

Introducing AI to Hospitality Students Without Stress: A Scaffolding Approach to Integration

Abstract

This Lecturers' Lounge presentation proposes a structured scaffolding approach for incorporating AI into hospitality education that focuses on preparing instructors, building student trust, establishing clear learning outcomes and policies, and designing progressively complex assignments and activities. The approach addresses instructor and student challenges in AI adoption through a 16-week integration model that develops critical thinking and digital literacy while maintaining academic integrity. The approach was successfully tested in Spring 2025 after identifying challenges in Fall 2024 courses.

Key Words: AI Integration, Scaffolding, Hospitality Education, Digital Literacy, Student Agency

Theme: Innovative didactics in teaching

Kind of submission: Idea Pitch for Lecturers' Lounge

Introduction

This presentation is the result of my research to find applicable solutions to overcome my struggles incorporating AI tools into my hospitality classes in Fall 2024 at the University of Missouri-Columbia USA. I applied my findings to my classes in Spring 2025, which significantly improved students' receptivity to AI and engagement in class activities. This presentation proposes a structured scaffolding approach for incorporating AI into hospitality education that focuses on preparing instructors, building student trust, establishing clear learning outcomes and policies, and designing progressively complex assignments and activities. The approach addresses instructor and student challenges in AI adoption through a 16-week integration model that develops critical thinking and digital literacy while maintaining academic integrity.

Addressing Challenges in AI Adoption

College instructors face numerous challenges in adopting AI tools, including technological concerns about lack of AI competency, data privacy and algorithmic bias (Doğan et al., 2025), reliability issues requiring critical assessment of AI-generated content (Zhang et al., 2024), and equitable access concerns (Mexhuani, 2025). Pedagogically, educators must maintain the human element in teaching while designing activities that enhance critical thinking (Doğan et al., 2025) and addressing concerns about "learning laziness" (Ng et al., 2025).

Students resist AI adoption due to technology anxiety (Karayianni et al., 2025), concerns that AI might weaken critical thinking abilities, worries about AI generating inaccurate information, and limited AI literacy affecting their ability to critically assess and apply AI. To address these challenges, institutions are implementing ethical guidelines, offering structured AI literacy workshops, and scaffolding AI integration through supervised interactions before independent use (Karayianni et al., 2025).

Familiarizing the Instructor with AI Tools

College instructors have varying levels of familiarity with AI tools, often unconsciously using AI-embedded technologies daily. Many lack confidence and digital competencies to effectively integrate generative AI into teaching, expressing uncertainty about these tools' functionality and pedagogical implementation (Kohnke et al., 2023). Becoming familiar with AI tools offers numerous benefits: enhanced critical thinking about AI's educational implications, greater integration confidence, improved ability to design effective learning activities, and better preparedness to address challenges like plagiarism (Kohnke et al., 2023).

Preparing the Class Before Semester Starts

Before introducing AI tools into hospitality courses, instructors should follow a structured preparation timeline (Bowen & Watson, 2024; Mollick, 2024; Panthagani, 2024):

- 6 months before: explore available tools, define goals, and consider how AI aligns with course objectives.
- 2-3 months prior: Draft syllabus language and begin designing AI-integrated activities.
- 1 month prior: Finalize syllabus policies and develop AI-integrated assignments
- 1-2 weeks before: Review statements and test tools from a student perspective

The syllabus should clearly define appropriate AI use—whether prohibited, permitted with limitations, or allowed with citation. Learning goals should align with AI integration while addressing ethical considerations. Assignments should emphasize critical thinking over memorization and foster collaboration rather than rote learning (Bowen & Watson, 2024; Mollick, 2024; Panthagani, 2024).

The Scaffolding Approach

The proposed model unfolds in three phases over 16 weeks:

Phase 1: Awareness and Basic Concepts (Weeks 1-4)

Introduce AI's capabilities and limitations, provide live demonstrations, and engage students in reflective activities. Ethical considerations are addressed from the beginning.

Phase 2: Exploring AI Tools and Applications (Weeks 5-12)

Students begin to interact with AI in structured, low-stakes contexts—generating outlines, analyzing AI outputs, and applying tools to hospitality scenarios.

Phase 3: Applying AI for Problem-Solving (Weeks 13-16)

Students work on advanced, open-ended projects. These may include revenue forecasting using AI tools, case analysis, and student-led presentations that demonstrate ethical and strategic use of AI.

Hospitality-Specific Applications

For hospitality management education, the model includes field-specific elements such as analyzing AI trends in chatbots and recommendation systems, creating customer service chatbot scripts, using sentiment analysis for guest reviews, and applying AI for revenue management during major events.

Conclusion

The initial implementation suggests that a structured, supportive approach reduces anxiety and increases student ownership of AI-enhanced learning. Students became more discerning users of AI—interrogating its outputs, recognizing its limitations, and positioning themselves as active participants in the digital transformation of the hospitality industry.

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