

A Learner-Centered Introduction to AI for Professors

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EME 610: Trends and Issues in Instructional Design

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March 12-24, 2026

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Problem Analysis

Artificial Intelligence (AI) has emerged as a new digital tool that is reshaping processes and expectations across industries, making it a seemingly necessary skill for both aspiring and current professionals. While specialized executives such as Justina Nixon-Saintil, the VP and Chief Impact Officer of IBM, emphasize the global notion that AI literacy is an essential skill across industries that must be developed, the higher education institutions tasked with the heavy responsibility of preparing emerging professionals for the modern job market have led with unclear protocols, integration, and little faculty training (Nixon-Saintil, 2024) (Alexander, 2025). Dr. Alexander, a futurist specializing in higher education curriculum development, articulates that, oftentimes, the task of defining AI implementation, usage, norms, and ethics on campus falls to adjunct professors, higher education professionals who are incredibly busy and do not necessarily understand AI (Alexander, 2025). Despite this delegation model, only 40% of higher education faculty have reported receiving AI literacy training (Cengage Group, 2026). Additionally, 92% of higher education faculty express concerns about student plagiarism and critical thinking induced by AI, underscoring the need for professor-led guidance and ethical use examples in the classroom (Howell, 2026). In order to properly prepare college students for a changing professional market, institutions must provide training support for the link between AI and college learners: professors. When professors have the instructional support necessary to develop personal AI literacy, enhancing their ability to integrate it into course curriculum, discuss meaningful usage techniques, and demonstrate ethical transparency, they are empowered to lead campus AI engagement that aligns with school policy, values, and goals.

Learner Analysis

Higher education professors, the target learners for this instructional project, are highly educated and specialized academic professionals, oftentimes earning degrees including PhDs and Master's, which demonstrates an interest in learning. Higher education faculty often include tenured, full-time, and adjunct professors. As this project aims to increase the AI proficiency of student-facing faculty, each professor (tenured, full-time, and adjunct) will be considered. Each professor's schedule, commitment level, specialization, and attitude towards AI differ, demonstrating a need for flexible, personal, multimodal, highly accessible, and portable instruction.

Moreover, a study conducted by Ellucian uncovered that 93% of higher education faculty intend to increase their classroom usage of AI within the next 2 years; however, this enthusiasm is contrasted by the Digital Education Council's 2025 Global AI Faculty Survey, demonstrating that "While 61% of faculty have used AI in teaching, 88% do so minimally" (Mulford, 2025). These results demonstrate faculty acknowledgment of the need for AI implementation in the classroom; however, they also showcase the gap between educational goals and the current state: faculty confusion surrounding AI policy, ethics, attitudes, and benefits. Despite this knowledge gap, a recent study by Tyton Partners and D2 found that 75% of administrators and 58% of faculty at higher education institutions contend that it is their responsibility to teach their students about AI, including its implementation in major-specific industries, ethical transparency, and meaningful usage (Tyton Partners, 2024).

Knowledge Gap

Current State	Knowledge Gap	Desired State
<p>The current target audiences have some active understanding of AI, allowing them to implement it in small ways in their classrooms. While some effort has been made, the majority of target learners have not been provided AI literacy training or defined policies.</p> <p>Overall, many target learners are wary of AI due to concerns such as student plagiarism, diminished critical thinking, fears that traditional and effective teaching processes will erode, and limited understanding of the technology’s benefits for themselves and their audiences.</p>	<ul style="list-style-type: none"> ● University policy ● Ethical guidelines ● Effective classroom implementation ● Impact of major-specific industries ● Potential benefits ● Meaningful usage ● How to overcome student AI plagiarism 	<p>By implementing adaptive learning opportunities and resources for higher education professors, they will enhance their AI literacy. This literacy includes an improved understanding of industry-specific impacts, classroom implementation, ethics, school policy, and values, and meaningful usage.</p> <p>By enhancing student-facing faculty AI literacy, professors not only encourage AI usage through curriculum inclusions but also demonstrate professional, ethical, and meaningful usage, serving as an example for college students.</p>

Is Instruction the Solution?

To determine whether a performance problem requires an instructional solution or a non-instructional intervention, the simplest approach is to ask one fundamental question: "Is the problem due to a lack of skill or knowledge?" To this case, the answer is yes. By implementing an instructional platform that is personalized to each learner's needs, in this case, finding what AI tool a professor has challenges with and which tools can best help them is the goal. Because of this, instruction is needed. Higher education faculty demonstrate willingness and interest in integrating AI into their teaching practices; however, current data shows that most faculty lack the foundational knowledge, training, and confidence to do so effectively. The issue is not a lack of motivation or resources alone, but rather a gap in understanding how to use AI tools, apply ethical guidelines, and align usage with institutional policies.

By implementing an instructional solution, like a personalized and adaptive AI literacy training platform, faculty can develop the necessary skills to confidently integrate AI into their teaching. This includes identifying which AI tools are most relevant to their discipline, understanding ethical implications, preventing misuse such as plagiarism, and modeling meaningful AI usage for students.

While some non-instructional supports (such as clearer institutional policies) may enhance outcomes, the primary barrier remains a lack of knowledge and skill. Therefore, instruction is not only appropriate but essential to address this performance gap.

Contextual Analysis

Context Area	Relevance	Implications for Instructional Design
Technological Context	Faculty have varying levels of familiarity with AI tools, and technologies are rapidly evolving. Access to tools may differ by institution.	Instruction should be tool-agnostic, adaptable, and frequently updated to remain relevant despite rapid technological changes.
Social / Cultural Context	Faculty may feel skeptical or fearful of AI due to concerns about job replacement, reduced rigor, or academic dishonesty.	Instruction must address attitudes and beliefs about AI, not just technical skills, by building confidence and demonstrating value.
Workplace / Performance Context	Faculty face time constraints due to teaching, grading, research, and administrative responsibilities. Adjunct faculty may have limited institutional support.	Instruction must be flexible, self-paced, and modular to accommodate busy schedules and varying levels of institutional support.
Learner Environment	Learning will likely occur asynchronously in varied environments (home, office, between classes). Faculty need convenient and accessible formats.	Instruction should be mobile-friendly, easily accessible, and delivered in short, manageable segments (microlearning).

Constraints

Faculty face several constraints that directly influence instructional design decisions. Time limitations are a major barrier, as instructors already balance teaching, grading, research, and administrative duties, leaving little room for training or skill development. Additionally, many faculty receive minimal incentives to participate in professional development, especially

adjuncts who often lack institutional support. Resistance to change also plays a significant role, some faculty may feel unsure, overwhelmed, or skeptical about adopting new technologies like AI. Finally, inconsistent institutional support creates uneven access to resources, tools, and guidance. These constraints require instructional solutions that are flexible, concise, well-supported, and highly sensitive to faculty workload and varying levels of readiness.

Task Analysis

Stage	Title	Key Focus
Objectives	Program Objectives	AI literacy, ethics, integration, and student guidance
Module 1	Foundations of AI Literacy	Define concepts, debunk myths
Module 2	Ethics, Policy & Responsible Use	Apply guidelines, model transparency
Module 3	Classroom Integration	Design activities using AI tools
Module 4	Assessment & Academic Integrity	Prevent misuse, teach ethical usage
Module 5	Personalization & Tool Alignment	Assess faculty needs, identify relevant AI tools for discipline and tasks

Module 6:	Discipline-Specific Exploration	Industry alignment, advanced tool selection and application
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References

Alexander, B. (2025, February 20). Peak higher ed: AI's possible futures with Bryan Alexander

(B. Stachowiak, Host) [Audio podcast episode]. In *Teaching in Higher Ed*.

<https://teachinginhighered.com/podcast/peak-higher-ed-ais-possible-futures-with-bryan-alexander/>

Cengage Group. (2026, January 20). Higher Ed Voices 2025: How AI is transforming higher education for students, faculty members and institutional leaders.

<https://www.cengagegroup.com/news/perspectives/2026/higher-ed-voices-2025/>

Howell, J. (2026, February 25). College faculty perceptions of generative artificial intelligence in higher education. *College Board*.

<https://newsroom.collegeboard.org/new-college-board-research-faculty-express-near-universal-concern-student-ai-use-undermines>

Mulford, D. (2025, March 6). AI in higher education: A meta summary of recent surveys of students and faculty. *Campbell University Academic Technology Services*.

<https://sites.campbell.edu/academictechnology/2025/03/06/ai-in-higher-education-a-summary-of-recent-surveys-of-students-and-faculty/>

Nixon-Saintil, J. (2024, May 15). The AI skills you need for 2025. *IBM Think*.

<https://www.ibm.com/think/insights/ai-skills-you-need-for-2025>

Tyton Partners. (2024, October 9). Tyton Partners report examines AI in higher education. *D2L*.

https://www.d2l.com/newsroom/tyton_partners_report_examines_ai_in_higher_education

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