



Chapter 1

Rethinking Educational Assessment in the Age of Generative AI: Actionable Strategies to Mitigate Academic Dishonesty


Manuel B. Garcia

 <https://orcid.org/0000-0003-2615-422X>
FEU Institute of Technology, Philippines


Kingsley Ofori-Ampong

 <https://orcid.org/0000-0003-0561-6376>
Heritage Christian University, Ghana

Joanna Rosak-Szyrocka

 <https://orcid.org/0000-0002-5548-6787>
Czestochowa University of Technology, Poland


Fatih Erdoğan

 <https://orcid.org/0000-0003-1022-8570>
Zonguldak Bülent Ecevit University, Turkey


Ramazan Yılmaz

Bartın University, Turkey


Chorng Yuan Fung

 <https://orcid.org/0000-0002-2007-6286>
Swinburne University of Technology, Sarawak, Malaysia


Ahmed Hosny Saleh Metwally

 <https://orcid.org/0000-0002-9545-5870>
Helwan University, Egypt

Aras Bozkurt

 <https://orcid.org/0000-0002-4520-642X>
Anadolu University, Turkey

Dharel P. Acut

 <https://orcid.org/0000-0002-9608-1292>
Cebu Technological University, Philippines

ABSTRACT

As artificial intelligence (AI) becomes increasingly integrated into educational contexts, they present new challenges to traditional assessment methods. A particularly pressing issue is academic dishonesty, which undermines learning authenticity and the credibility of educational institutions. With generative AI tools like ChatGPT making it easier for students to produce automated answers, educational assessments are at risk of measuring AI capabilities rather than students' actual knowledge. Thus, this chapter explores a range of strategies designed to adapt assessment practices in response to the influence of AI in education. These strategies offer actionable frameworks to support authentic learning and uphold academic

DOI: 10.4018/979-8-3373-0122-8.ch001

integrity. Additionally, the chapter highlights future research directions to guide further adaptation of educational policies and practices. Given the rapid integration of AI in the education sector, this chapter provides sensible insights that reinforce the importance of integrity-focused reforms in sustaining meaningful educational outcomes in an AI-driven world.

INTRODUCTION

Educational assessment is fundamental to the learning process. It provides essential insights into both student progress and institutional effectiveness. Over time, assessment practices have evolved alongside shifts in educational theories and societal expectations. This evolution underscores the ongoing need to align them with the demands of higher education and professional fields. Traditionally, assessments have relied on structured, standardized methods such as written exams, essays, and graded assignments. These approaches often emphasize the retention of knowledge, critical thinking, and the ability to apply learned concepts in specific contexts. In classroom settings, educators have used techniques like oral questioning, quizzes, and written feedback to gauge student comprehension and progress. Final exams and cumulative projects serve as benchmarks to summarize students' overall performance. These culminating assessments prove a snapshot of their achievements at the end of a course or program. While these conventional methods have shaped the foundation of educational assessment, evolving educational landscapes and emerging challenges signal a need to explore more dynamic and flexible ways of measuring and fostering learning outcomes (e.g., Swiecki et al., 2022).

In the 21st century, advancements in information and communication technologies have significantly transformed assessment methods (See et al., 2022). Recent trends pave the way for technology-enhanced assessments like computer-based testing and online evaluations. Particularly, e-assessment has emerged as a powerful tool for aiding teachers in monitoring student progress and evaluating complex cognitive skills (Azevedo & Azevedo, 2019). Prior works underscored the benefits of e-assessment in higher education, highlighting its potential to boost student motivation, satisfaction, skill development, autonomy, and flexibility (Montenegro-Rueda et al., 2021). E-assessments are often facilitated through learning management systems, which provide a variety of assessment options, including calculation questions, essays, matching exercises, and true/false queries. In addition, online tools like self-test quizzes, discussion forums, and e-portfolios have been increasingly adopted for educational assessments (Gikandi et al., 2011). The importance of these resources was further amplified during the COVID-19 pandemic (Ofosu-Ampong et al., 2024) when platforms such as Moodle and Zoom became essential for conducting online assessments to maintain the continuity of student evaluation amidst unprecedented challenges (Montenegro-Rueda et al., 2021; Slack & Priestley, 2023).

While e-assessments offer numerous benefits (Heil & Ifenthaler, 2023), the rise of emerging technologies like artificial intelligence (AI) introduces new challenges in educational assessment (Swiecki et al., 2022). One of the most pressing concerns is the increasing use of generative AI tools, which can produce sophisticated written responses, solve complex problems, and simulate human-like interactions. These AI-powered tools, such as ChatGPT, have made it easier for students to generate content that may not accurately reflect their individual understanding or learning progress. This ease of access has heightened concerns around academic dishonesty (Gruenhagen et al., 2024), which refers to any form of cheating or misrepresentation of one's own work in an academic setting. Students may rely on AI tools to complete assessments, which undermines the authenticity of their work (Lee et al., 2024).

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/rethinking-educational-assessment-in-the-age-of-generative-ai/379657

Related Content

AI-Powered Gamification and Interactive Learning Tools for Enhancing Student Engagement

Barnali Gupta Banikand Aparna Gullapelly (2025). *Driving Quality Education Through AI and Data Science* (pp. 283-310).

www.irma-international.org/chapter/ai-powered-gamification-and-interactive-learning-tools-for-enhancing-student-engagement/370084

A Comparative Analysis of the Integration of SOA Elements in Widely-Used Enterprise Architecture Frameworks

Ayed Alwadain, Erwin Fieft, Axel Korhausand Michael Rosemann (2013). *International Journal of Intelligent Information Technologies* (pp. 54-70).

www.irma-international.org/article/comparative-analysis-integration-soa-elements/77874

Innovating Hospitality Finance Education Through Revenue Strategies and Technology

Albian Albrahimi (2026). *The Impact of Artificial Intelligence on Hospitality Education* (pp. 203-230).

www.irma-international.org/chapter/innovating-hospitality-finance-education-through-revenue-strategies-and-technology/411855

Context-Aware Services for Ambient Environments

Rene Meierand Deirdre Lee (2009). *International Journal of Ambient Computing and Intelligence* (pp. 1-14).

www.irma-international.org/article/context-aware-services-ambient-environments/1368

Internet of Things Cyber-Physical Systems in Smart Healthcare

Imdad Ali Shah, Quartulain Sialand N. Z. Jhanjhi (2025). *Generative AI Techniques for Sustainability in Healthcare Security* (pp. 279-300).

www.irma-international.org/chapter/internet-of-things-cyber-physical-systems-in-smart-healthcare/363505