

28 - 30 November 2025

Vienna , Austria

From Knowledge to Competence: Leveraging Ai in Skills-oriented Teaching and Learning

Mostafa Batouli , Dr. Nahid Vesali

The Citadel, United States

Abstract

The rapid growth of generative artificial intelligence (AI) has created both risks and opportunities for higher education. While concerns about academic dishonesty have led many institutions to adopt restrictive policies, such measures may overlook the need to prepare students for professional environments where AI is widely used. This paper argues that the central task for educators is not to prohibit AI, but to design teaching and assessment practices that emphasize the human competencies AI cannot replace. Drawing on examples from project management education, we present seven strategies that are broadly transferable across disciplines: asking students to critique AI outputs, analyzing AI-generated work to uncover assumptions and errors, requiring oral defenses to ensure authentic understanding, using dual prompts to evaluate conflicting arguments, employing AI to explore communication for different audiences, leveraging role-play and debate to engage with multiple perspectives, and refining AI-generated code or problem solutions. Together, these approaches demonstrate how AI can be reframed from a shortcut to an instructional partner, fostering higher-order skills such as critical judgment, ethical reasoning, communication, and systems thinking. The paper contributes to teaching and learning practice by offering a framework for aligning assessment with competence-based goals while maintaining transparency and academic integrity in an AI-rich era.

Keywords: Academic Integrity, Assessment Design, Higher-Order Skills, Pedagogy, Professional Preparation