews, and a student focus group, and analyzed using reflexive thematic analysis. Findings indicate that faculty experienced the sessions as relationally rich and professionally meaningful but also cognitively and emotionally demanding. Faculty positioned the sessions as practicum-adjacent spaces for guided practice, reflective processing, ethical reasoning, and professional identity development. Participants also identified persistent ambiguity related to the absence of shared guidelines, equity concerns across course sections, and the intensive labor of managing engagement and group process in synchronous environments. Students reported initial uncertainty about the sessions' purpose but described increasing appreciation as they progressed into practicum and core skills courses. Faculty recommended program-level supports that preserve instructional autonomy while strengthening coherence, including clearer learning objectives, shared exemplars, targeted facilitation training, and alignment with counseling competencies. Implications highlight the need for intentional design structures that enhance consistency, support faculty workload, and maximize developmental value in online practicum-support models.

Keywords: online counselor education, practicum, synchronous learning, faculty perceptions, collaborative sessions

National University's School Counseling program requires students to participate in weekly online collaborative sessions facilitated by faculty. Although these sessions count toward the program's required practicum hours, they are intentionally nonprescriptive, allowing faculty discretion in design and facilitation. Little is known about how faculty interpret this responsibility or how the sessions function as practicum-aligned learning experiences. This lack of shared guidance may contribute to variability in instructional practices, inconsistent student experiences, and uncertainty about the sessions' role in counselor preparation.

The purpose of this qualitative case study was to explore faculty experiences facilitating weekly Zoom collaborative sessions within a fully online counseling program. Specifically, the study examined how faculty conceptualized the sessions' purpose, navigated opportunities and challenges associated with nonprescriptive design, perceived contributions to student professional growth, balanced personal teaching styles with program expectations, and articulated recommendations for improvement.

Literature Review

The expansion of online delivery in higher education has transformed professional preparation programs that historically relied on in-person, relationship-rich training. Counselor education is particularly sensitive to this shift because professional readiness depends on supervised skill practice, interpersonal attunement, and ethical decision-making in complex contexts (American School Counselor Association [ASCA], 2025). As practicum-adjacent learning moves online, faculty must redesign guided practice to remain clinically meaningful while meeting accreditation standards, institutional expectations, and student needs. This review synthesizes scholarship on faculty experiences teaching online, collaborative learning in counselor preparation, modality considerations, frameworks for online practicum design, and organizational conditions shaping faculty work.

Faculty Experiences in Online Teaching and Presence

Research consistently indicates that effective online teaching requires more than content delivery, it demands intentional design to cultivate engagement, social connection, and instructor presence (Lowenthal & Dunlap, 2018; Martin & Bolliger, 2018). These challenges are amplified in counselor education, where relational cues and interpersonal processes are core learning targets. Faculty often rely on synchronous platforms to recreate immediacy and interaction that asynchronous formats cannot easily provide.

Within synchronous environments, instructors commonly use breakout rooms, interactive tools, and structured discussion to increase participation and social presence (Salmon, 2013). Camera use, though contested for equity and privacy reasons, is often framed as supporting nonverbal feedback and connection (Castelli & Sarvary, 2021). Despite these strategies, faculty report persistent obstacles including technology disruptions, uneven engagement, and the cognitive demands of managing multiple communication channels simultaneously (Rapanta et al., 2020). These constraints shape faculty perceptions of what Zoom-based collaborative sessions can realistically accomplish when expected to approximate practicum experiences.

Collaborative Learning, Group Work, and Supervision

Collaborative learning, particularly group work and supervision, is central to counselor preparation and professional readiness. Licensure pathways integrate coursework with supervised practicum and internship experiences aligned with ethical and professional standards (ASCA, 2025). Guided collaborative practice supports the development of empathy, ethical reasoning, professional communication, and case conceptualization through relational engagement and feedback (Bledsoe et al., 2021; Wilder et al., 2022).

Group process has long functioned as a core experiential component in counselor education, offering structured opportunities for skill rehearsal, self-awareness, and tolerance for ambiguity (Kolb, 1984; Rogers, 1970, 1971). Role-plays and simulations provide psychologically safer environments for practicing counseling skills prior to field placements (Bledsoe et al., 2021; Wilder et al., 2022). However, research cautions that group cohesion does not

automatically translate into counseling competence, and poorly facilitated group experiences may introduce risks related to vulnerability, shame, or inadequate support (Anderson & Price, 2001; Maaß et al., 2022; Murphy & Schofield, 2024). These mixed findings are particularly relevant for online group spaces, where faculty facilitation plays a critical role in balancing safety and developmental challenge.

Supervision is consistently identified as essential for counselor competence, ethical judgment, and professional identity formation (Wilder et al., 2022). Professional standards emphasize the importance of trained supervisors to ensure client welfare and gatekeeping (American Counseling Association [ACA], 2014; ASCA, 2024; CACREP, 2016). While supervision strengthens self-efficacy and professional growth (Bernard & Goodyear, 2019; Tang, 2020), structural limitations such as inconsistent supervision quality and limited availability persist, particularly in distributed or online programs (Brott et al., 2017; Wilder et al., 2022). As a result, program-managed Zoom sessions may function as compensatory structures for guided practice when local supervision capacity is uneven.

Synchronous and Asynchronous Modalities

Faculty perceptions of online learning often distinguish between synchronous and asynchronous modalities, though definitions of synchronous instruction vary widely (Belt & Lowenthal, 2023). Research suggests that perceived effectiveness depends less on modality itself and more on instructional design and contextual conditions. During emergency remote teaching, limited preparation and engagement contributed to negative perceptions, especially when asynchronous formats were used by default rather than by design (Gopalan et al., 2022; Klein et al., 2023).

Synchronous video-based learning is frequently valued for community-building and observable participation, though its effectiveness declines with large class sizes or technological barriers (Lowenthal et al., 2021). Faculty also report concerns about assessment integrity in asynchronous contexts, which may shape preferences for synchronous formats when professional behavior and skill demonstration are central (Ahadiat & Gomaa, 2020; Watson et al., 2023). For practicum-aligned learning, synchronous sessions may provide more direct evidence of professional communication, responsiveness, and ethical reasoning when active learning strategies are employed.

Frameworks for Online Practicum and Skill Development

Emerging scholarship recommends explicit frameworks to guide online work-integrated learning and skill development. Relevant approaches include Community of Inquiry (CoI), competency-based education (CBE), entrustable professional activities (EPAs), and simulation-based mastery learning with deliberate practice (Lewis et al., 2022; Petit et al., 2023; Hennis et al., 2025; McGaghie et al., 2025). CoI emphasizes social, cognitive, and teaching presence and has been applied to remote supervision to strengthen relational engagement (Petit et al., 2023). Structured reflection and feedback are associated with improved learning outcomes in online practicum contexts (Bowen, 2020; Chatoor, 2023).

CBE and EPAs shift emphasis from time-based requirements to demonstrated competence, supporting the use of simulated and digitally mediated activities when assessment criteria are explicit (Encandela et al., 2023; Lewis et al., 2022). These frameworks align with telemental health training literature emphasizing technology competence and ethical digital practice (Jiang et al., 2024). Simulation-based mastery learning and deliberate practice further support the use of structured role-play and feedback to develop interpersonal skills such as empathy (Larsson et al., 2025; Mitchell & Clark, 2023).

Faculty Workload, Professional Identity, and Autonomy

The sustainability of synchronous practicum-oriented sessions is shaped by faculty workload and professional identity. Online teaching often expands instructional labor through course redesign, continuous communication, and emotional presence (Delgaty, 2013). Recent studies link these demands to emotional exhaustion and reduced satisfaction, particularly when institutional expectations exceed available support (Oh et al., 2025; Yan & Pourdavood, 2024). Faculty also report role ambiguity as pedagogical, technical, and managerial responsibilities converge in online and hybrid contexts (Marques et al., 2024; Orfali et al., 2024).

Tensions between faculty autonomy and program-level consistency further shape practicum design. While standardized structures can promote equity and accreditation alignment (Choppin et al., 2022; Hasinoff et al., 2024), prescriptive requirements may constrain professional judgment and responsiveness to student needs (Nikolaidis et al., 2024; Reichman, 2025). Scholarship suggests that negotiated structures, developed through shared governance, offer a more sustainable balance between consistency and instructional flexibility (Ghamrawi et al., 2024; Wehlburg, 2025). In online counseling programs, Zoom collaborative sessions often become sites where these tensions are enacted.

Methods

This study employed a qualitative single-case study design to examine faculty perceptions of Zoom-based collaborative sessions within one online School Counseling program. Faculty served as primary participants, with students contributing supplementary perspectives for triangulation. Data collection included three sources: (a) open-ended questionnaires completed by ten faculty members, (b) semi-structured interviews with five faculty members, and (c) a voluntary student focus group conducted in the final course of the program. Faculty data focused on instructional strategies, perceived purpose, challenges, and effectiveness, while student data contextualized how sessions were experienced across the program.

Data were analyzed using Braun and Clarke's reflexive thematic analysis. Coding occurred at semantic and latent levels, with themes refined through iterative review and comparison across data sources. Trustworthiness was supported through triangulation, analytic memoing, and an audit trail. Institutional Review Board exemption was granted prior to data collection.

Results

Faculty Experiences Facilitating Zoom Collaborative Sessions

Faculty described the sessions as relationally rich and professionally meaningful, offering deeper engagement than asynchronous coursework. At the same time, participants emphasized the emotional and cognitive demands of sustaining presence, managing group dynamics, and monitoring multiple communication channels. Over time, faculty reported increased confidence as they developed strategies for reading virtual group cues and facilitating interaction.

Faculty consistently framed the sessions as practicum-adjacent learning spaces rather than traditional classes. They described them as bridges between theory and practice where students engaged in guided rehearsal, reflective dialogue, ethical reasoning, and professional identity development. Faculty viewed their role as mentoring and supervision-adjacent, emphasizing formation rather than content delivery.

Opportunities and Challenges of Nonprescriptive Design

Faculty valued the instructional autonomy afforded by the lack of prescriptive guidelines, noting that flexibility allowed responsiveness to student needs and practicum contexts. Participants described using role-plays, case consultation, and reflective dialogue to tailor sessions to cohort-specific challenges.

However, this autonomy also produced uncertainty. Faculty reported ambiguity regarding expectations, scope, and consistency across sections, as well as concerns about equity when students compared experiences. Technological challenges, uneven participation, and cognitive overload during facilitation further compounded these tensions. In the absence of formal guidance, faculty relied on professional judgment, prior supervision experience, and informal peer benchmarking.

Contributions to Student Professional Growth

Faculty perceived the sessions as central to professional identity formation, helping students transition from academic learners to emerging counselors. Participants highlighted gains in confidence, ethical reasoning, professional language, and applied skills. Faculty noted that students often initially viewed the sessions as a requirement for accruing hours, but increasingly recognized their value once engaged in practicum and skills-based coursework.

Student focus group data corroborated these perceptions. Students described early uncertainty about purpose, followed by growing appreciation as sessions became spaces to process real-world experiences, reduce isolation, and receive guidance. Many characterized the sessions as resembling group supervision, particularly valuing role-plays, case discussions, and faculty feedback.

Balancing Personal Pedagogy and Program Expectations

Faculty described integrating personal teaching styles into facilitation, ranging from relational check-ins to structured agendas. Most emphasized “structured flexibility,” using loose frameworks that allowed adaptation to group dynamics. Participants acknowledged tension between autonomy and program consistency, expressing concern about equity while also valuing discretion to respond to cohort needs.

Faculty Recommendations

Faculty recommended clearer learning objectives and shared exemplars to anchor facilitation without imposing rigid scripts. Participants emphasized the need for targeted professional development in online facilitation and group process, as well as opportunities for peer mentoring and observation. Faculty also called for recognition of the emotional and cognitive labor involved in facilitating these sessions. Many envisioned a more formalized framework aligning sessions with counseling competencies and practicum supervision structures while preserving instructional flexibility.

Discussion and Conclusions

This case study positions Zoom-based collaborative sessions as central, supervision-adjacent learning spaces in fully online counselor education. Faculty experienced the sessions as meaningful sites of professional formation, bridging coursework and practicum preparation through relational engagement, guided practice, and reflection. At the same time, the study highlights tensions related to ambiguity, workload, and consistency inherent in nonprescriptive design.

Findings suggest that online practicum-support models benefit from intentional structures that clarify purpose, support faculty development, and recognize instructional labor without constraining professional judgment. Student perspectives reinforce the developmental value of these sessions, particularly as learners enter practicum contexts and seek spaces for collective reflection and support.

Future research should examine similar models across institutions, track student development longitudinally, and further investigate faculty workload and sustainability. As online counselor education continues to expand, understanding how to design, support, and legitimize synchronous practicum-aligned learning environments remains essential.

References

- Ahadiat, N., & Gomaa, M. I. (2020). Online accounting education: How to improve security and integrity of students' performance assessments. *Journal of Instructional Pedagogies*, 24, 1–14.
- American Counseling Association. (2014). *2014 ACA code of ethics*. <https://www.counseling.org/resources/ethics>

- American School Counselor Association. (2024). *Ethical standards for school counselor education and faculty*. <https://www.schoolcounselor.org/About-School-Counseling/Ethical-Legal-Responsibilities>
- American School Counselor Association. (2025). *State/territory certification*. <https://www.schoolcounselor.org/About-School-Counseling/Careers-in-School-Counseling/State-Requirements-Programs>
- Anderson, R. D., & Price, G. E. (2001). Experiential groups in counselor education: Student attitudes and instructor participation. *Counselor Education and Supervision*, 41, 111–119. <https://doi.org/10.1002/j.1556-6978.2001.tb01275.x>
- Belt, E. S., & Lowenthal, P. R. (2023). Synchronous video-based communication and online learning: An exploration of instructors' perceptions and experiences. *Education and Information Technologies*, 28(5), 4941–4964. <https://doi.org/10.1007/s10639-022-11360-6>
- Bernard, J., & Goodyear, R. (2019). *Fundamentals of clinical supervision* (6th ed.). Pearson.
- Bledsoe, K. G., Burnham, J. J., Cook, R. M., Clark, M., & Webb, A. L. (2021). A phenomenological study of early career school counselor clinical supervision experiences. *Professional School Counseling*, 25(1). <https://doi.org/10.1177/2156759X21997143>
- Bowen, T. (2020). Work-integrated learning placements and remote working: Experiential learning online. *International Journal of Work-Integrated Learning*, 21(4), 377–386.
- Brott, P. E., Stone, V., & Davis, T. E. (2017). Growing together: A developmental model for training school counseling site supervisors. *Professional School Counseling*, 20(1), 139–148. <https://doi.org/10.5330/1096-2409-20.1.139>
- Castelli, F. R., & Sarvary, M. A. (2021). Why students do not turn on their video cameras during online classes and an equitable and inclusive plan to encourage them to do so. *Ecology and Evolution*, 11(8), 3565–3576.
- Chatoor, K. (2023). *Working (and learning) online: Improving remote work-integrated learning experiences for students and employers*. Higher Education Quality Council of Ontario.
- Choppin, J., Roth McDuffie, A., Drake, C., & Davis, J. (2022). The role of instructional materials in the relationship between the official curriculum and the enacted curriculum. *Mathematical Thinking and Learning*, 24(2), 123–148.
- Council for Accreditation of Counseling and Related Educational Programs. (2016). *2016 CACREP standards*. <http://www.cacrep.org/for-programs/2016-cacrep-standards>
- Delgaty, L. (2013). A critical examination of the time and workload involved in the design and delivery of an e-module in postgraduate clinical education. *Medical Teacher*, 35, 1173–1180.
- Encandela, J. A., Shaull, L., Jayas, A., Amiel, J. M., Brown, D. R., Obeso, V. T., Ryan, M. S., & Andriole, D. A., Core Entrustable Professional Activities for Entering Residency Pilot. (2023). Entrustable professional activities as a training and assessment framework in undergraduate medical education: A case study of a multi-institutional pilot. *Medical Education Online*, 28(1), 2175405. <https://doi.org/10.1080/10872981.2023.2175405>
- Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024). Exploring the impact of AI on teacher leadership: Regressing or expanding? *Education and Information Technologies*, 29(7), 8415–8433.

- Gopalan, C., Serrano, C., Dickey, P., Daugherty, S., Hackmann, E., Bracey, G., Bartels, L., Fickas, J., Locke, S., & Butts-Wilmsmeyer, C. (2022). Flipped teaching transition to online teaching by STEM educators during the COVID-19 pandemic. *Advances in Physiology Education*, 46(4), 677–684.
- Hasinoff, A. A., Bolyard, W., DeBay, D., Dunlap, J. C., Mosier, A. C., & Pugliano, E. (2024). “Success was actually having learned:” University student perceptions of ungrading. *Teaching and Learning Inquiry*, 12, 1–22.
- Hennus, M. P., Kox, M. C. R., Zuiderent-Jerak, T., & Lombarts, K. M. J. M. H. (2025). Implementing entrustable professional activities: Practical and legal implications. *Medical Teacher*. <https://doi.org/10.1080/0142159X.2025.2559917>
- Jiang, Q., Deng, Y., Perle, J., Zheng, W., Chandran, D., Chen, J., & Liu, F. (2024). Education and training of telemental health providers: A systematic review. *Frontiers in Public Health*, 12, 1385532. <https://doi.org/10.3389/fpubh.2024.1385532>
- Klein, K., Galantino, M., Crowell, T., & Cavazza, R. (2023). The abrupt educational switch: Impact of COVID-19 and lessons learned for health science faculty and students. *Internet Journal of Allied Health Sciences & Practice*, 21(2), 1–19.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Larsson, J., Werthén, D., Carlsson, J., Salim, O., Davidsson, E., Vaz, A., Sousa, D., & Norberg, J. (2025). Does deliberate practice surpass didactic training in learning empathy skills? A randomized controlled study. *Nordic Psychology*. <https://doi.org/10.1080/19012276.2023.2247572>
- Lewis, L. S., Rebesch, L. M., & Hunt, E. (2022). Nursing education practice update 2022: Competency-based education in nursing. *SAGE Open Nursing*, 8, 23779608221140774. <https://doi.org/10.1177/23779608221140774>
- Lowenthal, P. R., & Dunlap, J. C. (2018). Investigating students’ perceptions of instructional strategies to establish social presence. *Distance Education*, 39(3), 281–298.
- Lowenthal, P. R., West, R. E., Archambault, L., Borup, J., & Belt, E. S. (2021). Faculty perceptions of using synchronous video-based communication technology. *Online Learning*, 25(4), 74–96.
- Maaß, U., Kühne, F., Hahn, D., & Weck, F. (2022). Group cohesion in group-based personal practice. *Behavioural and Cognitive Psychotherapy*, 50(1), 28–39. <https://doi.org/10.1017/S1352465821000369>
- Marques, R. M. G., Lopes, A., & Magalhães, A. M. (2024). Academic identities and higher education change: Reviewing the evidence. *Educational Research*, 66(2), 228–244. <https://doi.org/10.1080/00131881.2024.2334760>
- Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, 22(1), 205–222.
- McGaghie, W. C., Barsuk, J. H., & Salzman, D. H. (2025). Simulation-based mastery learning curriculum development workbook. *Simulation in Healthcare*, 20(1S), S1–S13.
- Mitchell, S. A., & Clark, T. (2023). Deliberate practice in medical simulation. In *StatPearls* [Internet]. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK554558/>

- Murphy, R., & Schofield, M. (2024). How do counselling trainees describe group process and does this change over time? *Counselling and Psychotherapy Research*, 24(1), 219–229. <https://doi.org/10.1002/capr.12633>
- Nikolaidis, A. C., Fitz, J. A., & Warnick, B. R. (2024). How much is too much? Refining normative evaluations of prescriptive curriculum. *Theory and Research in Education*, 22(2), 189–216.
- Oh, E. G., Kang, S. P., & Han, S. H. (2025). Exploring satisfaction of online teaching faculty from a Job Demands-Resources model perspective: The mediating roles of emotional exhaustion and motivation. *Journal of Computing in Higher Education*, 37, 1243–1262. <https://doi.org/10.1007/s12528-024-09421-5>
- Orfali, C. H., Muñoz, M. L. A., Plaza, I. R., & Valenzuela, R. U. (2024). How higher education teachers see their professional identity. *Frontiers in Education*, 9, 1429847. <https://doi.org/10.3389/feduc.2024.1429847>
- Petit, M., Babin, J., & Desrochers, M.-È. (2023). Remote supervision of teacher trainee internships: Using digital technology to increase social presence. *Frontiers in Education*, 7, 1026417. <https://doi.org/10.3389/feduc.2022.1026417>
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3), 923–945.
- Reichman, H. (2025). *Understanding academic freedom*. JHU Press.
- Rogers, C. (1970). *Carl Rogers on encounter groups*. Harper Row.
- Rogers, C. (1971). Carl Rogers describes his way of facilitating encounter groups. *The American Journal of Nursing*, 71(2), 275–279. <https://pubmed.ncbi.nlm.nih.gov/5203599/>
- Salmon, G. (2013). *E-tivities: The key to active online learning* (2nd ed.). Routledge.
- Tang, A. (2020). The impact of school counseling supervision on practicing school counselors' self-efficacy in building a comprehensive school counseling program. *Professional School Counseling*, 23(1). <https://doi.org/10.1177/2156759X20947723>
- Watson, C., Templet, T., Leigh, G., Broussard, L., & Gillis, L. (2023). Student and faculty perceptions of effectiveness of online teaching modalities. *Nurse Education Today*, 120, 1–7. <https://doi.org/10.1016/j.nedt.2022.105651>
- Wehlburg, C. M. (2025). *Academic master planning: Guiding strategic innovation for academic leadership*. Springer Nature.
- Wilder, C. R., Smith, A. R., Money-Brady, J., Ebersole, D. B., Cazares-Cervantes, A., Hannor Walker, T. L., & Justice, J. (2022). School counseling site supervision: Training recommendations to benefit school counselor interns and site supervisors. *Journal of Counselor Preparation and Supervision*, 16(1). <https://research.library.kutztown.edu/jcps/vol16/iss1/4>
- Yan, M., & Pourdavood, R. G. (2024). Faculty and student perspectives on online learning in higher education. *Education Sciences*, 14(8), 801. <https://doi.org/10.3390/educsci14080801>

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Supporting and Scaling Online Teaching Excellence

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Abstract

To scale online teaching excellence, intentional faculty preparation is essential. Scaling this practice campus-wide requires access to development, mentoring, and fiscal support across all academic ranks. Guided by the institution's strategic plan, interdisciplinary collaboration and evidence-based frameworks sustain innovation, ensuring lasting impact and a culture of excellence in online education.

Introduction

Online teaching is not a new trend within higher education discourse. Research affirms the impact of online learning on student success (Castro & Tumibay, 2021). Seamless navigation, backward design, accessibility, and assessment alignment, are pivotal factors for effective course design (Brown, 2021). However, a key aspect that is equally valuable is the role of teaching. A well-designed online course alone will not ensure learning occurs leading to evidence of student success. Quality course design coupled with evidence-based teaching practices is a recipe for meaningful impact. Online teaching necessitates a distinct set of pedagogical skills for effectiveness (Darby & Lang, 2019). Everything faculty may implement in a traditional classroom setting is not readily transferable to an online classroom. Online teaching excellence often develops in isolated pockets, but institutions need mechanisms to scale faculty capacity across hundreds of instructors and multiple disciplines. Voluntary development, mentoring, and incentives can build momentum, yet without an institution-wide structure, efforts remain uneven and difficult to sustain. The problem is operational: how to institutionalize support, resources, and leadership practices that normalize online teaching excellence campus wide. When faculty are supported to implement evidence-based practices that enhance engagement, belonging, and persistence, online learning outcomes improve, and the need to scale such support becomes urgent. Therein, lies the challenge, how do higher education institutions effectively prepare faculty to teach online courses with excellence? Once prepared, how do institutions of higher learning scale online initiatives that reach the entire faculty ecosystem? This paper offers a replicable model for scaling online teaching excellence through (1) evidence-based development, (2) mentoring structures, and (3) sustainable resourcing.

Institutional Awareness

Every higher education institution has a strategic plan that provides visionary leadership and benchmarks to assess progress. Data-informed decision making concerning current curricular programming and future program development are necessary to attract new and keep current students (Bowman, 2021). Given the need for continuing education through certification or a baccalaureate degree, online programs are a practical solution for every learner, particularly adult learners. Evaluating the institutional context of a campus community offers valuable insight to assess institutional readiness, buy-in, and sustainability. The *Excellence in Online Instruction Initiative* at a public, four-year, Historically Black College and University (HBCU) in the Southeast region was the incubator for online teaching excellence. As a trailblazer in social mobility, the HBCU sought to bolster academic programming for online courses taught by 395 instructional faculty. The executive leadership understood the importance of faculty voice as an important actionable step to gain buy-in for the initiative. As a strategic thought partner, Academic Affairs personnel conveyed the importance and value proposition of the initiative to the campus community. While the initiative emerged within an HBCU context, the underlying strategies of intentional faculty preparation, interdisciplinary mentoring, and alignment with institutional priorities are adaptable across institutional types.

Faculty Development

Centers for Teaching and Learning are often the hidden gems on a campus whose focus is faculty development (Mihai et al., 2025). The faculty development professionals are skilled practitioners who support faculty in enhancing their pedagogical toolkit. To scale an initiative of this type across a campus, knowing who to collaborate with is important. Faculty developers know the pulse of the campus and often have great relationships with faculty. This safe space of sorts becomes the impetus for lasting change. To this end, the faculty development staff on the campus partnered with the Association of College and University Educators (ACUE). The mission of ACUE is to elevate student success through high-quality instruction at higher education institutions. By offering the only nationally recognized Effective Teaching certification, endorsed by the American Council on Education (ACE), faculty would gain the necessary skills for effective online teaching. ACUE-certified faculty deliver exceptional teaching in every class, resulting in higher student engagement, improved achievement, and stronger retention – outcomes that enhance institutional impact and support long-term student success. To aid preparation, faculty completed a 25-week asynchronous course on *Effective Online Teaching Practices* that immerses them in evidence-based teaching practices. With the ACUE Effective Teaching Framework as a guide, faculty view and discuss authentic video teaching demonstrations, engage in a community of practice, implement what they are learning in real time, and reflect on their learning.

Mentoring

Given the time commitment of 2-3 hours weekly, a support system is necessary. A Campus Lead, usually a faculty development professional, serves as the leading mentor for faculty. In this capacity, the Campus Lead adheres to an interdisciplinary approach that aligns with the institutional strategic plan. Interdisciplinary collaboration provides a community of practice that is common in the field of educational development (Adams et al., 2023). As faculty matriculate through the certification course, participating Department Chairs model exemplary leadership. This modeling helps to foster a departmental culture that elevates the importance of quality teaching. The agenda for departmental meetings evolved to include mentorship opportunities for participating faculty to share impactful teaching practices. This sharing of best practices, lessons learned and student impact becomes a positive motivator for current and future course-takers. To encourage more Department Chairs to complete the certification, the Campus Lead became a coach not only for faculty but also administrative leaders.

Fiscal Support

Participation in the certification course was voluntary and designed to enhance faculty teaching efficacy rather than serve as a mandated requirement. To emphasize intrinsic motivation, faculty were not informed of available fiscal support until the midpoint of the course. This intentional decision, guided by the provost's leadership, reinforced that participation was driven by a shared commitment to student success rather than financial incentive. Faculty learned about stipends during a virtual meeting held shortly before winter break, reinforcing the message that institutional leaders viewed the initiative as a meaningful investment in professional growth across academic ranks. While such funding may not be feasible in every institutional context, financial support can serve as a powerful signal of the value placed on faculty labor, particularly given the time commitment required and ongoing compensation disparities in higher education. Although the initiative was launched through grant funding, institutional resources were later embedded into the operating budget to ensure long-term sustainability.

Scaling for Impact

During the four-year initiative, 146 faculty earned the Effective Teaching certification. This population reflects different disciplines, faculty rank, and focus areas. Years of experience for faculty varied from new adjunct faculty to tenured professors. Despite where faculty were in their career, the course included something for everyone. Since participation was open to all faculty members, sustained interest and online teaching excellence became a common discussion and expectation within the institutional context. While the focus was online teaching, the residual impacts extend to traditional face-to-face courses as well. Faculty who excels in the online modality are more confident and even better facilitators of learning in-person. Recognition of the ACUE-certified faculty occurs during an annual pinning ceremony that is open to the campus community.

Faculty receive a certificate, lapel pin, commemorative yearbook, and supporting documentation to include in their tenure and promotion dossier. Additionally, faculty can display their certification on LinkedIn, curriculum vitae, email signatures, and digital portfolios. As a result of this initiative, faculty confidence in facilitating online engagement, assessing learning, and fostering belonging increased consistently across cohorts. Table 1 reflects the increase in confidence for faculty using evidence-based practices. As shown in Figure 1, faculty confidence increased substantially across all evidence-based teaching practices following certification, with gains ranging from 25 to 48 percentage points across academic years. A longitudinal study is forthcoming to examine the impact on DFW rates and student retention for courses taught by ACUE-certified faculty.

Table 1

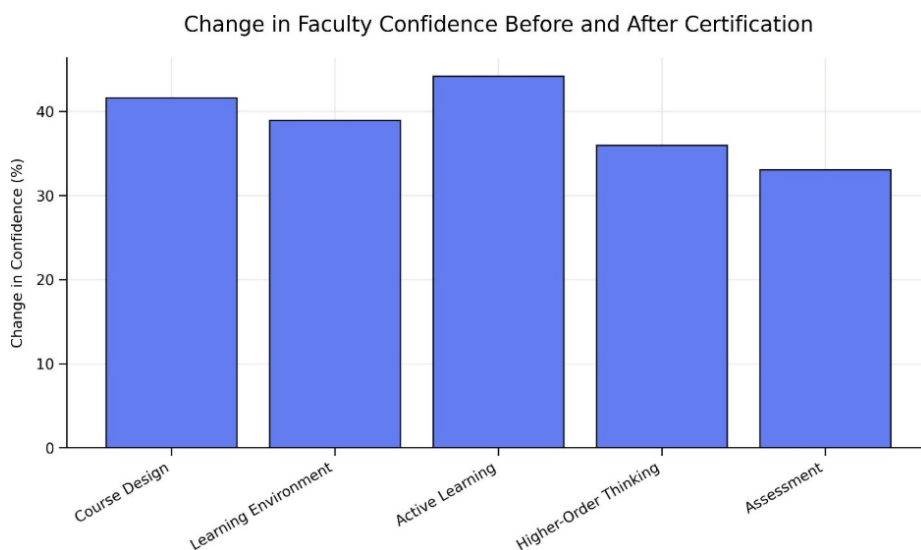
Faculty Confidence in Evidence-Based Teaching Practices Before and After Certification

Academic Year	Faculty (n)	Course Design		Learning Environment		Active Learning		Higher-Order Thinking		Assessment	
		Pre (%)	Post (%)	Pre (%)	Post (%)	Pre (%)	Post (%)	Pre (%)	Post (%)	Pre (%)	Post (%)
2021–2022	53	57	99	51	90	40	86	56	93	68	97
2022–2023	40	51	99	44	88	44	90	49	91	59	93
2023–2024	26	57	98	49	84	42	85	59	95	53	91
2024–2025	27	60	92	55	90	53	92	61	86	55	90

Note. Pre = pre-certification; Post = post-certification. Values represent faculty self-reported confidence (percentages) in applying evidence-based teaching practices. Total certified faculty across all academic years equals $N = 146$.

Figure 1

Change in Faculty Confidence Before and After Effective Online Teaching Certification



Note. Values represent the difference between post-certification and pre-certification faculty self-reported confidence (Post – Pre). Positive values indicate increased confidence in applying evidence-based teaching practices. Total certified faculty across all cohorts equals $N = 146$.

Conclusion

As online education continues to evolve, online teaching excellence must become an institutional priority. The online experience of students affects their learning, retention, future giving, and recruitment at our institutions. When leaders show a standard of excellence, most faculty readily align for a love for learning and student success. For those who may be reticent, positive peer feedback from colleagues, departmental discussions, and evidence of impact with supporting data becomes intriguing. To support and scale the online teaching initiatives across a higher education institution, supportive leadership, faculty voice, intentional and evidence-based faculty development opportunities, and a commitment to student success will prove higher education institutions as leaders in online teaching excellence. Institutions that invest intentionally in faculty teaching excellence position themselves not only for online growth, but for long-term academic resilience.

References

- Adams, S., Tesene, M., Gay, K., Brokos, M., Swindell, A., McGuire, A., & Rettler-Pagel, T. (2023). *Communities of practice in higher education: A playbook for centering equity, digital learning, and continuous improvement*. Association of Public and Land-Grant Universities.
<https://www.everylearnereverywhere.org/resources/communities-of-practice-in-higher-education/>
- Brown, B. (2021). Incorporating UDL Principles in an Online Graduate Course Using a Backward Design Approach. *Incorporating Universal Design for Learning in Disciplinary Contexts in Higher Education*, 39-42.
- Bowman, R. A. (2021). Student trajectories for enrollment forecasting, management, and planning. *The AIR Professional File* (Article 153). Association for Institutional Research.
<https://doi.org/10.34315/apf1532021>
- Castro, M. D. B., & Tumibay, G. M. (2021). A literature review: efficacy of online learning courses for higher education institution using meta-analysis. *Education and Information Technologies*, 26(2), 1367-1385.
- Darby, F., & Lang, J. M. (2019). *Small teaching online: Applying learning science in online classes*. Jossey-Bass.
- Mihai, A. I., Dailey-Hebert, A. L., & Beausaert, S. (2025). *Understanding the complexity of centers for teaching and learning: Introducing a four-dimensional model*. *Higher Education*, 90, 1693–1712.
<https://doi.org/10.1007/s10734-025-01399-y>
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Designing Comprehensive Onboarding and Professional Development for Online Adjunct Faculty

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Abstract

Hiring online adjunct faculty in higher education continues to grow, encompassing nearly half of the overall faculty population. As four-year institutions rely on the benefits of adjunct faculty, they must also invest in their orientation and continuous development. Existing literature confirms the varied approaches to supporting adjunct faculty, the deficiency in coordinated programming, and reveals a lack of understanding in adjunct faculty's perception of training delivered. Using a qualitative phenomenological design, this study explored the gap between the onboarding and professional development an institution provides and the online adjunct faculty's perception of its effectiveness. The research questions explored the lived experiences of adjunct faculty receiving and administrators managing the training. To better understand the barriers to developing comprehensive training, both perspectives contributed to the body of literature on this topic. The study was conducted with participants from two small liberal arts universities in the Midwest by conducting direct interviews with three administrators and 25 online adjunct faculty. The findings revealed eight themes about the phenomena of adjunct faculty onboarding and professional development, indicating that diverse perceptions among adjunct faculty highlight the challenge of creating effective training programs. However, academic leaders can overcome this by listening to adjuncts and improving processes. Adjuncts reported that receiving clear expectations, a thorough orientation to the LMS, and connecting with support staff can boost satisfaction and readiness. Results suggest that a structured approach to assessing training needs and effectiveness provides valuable insights into the most effective training program design.

Keywords: Adjunct faculty onboarding and professional development, Adjunct faculty training, Adjunct faculty support, Designing comprehensive contingent faculty training, Higher education

Introduction

Four-year university institutions continue to manage the many challenges within the higher education industry, combating high competition and economic difficulties with innovative strategies, including increased online program development for enriching student enrollment (Laws, 2021). As online learning continues to grow, so does the hiring and use of online adjunct faculty (Aguilera & Martinez, 2023). Adjunct faculty growth has been increasing steadily at private and public institutions, comprising at least 40% of the faculty labor force (Barnes & Fredericks, 2021). As student and faculty competition increases, attracting and retaining students with quality online teaching delivered by adjunct faculty is a top consideration for academic leaders (Burleigh et al., 2021; McAtee & Huston, 2023; Laws, 2021). Professional development and onboarding processes for adjunct faculty are critical functions to prepare and support contingent faculty for providing quality teaching (Barnes & Fredericks, 2021; Buch et al., 2023; Butters & Gann, 2022; Dyer & Song, 2023; Mellieon et al., 2021). Furthermore, for distance education administrators and chief online officers, delivering appropriate and meaningful training enhances adjuncts' preparedness, sense of belonging, and professional growth, leading to job satisfaction and faculty retention (Rahman et al., 2021). Ongoing and effective faculty training is essential, yet centralized training initiatives designed specifically for online adjunct faculty remain challenging for many academic leaders, distance education departments and universities (Frögéli et al., 2023; Perrotta & Bohan, 2020).

Universities are investing in online programs and continuing to hire more adjunct faculty members, but are not consistently improving orientation and training to adequately prepare new adjunct faculty members to teach online courses (Cheslock & Jaquette, 2022; Burleigh et al., 2021; Farakish et al., 2022; Frankel et al., 2020). The problem addressed in this study is the lack of development in onboarding training and professional development for online adjunct faculty. Research has focused on various approaches and components to either faculty professional

development or onboarding (Bush & McCullough, 2023; Farakish et al., 2022; Markowitz, 2021). A research gap exists in understanding the barriers that universities face in developing cohesive training programs and the perceptions of online adjunct faculty regarding the effectiveness of training (Perrotta & Bohan, 2020). By exploring experiences within both roles, adjunct faculty receiving training and directors implementing training, the researcher explored the perceptions of effectiveness and needs for onboarding and professional development that increase teaching preparedness and satisfaction (Perrotta & Bohan, 2020). If academic affairs leaders do not invest in adjunct faculty with appropriate training to facilitate their transition to the institution, instructional quality and confidence can suffer, causing feelings of isolation and doubt (Farakish et al., 2022). Creating a systematic orientation, onboarding, and ongoing professional development process for new online adjunct faculty has been shown to be a critical initiative for universities to assist new faculty members in adapting to the social environment and preparing for effective online teaching (Frögéli et al., 2023).

The researcher utilized four research questions to explore the reasons contributing to successful training initiatives, inquired about online adjunct faculty experiences and top needs, as well as the barriers university administrators face in creating and implementing training. The methodology involved a flexible design phenomenological study to explore how higher education institutions can improve support for online adjunct faculty with comprehensive onboarding and professional development training designed to meet their specific needs. The findings indicate that intentionally seeking feedback from the institution's current adjunct professionals and outlining a comprehensive plan for consistent support are the first steps. Although the study was conducted with two small liberal arts institutions, the core findings and implications are likely transferable across institution types and sizes. Administrators, including chief online officers or distance education directors, can establish more thoughtful feedback loops and initiatives that provide ongoing technology training, clearly communicated expectations, and actions to promote investment and value of adjunct professionals. Academic leaders must recognize the diverse expectations and experiences of their adjunct population to develop coordinated actions and resources that support and value adjunct contributions.

Purpose Statement

The purpose of this flexible design phenomenological study was to explore the gap between the professional development an institution provides and online adjunct faculty's perception of its effectiveness. The study expanded understanding of the reasons behind the lack of comprehensive, research-informed, and resource-supported professional development and onboarding programs for online adjunct faculty (Buch et al., 2023; Burleigh et al., 2021; Dyer & Song, 2023; Frankel et al., 2020). The research sought to uncover the actions or behaviors contributing to successes and breakdowns of systematic onboarding and professional training initiatives designed for online adjunct faculty members' needs, informed by experiential learning and adult learning theory.

Onboarding orientation training is considered the orientation and onboarding process for new employees, serving the purpose of a newcomer socialization practice to assist new adjunct faculty in adapting to the social and task environment in their new role and institution (Frankel et al., 2020; Frögéli et al., 2023; Smith et al., 2022; Young-Brice, 2022). Professional development is defined as the systematic efforts to bring change in the teaching practices of instructors and the outcomes of students (Butters & Gann, 2022; Buch et al., 2023; Dyer & Song, 2023; Frankel et al., 2020; Witcher & Sasso, 2022). Developing a better understanding of the more significant problem of adequately supporting online adjunct faculty members will be explored through an in-depth study of the barriers to improving comprehensive training and adjunct faculty member experiences and their perceptions of received training for influencing teacher preparedness and satisfaction (Buch et al., 2023; Burleigh et al., 2021; Butters & Gann, 2022; Dyer & Song, 2023; Frankel et al., 2020). The qualitative data was collected through semi-structured interviews with the university administrators responsible for implementing the training initiatives and with the coordinating online adjunct faculty members from the two separate four-year institutions.

Methodology

The researcher used qualitative and phenomenological methods to explore an in-depth understanding of the lack of development in onboarding training. Specifically, she studied how adjunct faculty members and directors interpret their experiences through their lived experiences, what meaning adjuncts attributed to their training experiences regarding feeling prepared for teaching online and their satisfaction level with the training, and how directors experienced barriers or challenges in managing the training.

Research Questions

To address the problem of the lack of development in online adjunct faculty onboarding and professional development, the research questions explore the lived experiences of adjunct faculty and directors, as well as their perceptions of effectiveness, in order to reveal reasons contributing to successful initiatives and preventing the implementation of planned training. Four research questions guided the study, addressing various key aspects of training development and the desires held by online adjunct faculty for institutional communication, orientation, and online teaching training to feel equipped for remote teaching.

- RQ1. What is the lived experience of adjunct faculty members during the onboarding process and professional development training at a university?
- RQ2. How do adjunct faculty members perceive the effectiveness of their onboarding training and professional development?
- RQ3. What is the lived experience of directors in developing and implementing training for adjunct faculty?
- RQ4. What differences exist in how directors perceive the effectiveness of their training initiatives compared to adjunct faculty members?

Study Design

The researcher used qualitative tools with the phenomenological method to explore an in-depth understanding of the lack of development in onboarding training, how the adjunct faculty members interpret their experiences through their lived experiences, and what meaning they attribute to their training experiences concerning feeling prepared for teaching online and satisfied with their training. The phenomenological approach focuses on studying the lived experience or essence of an experience or phenomenon shared among individuals (Moustakas, 1994). With this method, the researcher sought to explain what individuals share in their similar experiences of developing and receiving adjunct onboarding, training, and ongoing support. In the findings, the researcher describes the common meaning from which she reduced the individual phenomena experiences to a universal essence that was derived from data collection and analysis directly from participants (Creswell & Poth, 2018). By gathering descriptive expressions of their experiences, the researcher addressed the research questions about the lack of development in training, the influence of experienced training on teaching preparedness, and the specific challenges adjunct faculty experience for teaching online from the perspective of both directors and adjunct faculty.

The researcher conducted in-depth interviews with adjunct faculty from two different institutions who had taught at least one online course with the institution and were only employed as contingent instructors. Purposeful sampling was used to identify and elicit participants. The researcher conducted interviews with the corresponding administrator to elicit their experiences in leading the orientation efforts, including the development of training initiatives and the barriers they encountered. The interviews allowed for analysis and comparison between the perceptions and lived experiences of both participant groups. This research combined interviews, a collection of training documents, and an adjunct survey to substantiate findings through triangulation of the data.

Results

The findings of this study explored the lived experiences of adjunct faculty and directors in onboarding and professional development at two small liberal arts universities. Data was gathered through semi-structured interviews with 25 adjuncts, 17 from Site A, 8 from Site B, and surveys with 15 responses. Additionally, three directors were interviewed about managing adjunct onboarding and professional development at these institutions. The three directors' roles varied, with one as a dean and overseeing hiring and onboarding within a department, one working in Academic Affairs, overseeing onboarding and training more broadly (Site B), and one working as the instructional designer engaging primarily with LMS training and support for adjunct faculty (Site A).

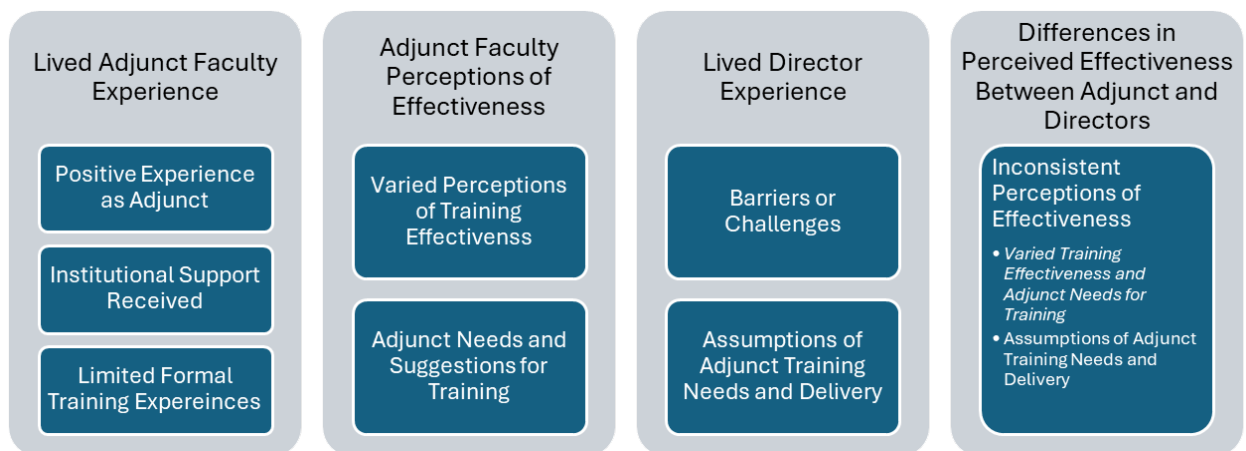
The researcher conducted all interviews via a videoconferencing platform, Zoom, and followed a 10-question interview guide for adjunct faculty and a 10-question interview guide for directors. The interviews spanned from 18 minutes to 66 minutes. The interviews were transcribed and coded in the software NVivo and coded with a

combination of methods, including a starting short code list, open coding, and in vivo coding (Creswell & Poth, 2018; Saldana, 2021). The researcher disseminated a 5-question survey via a survey software, Qualtrics, to the adjunct faculty who agreed to participate and used the results for triangulation and descriptive statistics.

The study's findings highlight the lack of formal, structured onboarding and professional development for adjunct faculty, especially at small institutions. Figure 1 displays the eight themes that emerged from the findings, including: (1) positive experiences as an adjunct, (2) institutional support received, (3) limited formal training experiences, (4) varied perceptions of training effectiveness, (5) adjunct needs and suggestions for training, (6) barriers or challenges for directors, (7) assumptions of adjunct training needs and delivery (8) inconsistent perception of effectiveness. Figure 2 shows the eight identified themes that emphasize the need for better training, clear expectations, ongoing support, and accessible communication.

Figure 1

Experience and Perception Findings



In addition to the interviews, the researcher distributed a survey to adjunct faculty for triangulation with the interview data and descriptive statistics purposes. Table 1 displays the responses to the survey. Of the participants who responded to the survey, the majority indicated a high level of perceived effectiveness in the received training, either onboarding or professional development opportunities, for influencing their preparedness to teach and satisfaction with teaching at the institutions. However, the interview responses indicated themes for which they could be prepared better or more thoroughly through orientation and ongoing training. The results indicate the varied experiences and perceptions that are further elaborated in the discussion of the themes.

Table 1

Adjunct Survey Results

Question	Count	Percentage
Q2 - Did your onboarding experience influence your feelings of preparedness to teach your online courses?		
Definitely	7	47%
Probably	5	33%
Unsure	1	7%
Probably Not	2	13%
Q3 - Has the professional development offered influenced your feelings of preparedness to teach your online courses?		
Definitely	6	40%
Probably	3	20%
Unsure	3	20%

Probably Not	2	13%
Definitely Not	1	7%

Q4 - The overall training you received from the institution influenced your overall satisfaction with teaching at this institution.

Strongly Agree	2	13%
Agree	8	53%
Undecided	3	20%
Disagree	1	7%
Strongly Disagree	1	7%

Q5 - The overall training you received from the institution addressed the challenges or barriers you encountered as you prepared to teach remotely.

Strongly Agree	3	20%
Somewhat agree	9	60%
Neither agree nor disagree	1	7%
Somewhat disagree	1	7%
Strongly disagree	1	7%

Discussion

The research results uncovered challenges such as misalignment in training, barriers in workflow and timing, and the lack of awareness of the effectiveness of the training. Adjuncts reported that changes in leadership may contribute to breakdowns in systematic onboarding and professional development initiatives in addition to limited feedback loop opportunities. Despite the gaps, most participants indicated positive experiences and feeling supported by at least one key person or department. However, a lack of structured onboarding and limited professional development left many adjuncts feeling less prepared, confident, and invested in their teaching and technology use. The variation in perceptions highlights the challenge of developing structured training that meets all the needs and desires of an institution's adjunct population.

Table 2 displays the emergent themes and codes in alignment with the four overarching research questions. The purpose of research question one was to explore the lived experience of adjunct faculty members during their onboarding process and professional development training opportunities at the university involved in the study, Site A or Site B. They were asked to describe their overall experience as an adjunct, their experience with any training programs, and how their experience has compared to other institutions if they have worked as an adjunct elsewhere. The purpose of research question two was to explore how adjunct faculty perceive the effectiveness of their onboarding training and professional development opportunities. They were asked to reflect on how their training experiences have influenced their teaching abilities and connectedness to the institution, examples of when they felt they did and did not receive need training and support, what specific types of training are needed, suggestions for improving the overall training and how this would change their experience. The purpose of research question three was to explore the lived experiences of directors in developing and implementing training for adjunct faculty. They were asked to describe their experience in their professional role with adjunct faculty in managing the training and the challenges or barriers they face in implementing comprehensive training. Research question four aimed to examine the gap or differences in how adjunct faculty perceived the effectiveness of training received compared to how directors perceived the effectiveness of training delivered.

Table 2

Emergent Themes, Relevant Codes, and Research Question Alignment

Research Question	Relative Codes	Theme
RQ1. What is the lived experience of adjunct faculty members during the onboarding process and professional	Passion for teaching and students; Good Experience; Feel Supported/Connected; Appreciate Additional Income	Positive Experience as Adjunct
		Institutional Support Received by Adjuncts

development training at a university?	One-on-One Training/Meeting; Support of Department/key People; Importance of Technology and LMS Training; Courses/Workshops; Connecting with Peers; Knowing Who to Ask Questions Limited Formal Onboarding; Limited Professional Development Opportunities; Self-initiated	Limited Formal Training Experiences by Adjuncts
RQ2. How do adjunct faculty members perceive the effectiveness of their onboarding training and professional development?	Lack of Formal Onboarding; Lack of Professional Development Opportunities; Experience of Adequate Training; Importance of Connection/Support; Desire for More; Inconsistency in Delivery/Leadership; Feeling Isolated; Adjunct Teaching Competencies; Adjunct Desires for Role Technology and LMS Training; Clear Expectations and Communication; Connecting with Peers; Personalized/Relevant; Mentoring; Systematic Training; Understanding Program/Full Curriculum; Feedback; Earlier Access to Courses	Varied Perceptions of Training Effectiveness by Adjuncts Adjunct Needs and Suggestions for Training
RQ3. What is the lived experience of directors in developing and implementing training for adjunct faculty?	Limited Barriers; Varied Adjunct Teaching Experiences; Timing/Workflow Create Sense of Belonging; Technology and LMS Training; Personalized/Relevant; Program Orientation	Barriers or Challenges for Directors Assumptions of Adjunct Training Needs and Delivery by Directors
RQ4. What differences exist in how directors perceive the effectiveness of their training initiatives compared to adjunct faculty members?	Lack of Formal Onboarding; Lack of Professional Development Opportunities; Experience of Adequate Training; Importance of Connection/Support; Desire for More; Inconsistency in Delivery/Leadership; Feeling Isolated; Adjunct Teaching Competencies; Adjunct Desires for Role; Technology and LMS Training; Clear Expectations and Communication; Connecting with Peers; Personalized/Relevant; Mentoring; Systematic Training; Understanding Program/Full Curriculum; Feedback; Earlier Access to Courses Create Sense of Belonging; Technology and LMS Training; Personalized/Relevant; Program Orientation	Inconsistent Perceptions of Effectiveness from Adjuncts and Directors: <i>Varied Perceptions of Training Effectiveness by Adjuncts and Adjunct Needs for Training by Directors</i> <i>Assumptions of Adjunct Training Needs and Delivery</i>

Theme 1: Positive Experience as Adjunct

Most adjuncts reported a broadly positive experience, driven by a passion for teaching, student impact, and the flexibility to keep full-time roles. Feeling connected to departments and having approachable contacts reduced the isolation sometimes felt by off-campus or online instructors. Triangulation supported this: institutional messages conveyed a collegial tone, and 66% of survey respondents agreed training influenced overall satisfaction.

Theme 2: Institutional Support Received by Adjuncts

Participants reported varied and sometimes inconsistent support across time and leaders at their employing institution. All received some LMS onboarding via 1:1 help or an online course, with additional workshops offered intermittently. Ongoing help often came through clear individual pathways, email reminders, ITS assistance, and occasional peer connections. Knowing whom to contact (department leads, ITS) was pivotal; however, opportunities for peer connection varied by site, reflecting the inconsistency noted in prior literature.

Theme 3: Limited Formal Training Experiences by Adjuncts

Many adjuncts characterized formal onboarding and PD as limited or self-initiated, often receiving only operational basics such as grading timelines or FERPA information. Competing work demands and late course access further reduced participation. Archival training example materials collected indicated that resources existed, but outreach and cadence were inconsistent. In the survey, about 60% reported PD influenced preparedness, demonstrating the gap between availability and effectiveness.

Theme 4: Varied Perceptions of Training Effectiveness by Adjuncts

Perceptions ranged from “adequate with strong informal support” to “insufficient and isolating,” often shaped by prior experience and leadership changes. Comparisons to other institutions were mixed. Lead-time constraints were common. Triangulation of survey results reflected the split: with about 80% felt onboarding prepared them, 66% said training affected satisfaction, yet 48% reported lacking onboarding/PD.

Theme 5: Adjunct Needs and Suggestions for Training

The theme aligns with findings in the literature on the importance and often lack of understanding of adjunct faculty's specific needs (Butters & Gann, 2022; Harwood & Koyama, 2021; Hurtienne et al., 2022). Top needs centered on robust LMS/technology preparation, clear expectations, identifiable support pathways, and earlier course access. Participants also asked for systematic, program-aligned onboarding/PD, a centralized resource hub, peer community/mentoring, and opportunities to provide feedback on courses. Survey patterns aligned with these priorities, with 64% of participants emphasizing technology/LMS, and 56% sought clearer expectations.

Theme 6: Barriers or Challenges for Directors

Directors reported few specific barriers but acknowledged workflow complexity, short hiring windows, and wide variability in adjunct backgrounds. Unclear cross-unit processes, such as understanding who owns which part of onboarding, created friction or uncertainty. These conditions align with current literature highlighting the need for more structured, coordinated onboarding and PD that can scale despite timing constraints.

Theme 7: Assumptions of Adjunct Training Needs by Directors

Directors emphasized LMS/technical orientation and fostering belonging through personalized, flexible touchpoints with either 1:1 sessions or larger group program orientation. They suggested earlier course access, stronger cross-department coordination, and mentoring, while acknowledging limited visibility into institution-wide onboarding content.

Theme 8: Inconsistent Perceptions of Effectiveness from Adjuncts and Directors

A clear perception gap emerged: directors generally believed training was effective, while adjuncts reported mixed results and limited formal feedback channels. Both groups valued technology/LMS support and community-building; however, adjuncts linked clearer, timelier, and more comprehensive training to increased confidence, efficiency, and teaching quality. Triangulation with surveys contextualized this tension (80% felt prepared, 66% satisfied with the influence of training on their teaching, 48% felt their experience lacked onboarding/PD opportunities).

Conclusion and Implications

The study affirms the importance of structured orientation practices and ongoing learning opportunities for adjuncts, as highlighted in the existing literature. The findings suggest that effective adjunct support requires addressing adjunct faculty's varied and often unmet needs, particularly through tailored, continuous training and clear communication. Administrative actions to outline the departments and roles that indicate appropriate ownership of the onboarding steps. Interviews with both faculty and academic administrators reveal that a one-size-fits-all approach to training is insufficient and that personalized, consistent feedback loops are necessary for enhancing faculty engagement, satisfaction, and teaching effectiveness. Distance education directors or academic affairs leaders could take action to outline the process, expectations, and procedure of the training, either at the policy level or by documenting guidelines.

The results of the study indicate that challenges to developing comprehensive training involve the diverse types and needs of adjunct faculty working for an institution and a lack of greater mapping of their orientation journey in the institution, including listening mechanisms for gauging the effectiveness of current practices. For practical implications, the study emphasizes that academic affairs leaders and distance education directors can improve adjunct faculty experiences by designing onboarding and professional development programs that are reflective, relevant, and applied to real teaching situations. This aligns with adult learning and experiential learning theories, which stress the importance of reflection, hands-on experience, and social interaction in fostering professional growth.

The research also uncovered barriers such as misaligned training, issues with timing and workflow, and a lack of awareness regarding training effectiveness that could be improved with feedback strategies and documented timing standards for hiring and course assignment. Many adjuncts noted that leadership changes might contribute to disruptions in consistent onboarding and professional development alongside limited feedback opportunities. Given this finding, documenting workflow procedures and standards in policy or guidelines is recommended. Despite these challenges, most participants reported positive experiences and feeling supported by at least one key person or department, which promotes the benefit of continuing to hire and adequately support adjunct faculty. The absence of structured onboarding and professional development left many adjuncts feeling less prepared, confident, and engaged in their teaching and technology or Learning Management System use. The study offers strategies for academic affairs leaders, chief online officers, and distance education directors, emphasizing the importance of establishing clear expectations, fostering relationships between faculty and administrators, and providing regular opportunities for faculty development. This approach could ultimately enhance faculty retention and student engagement. Although this study was conducted at two small liberal arts institutions, many of the findings are highly transferable across institutional types and sizes, public or private, including standardizing workflows, timing, communication, and feedback procedures. Findings that may be context-specific could depend on the type of adjunct faculty population, such as instructors without any teaching background or experience, course creation practices and use of LMS. Institutions with more established distance learning delivery policies or guidelines may read the suggestions as confirmation rather than as actions to take.

Experiential Learning Theory

The study findings and current literature suggest that elements of experiential learning theory were sometimes present within participants' training experiences and that training programs would benefit from intentional integration. The theory emphasizes learning through experience and reflection (Xin et al., 2019), aligning with participants who received personalized, hands-on LMS training. Such active engagement supported learning more effectively than self-paced or static instruction. Participants noted that earlier access to courses and just-in-time training would have deepened understanding and reduced information overload. Collaborative activities, such as peer work sessions, further reflected experiential principles.

However, the application of experiential learning across institutions was inconsistent. While some directors incorporated experiential methods through personalized meetings, others lacked structured approaches. Participants frequently expressed that limited training hindered their sense of belonging and readiness. These findings support the literature that integrating experiential learning more deliberately into onboarding and professional development could enhance engagement and effectiveness (Farakish et al., 2022; Harwood & Koyama, 2022).

Adult Learning Theory

Adult learning theory underscores the importance of collaboration, self-direction, and relevance to learners' professional experiences (Burleigh et al., 2021; Witcher & Sasso, 2022). The study and literature suggest that professional development programs based on theories of adult learning are more collaborative, better integrated into an institution's culture, and promote continuous learning with a greater degree of transferring learning (Burleigh et al., 2021; Ward & Lin, 2022; Witcher & Sasso, 2022). Participants valued experiences reflecting these principles, such as peer meetups and workshop-style training that emphasized shared practice. These opportunities fostered professional community and practical application, aligning with the theory's focus on experiential, problem-centered learning.

Yet, participants noted inconsistent implementation and irregular scheduling of professional development, limiting its sustained impact. The findings suggest that embedding adult learning theory into regular, interactive training could promote ongoing engagement and better transfer of learning to adjunct teaching contexts (Ward & Lin, 2022).

Recommendations for Further Study

This study examined a specific subset within higher education defined by institution size, type, and location. The researcher sought to advance knowledge by exploring lived experiences with training and perceptions of effectiveness among this group. The study compared adjunct faculty and academic leaders at two universities, generating rich insights primarily from adjunct participants. Future research could focus on specific leadership roles and purview, such as distance education department leaders, deans, or associate provosts, or include multiple universities to compare public and private institutions.

Both participating universities offered a limited portfolio of fully online programs, mainly in education. Further studies could explore adjunct faculty across disciplines or professional backgrounds, as prior teaching experience influenced participants' needs for online teaching support. Given the growth of online programs (Butters & Gann, 2022), research could also examine in-person adjunct faculty or compare those retired from full-time roles with those balancing full-time employment and adjunct work. Participants described varied experiences with receiving pre-built course shells or developing their own courses. Future studies might investigate different course development models, teaching expectations, and program structures to broaden understanding of online faculty practices and address areas beyond this study's scope.

References

- Aguilera, S. E., & Martinez, E. (2023). Average or outlier? Introductory statistics adjunct instructors' beliefs, practices, and experiences. *The Qualitative Report*, 28(6), 1769-1786. <https://doi.org/10.46743/2160-3715/2023.5971>
- Barnes, A., & Fredericks, E. (2021). A diamond in the rough: adjunct faculty opportunities and challenges in higher learning institutions. *Journal of Higher Education Theory and Practice*, 21(7), 83-102. <https://www.proquest.com/scholarly-journals/diamond-rough-adjunct-faculty-opportunities/docview/2572622896/se-2>
- Buch, K., McCullough, H., & Kapota, J. (2023). Virtual faculty learning communities: An innovative approach to supporting adjunct faculty. *The Journal of Faculty Development*, 37(1) <https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/virtual-faculty-learning-communities-innovative/docview/2760887042/se-2>
- Burleigh, C., Steele, P. B., & Gwitira, G. (2021). Online adjunct faculty perceptions of professional development to support personal and professional academic growth during COVID-19. *Higher Learning Research Communications*, 11(2) <https://www.proquest.com/docview/2859206210?accountid=12085&sourcetype=Scholarly%20Journals>
- Butters, D., & Gann, C. (2022). Towards professionalism in higher education: An exploratory case study of struggles and needs of online adjunct professors. *Online Learning (Newburyport, Mass.)*, 26(3), 259. <https://doi:10.24059/olj.v26i3.2801>
- Cheslock, J. J., & Jaquette, O. (2022). Concentrated or fragmented? the U.S. market for online higher education. *Research in Higher Education*, 63(1), 33-59. <https://doi.org/10.1007/s11162-021-09639-7>
- Creswell, J. W. & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage Publications
- Dyer, L. T., & Song, L. (2023). Professional development for online faculty: Supporting conceptual change through conceptual conflict activities. *The Journal of Faculty Development*, 37(3), 20-27. <https://www.proquest.com/scholarly-journals/professional-development-online-faculty/docview/2858412162/se-2>
- Farakish, N., Cherches, T., & Zou, S. (2022). Faculty success initiative: An innovative approach to professional faculty onboarding and development. *Journal of Formative Design in Learning*, 6(2), 113-126. <https://doi.org/10.1007/s41686-022-00069-x>
- Frankel, A. S., Friedman, L., Mansell, J., & Ibrahim, J. K. (2020). Steps towards success: Faculty training to support online student learning. *The Journal of Faculty Development*, 34(2), 23-32. <https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/steps-towards-success-faculty-training-support/docview/2478112391/se-2>
- Frögéli, E., Jenner, B., & Gustavsson, P. (2023). Effectiveness of formal onboarding for facilitating organizational socialization: A systematic review. *PloS One*, 18(2), e0281823. <https://doi:10.1371/journal.pone.0281823>
- Laws, G. (2021). Powerful or powerless? chief online education officers' legitimate power over online program quality in U.S. higher education institutions. *Online Learning (Newburyport, Mass.)*, 25(2), 120. <https://doi.org/10.24059/olj.v25i2.2101>
- McAttee, B., & Huston, R. (2023). Finding Innovative Strategies to Enhance Adjunct Faculty Support and Retention. *Journal of Nursing Education*, 1-4. <https://doi.org/10.3928/01484834-20230315-02>

- Mellieon, J., Harold I., & Robinson, P. A. (2021). The new norm: Faculty perceptions of condensed online learning. *The American Journal of Distance Education*, 35(3), 170-183. <https://doi.org/10.1080/08923647.2020.1847626>
- Moustakas, C. (1994). *Phenomenological Research Methods*. SAGE.
- Murray, D. S. (2019). The precarious new faculty majority: Communication and instruction research and contingent labor in higher education. *Communication Education*, 68(2), 235-245. <https://doi.org/10.1080/03634523.2019.1568512>
- Rahman, Z. G., Murray, E., & Golnabi, A. H. (2021). Adjunct mathematics instructor resources and support contributing toward job satisfaction. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 31(10), 1021-1037. <https://doi.org/10.1080/10511970.2020.1805660>
- Saldana, J. (2021). *The Coding Manual for Qualitative Researchers* (4th ed.). Sage.
- Sim, C. L., Wong, T. A., Sin, K. Y., & Sivakumaran, V. M. (2024). Pragmatism as a paradigm for quality management research in bridging academic-practitioner gaps. *International Journal of Quality and Service Sciences*, 16(2), 330-342. <https://doi.org/10.1108/IJQSS-07-2024-192>
- Smith, C. E., Matthews, R. A., Mills, M. J., Yeong-Hyun, H., & Sim, S. (2022). Organizational Benefits of Onboarding Contingent Workers: An Anchoring Model Approach. *Journal of Business and Psychology*, 37(3), 525-541. <https://doi.org/10.1007/s10869-021-09757-0>
- Ward, P., & Lin, H. C. (2022). Design and implementation of a program development practicum for faculty education and advancement of clinical programs. *Pediatric Reports*, 14(4), 457-463. <https://doi.org/10.3390/pediatric14040054>
- Witcher, S. D., & Sasso, P. A. (2022). A comparison of generational differences in faculty perceptions of online versus face-to-face professional development - A community college case study. *College Teaching, ahead-of-print*, 1-12. <https://doi.org/10.1080/87567555.2022.2124394>
- Xin, P. V., Wong, L., Chen, W., & Chee-Kit Looi. (2019). Principled practical knowledge in bridging practical and reflective experiential learning: case studies of teachers' professional development. *Asia Pacific Education Review*, 20(4), 641-656. <https://doi.org/10.1007/s12564-019-09587-z>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage Publications.
- Young-Brice, A., Farrar-Stern, K., & Malin, M. (2022). Comprehensive Onboarding and Orientation to Support Newly Hired Faculty in a Nursing Program. *Nurse Educator*, 47, 347-351. <https://doi.org/10.1097/NNE.000000000000124>
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Enhancing Instructor Work Productivity Through AI Tools: A Practical Framework for AI Adoption in Higher Education

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Abstract

Instructors in higher education face unprecedented workload demands, spending significant time on repetitive tasks such as grading, responding to routine communications, and making materials accessible. In recent years, artificial intelligence (AI) tools have emerged as potential solutions to these efficiency challenges, but adoption remains limited and uneven across higher education. This study employs a dual-method approach combining literature review with self-reflective case study to examine instructor workload challenges and AI tool implementation in practice. It proposes an implementation framework organized across four domains: teaching, student support, administrative tasks, and research. For each domain, the framework identifies concrete opportunities for AI adoption alongside the concerns and precautions specific to that context to ensure that quality and academic integrity are not compromised for efficiency.

Keywords: artificial intelligence, instructor efficiency, higher education, workload management, teaching productivity

Introduction

Higher education instructors face a crisis of time scarcity. Driven by increasing class sizes, expanding administrative responsibilities, and growing expectations for student support, faculty workload has increased dramatically over the past decade (Watermeyer & Tomlinson, 2021). Studies consistently show that instructors spend 30-40% of their time on administrative and repetitive tasks, 25-35% on grading and feedback, and only 20-25% on direct student interaction and mentorship—the activities with the greatest impact on learning outcomes (Tight, 2010). This workload compression creates a pedagogical paradox: instructors have less time for the essential tasks—curriculum innovation, meaningful student engagement, reflective practice—that most significantly enhance educational quality.

Concurrent with this workload crisis, artificial intelligence technologies have emerged with demonstrated capabilities to assist instructional work. Large language models like GPT-4, Claude, and Gemini can generate content, answer questions, process documents, and engage in domain-specific reasoning (Bommasani et al., 2021). Recent studies suggest that thoughtfully implemented AI tools can reduce instructor time spent on routine tasks by 30-60% without compromising—and in some cases enhancing educational quality (Mollick & Mollick, 2023).

Yet despite these capabilities, AI adoption in instructional contexts remains limited and uneven. Many instructors remain uncertain how to implement them effectively or have legitimate concerns about quality, bias, and academic integrity implications. Others take it for all without sufficient professional development support.

Research Gap and Contribution

While existing research documents both instructor workload challenges and AI tool capabilities, significant gaps remain in our understanding of the practical intersection between these domains. Specifically:

1. Limited studies on instructors' use of AI. With an exhaustive search on Google scholar, we found that most AI-in-education research focuses on student-facing use of AI (e.g. academic honesty) rather than instructor-facing potential ways to improve work and teaching efficiency.
2. Insufficient practical guidance. Most studies are conducted by educational researchers rather than instructors who use these tools daily, resulting in theoretical rather than practical knowledge. Studies often describe AI capabilities in abstract terms (e.g., "time saved") without providing concrete implementation guidance —what works, what fails, what skills are required, what potential concerns are.

This study addresses these gaps through a dual-method approach that combines scholarly rigor with practitioner expertise:

1. Synthesizes existing evidence on instructor time allocation, workload analysis, and AI tool effectiveness from recent literature.
2. Provides a full implementation framework through reflective case study drawing on my experience as both university instructor and instructional designer.
3. Delivers actionable recommendations grounded in real practices rather than theoretical knowledge.

The unique contribution of this study lies in bridging the gap between scholarly research and practitioner knowledge, offering guidance that is both evidence-based and immediately implementable.

Research Questions and Methodology

This study investigates three primary questions:

1. What does existing research reveal about instructor time allocation, high-burden tasks, and the capabilities of available AI tools to address these challenges?
2. How can AI tools be effectively implemented in instructional practice as well as non-instructional tasks to assist faculty's work?
3. What are the potential barriers and cautions we shall take for AI adoption in order to maintain pedagogical quality?

As a group of instructors and instructional designers at a higher education institution, we have first-hand experience in teaching and supporting other instructors in technology adoption and pedagogical innovation across multiple institutions. Our technology background provides us with technical expertise to evaluate AI tools critically and understand their capabilities and limitations at a deep level. This study combines systematic literature review to establish evidence base with detailed self-reflective case study to provide concrete, actionable implementation guidance.

Literature Review

Instructor Workload: Empirical Findings

Empirical research consistently documents that instructor workload is substantial, unevenly distributed across task types, and has grown significantly in recent years. Taylor and Frechette's (2022) study of marketing faculty during the COVID-19 pandemic found that perceived teaching workload averaged 4.4 on a 5-point scale (where 5 = "much higher" than pre-pandemic), far exceeding research (3.2/5.0) and service (3.72/5.0) demands. Critically, teaching workload and research workload were very positively related to burnout, while service workload was not.

Online and hybrid teaching has intensified these pressures further. Kellen and Kumar's review found that online instructors have the need for pedagogy innovations, such as increasing student participation, mitigating student isolation, and creating interactive tasks. However, they also face significant barriers to manage their time and online

teaching—for example, a 24/7 availability expectation as students expect immediate LMS responses, and text-based feedback that is substantially more time-consuming than verbal feedback in face-to-face settings (Kellen & Kumar, 2020). Barua and Lockee (2025) document a parallel dynamic with flexible assessment: offering students choices in tasks, formats, and deadlines enhances engagement and outcomes but requires substantial effort and time commitments and increases instructors' workload. The implication is that workload growth is often a byproduct of instructors doing their jobs well.

Sustained overload carries significant costs across health, career, and quality of life. Abdullah and Hassan (2024) identified health impacts such as anxiety, burnout, etc.; professional impacts such as diminished teaching quality, reduced research productivity, and decreased job satisfaction. Solutions must therefore reduce burden on repetitive execution while preserving the instructor's important role in high-judgment, intellectual, or mentoring work. This is precisely the gap AI tools are positioned to fill, easing repetitive, time-consuming tasks.

AI and Faculty/Staff Productivity

A growing body of quantitative and qualitative research reports meaningful productivity gains when faculty adopt AI tools. Gupta, Kumar, and Rao (2024) found that AI adoption reduced faculty weekly task time from 52.4 to 30.2 hours, with the largest gains in grading (7.1 hours), lecture preparation (6 hours), and administrative duties (3.8 hours); 95% of participants agreed AI saved time and 80% reported reduced stress. Segbenya et al.'s (2024) structural equation modeling across 663 academics in seven countries confirmed that AI usage significantly predicted productivity ($\beta = 0.283$, $p < 0.001$), though availability alone did not generate productivity; Gains required actual usage paired with institutional support and training. In the next section, we will discuss how instructors can use AI tools to maximize productivity while providing personalized teaching to students.

AI Adoption in Higher Education: Opportunities and Risks

Evidence reviewed in sections 4.1 and 4.2 confirms that AI can meaningfully reduce faculty workload—but availability alone does not produce gains. Adoption remains uneven, constrained by awareness gaps, quality concerns, and insufficient institutional support (Liang et al., 2025; Kellen & Kumar, 2020; Segbenya et al., 2024). This implementation framework below describes opportunities and precautions for AI adoption in higher education across four domains. The guiding principle throughout is that AI is most effective as a draft generator or task automator for well-defined, lower-judgment work—not as a substitute for the instructor's disciplinary expertise, relation building, or ethical responsibility.

Teaching

Instructors can use AI for substantial assistance across the full teaching cycle. For content creation, generative AI can draft lecture outlines, discussion prompts, and slide content. For course design, AI can propose interactivities, giving instructors a starting point to refine with disciplinary expertise. AI also allows instructors to bulk edit documents for accessibility instead of making every edit for each document. For assessment, AI can draft question banks and draft rubric language; AI reliably automates objective evaluation—multiple-choice items, grammar, code correctness, factual accuracy—freeing instructors for higher-order feedback.

However, the critical boundary is the objective/subjective distinction: AI may disappoint on tasks requiring disciplinary judgment such as argument quality, originality, or conceptual depth, and should not be used without thorough instructor review. For example, for content creation, question banks and content generated by AI can be general and conceptual without inviting students for critical thinking or applying the knowledge. For assessment, AI scoring models can produce averagely lower scores than human raters, so instructors should compare score distributions and correct for mean and standard deviation differences. AI can serve as a starting point, but all AI-generated content must be carefully reviewed for accuracy, relevancy, and potential bias before use.

Student Support

AI chatbots can well handle the category of repetitive logistical queries—due dates, course policies, assignment instructions—that significantly contribute to burnout, providing 24/7 responses based on syllabus and LMS content (Liang et al., 2025). It frees instructors and administrative staff from answering low-order questions

or conducting massive outreach to students so that they have more time for providing critical support. Instructors can focus on mentorship, conceptual guidance, and relationship building that require human judgment and that represent the most valuable use of instructor-student contact time (Taylor & Frechette, 2022).

One precaution is that chatbots can only answer accurately within what they have been given. They should be well trained before implementation and audited regularly at post-implementation. Chatbots cannot replace an instructor's social presence. The objective/subjective boundary applies equally here. AI can neither impact students like instructors' passion for the subject does nor make students feel connected and cared.

Administrative Tasks

AI offers meaningful automation across the clerical layer of faculty work: attendance tracking, grade anomaly flagging, document editing, etc. For example, learning analytics tools can identify at-risk students from engagement indicators—login frequency, submission patterns, discussion participation, rather than waiting for instructors' manual input (Liang et al., 2025).

However, predictive models use behavioral proxies that correlate with but do not fully explain the behavior problem, and AI-generated alerts must be treated as prompts for human follow-up, not a simple replacement with a message. Also, any system processing student data must comply with applicable privacy regulations.

Research

AI is already the most organically adopted for literature searches, paraphrasing, citation formatting, and data analysis—all tasks with high time costs and relatively low need for original scholarly judgment. AI can synthesize a large body of literature rapidly, producing a landscape that the researcher then critically evaluates (Aithal & Aithal, 2024).

The central risk is hallucination: AI-generated literature summaries can produce plausible but non-existent citations or misrepresent source arguments. Every AI-assisted summary must be verified against the primary source before use in scholarly work. For writing assistance, disclosure and attribution norms vary by journal and institution and are evolving rapidly; faculty should follow applicable policies. For data analysis, AI can generate the charts but cannot fully interpret the stories from the data. The deepest risk is intellectual over-reliance—delegating the synthesis, argument, or interpretation that constitutes scholarly contribution itself. Faculty should not use AI as a substitute for original intellectual work.

Keys for Successful Implementation

Three enablers are essential across all four domains. First, faculty training and AI literacy will magnify the power of AI. Structured professional development in prompt engineering, output evaluation, and tool selection will help faculty learn to use AI ethically and efficiently. Second, institutional guidelines on acceptable AI use in grading, student communication, research, and administrative monitoring are needed to ensure data privacy and academic integrity. Third, a human-in-the-loop standard is the key. AI outputs are drafts and signals, not decisions. This standard preserves instructor authority and intellectual work, and ensures that efficiency gains do not come at the cost of educational quality or professional integrity.

Discussion and Conclusion

Higher education instructors face a structural workload problem that is unlikely to resolve on its own. Class sizes grow, administrative demands expand, and the pedagogical practices that most benefit students tend to increase rather than decrease faculty burden. AI offers a genuine and well-evidenced path toward relief—but only when adopted deliberately, with appropriate training, institutional policy, and human oversight in place.

This paper has synthesized empirical evidence on instructor workload and AI productivity gains, and proposed a four-category framework that maps AI capabilities to specific faculty tasks while arguing the precautions

each category requires. The framework's central organizing principle—that AI should automate lower-judgment execution while preserving instructor authority over high-judgment decisions. Sustainable gains require investment in faculty AI literacy, policy infrastructure that considers academic integrity, data privacy, and a professional culture that treats AI as a collaborative tool rather than a threat or a shortcut. For individual instructors, the practical starting point is identifying the two or three highest-burden, lowest-judgment tasks in their current workflow and using AI to reduce such repetitive work. The goal is not to replace the work of teaching, but to protect the time and energy that make it worth doing.

References

- Abdullah, M. H. S., & Hassan, N. M. (2024). Negative implications of workload among teachers: A systematic literature review. *International Journal of Academic Research in Progressive Education and Development*, 13(3), 2515–2527. <https://doi.org/10.6007/IJARPED/v13-i3/22193>
- Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, 32(3), 421-439.
- Barua, L., & Lockee, B. B. (2025). Flexible assessment in higher education: A comprehensive review of strategies and implications. *TechTrends*, 69, 301–309. <https://doi.org/10.1007/s11528-025-01039-3>
- Bommasani, R., Hudson, D. A., Adeli, E., et al. (2021). On the opportunities and risks of foundation models. arXiv preprint arXiv:2108.07258.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27, 1-12.
- Kulik, J. A., & Fletcher, J. D. (2016). Effectiveness of intelligent tutoring systems: A meta-analytic review. *Review of Educational Research*, 86(1), 42-78.
- Kellen, K., & Kumar, S. (n.d.). Types of barriers experienced by online instructors in higher education. *Online Journal of Distance Learning Administration*. Retrieved from <https://ojdla.com/>
- Mollick, E. R., & Mollick, L. (2023). Using AI to implement effective teaching strategies in classrooms: Five strategies, including prompts. The Wharton School Research Paper.
- Taylor, D. G., & Frechette, M. (2022). The impact of workload, productivity, and social support on burnout among marketing faculty during the COVID-19 pandemic. *Journal of Marketing Education*, 44(2), 134–148. <https://doi.org/10.1177/02734753221074284>
- Tight, M. (2010). The curious case of case study: A viewpoint. *International Journal of Social Research Methodology*, 13(4), 329-339.
- Wang, Y., Paquette, L., & Baker, R. (2020). A longitudinal study on learner career advancement in MOOCs. *Journal of Learning Analytics*, 1(3), 2-17.
- Watermeyer, R., & Tomlinson, M. (2021). Competitive accountability and the dispossession of academic identity. *Studies in Higher Education*, 47(4), 864-878.
- Aithal, P. S., & Aithal, S. (2024). Optimizing the use of artificial intelligence-powered GPTs as teaching and research assistants by professors in higher education institutions: A study on smart utilization. SSRN Working Paper. <https://ssrn.com/abstract=4729191>
- Firaina, R., & Sulisworo, D. (2023). Exploring the usage of ChatGPT in higher education: Frequency and impact on productivity. *Buletin Edukasi Indonesia*, 2(1), 39–46. <https://doi.org/10.56741/bei.v2i01.310>

Gupta, M. S., Kumar, N., & Rao, V. (2024). AI and teacher productivity: A quantitative analysis of time-saving and workload reduction in education. Presented at the International Conference on Advancing Synergies in Science, Engineering, and Management (ASEM-2024), Glocal University.

Katsamakas, E., Pavlov, O. V., & Saklad, R. (2024). Artificial intelligence and the transformation of higher education institutions: A systems approach. *Sustainability*, 16(14), 6118. <https://doi.org/10.3390/su16146118>

Segbenya, M., Senyamator, F., Aheto, S. P. K., Agormedah, E. K., Nkrumah, K., & Kaedebi-Donkor, R. (2024). Modelling the influence of antecedents of artificial intelligence on academic productivity in higher education: A mixed method approach. *Cogent Education*, 11(1), 2387943. <https://doi.org/10.1080/2331186X.2024.2387943>

Liang, J., Stephens, J. M., & Brown, G. T. L. (2025). A systematic review of the early impact of artificial intelligence on higher education curriculum, instruction, and assessment. *Frontiers in Education*, 10, 1522841. <https://doi.org/10.3389/educ.2025.1522841>

Ufomba, E. R., Ezichi-Obasi, J., & Obasi, C. D. (2024). The role of artificial intelligence in enhancing administrative and learning efficiency in higher education: Insights from Abia State University, Uturu. *International Academy Journal of Administration, Education and Society*, 6(3), 189–202.

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