

Adopting Artificial Intelligence Tools in Higher Education: Student Assessment, edited by Thangavel Murugan, Karthikeyan Periasamy, and A. M. Abirami

CRC Press. 2025. pp. 241.

ISBN: 9781032746685 (Hardback)

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The rapid emergence of generative artificial intelligence (AI) has fundamentally reshaped debates surrounding student assessment in higher education. Questions that once centred on automated grading, adaptive testing, and learning analytics have expanded to encompass broader concerns about academic integrity, authorship, human agency, and the purposes of assessment itself. Published at this pivotal moment, *Adopting Artificial Intelligence Tools in Higher Education: Student Assessment*, edited by Thangavel Murugan, Karthikeyan Periasamy, and A. M. Abirami, offers a timely overview of AI-supported assessment while documenting many of the assumptions that shaped educational practice immediately before generative AI transformed the field. Rather than providing a definitive account of assessment in the age of large language models, the volume is best understood as capturing a transitional moment in the development of AI in higher education. It is this historical positioning that constitutes both its greatest strength and its principal limitation.

The volume comprises 10 chapters that examine the application of AI to student assessment from multiple perspectives, including automated grading, machine learning, natural language processing, adaptive assessment, personalised learning, plagiarism detection, and inclusive assessment. Rather than attempting to survey every aspect of AI in higher education, the editors deliberately focus on assessment, providing the collection with a coherent thematic scope. Although the chapters differ in emphasis and methodology, they are united by a shared concern with how AI can improve assessment while maintaining educational values such as fairness, accessibility, and responsible



Education as Change
Volume 30 | 2026 | #22801 | 3 pages



<https://doi.org/10.25159/1947-9417/22801>

ISSN 1947-9417 (Online)

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implementation. This focused approach distinguishes the volume from many recent edited collections that offer broader, but often less integrated, accounts of AI in education.

The volume's principal contribution lies in its consistently practical orientation. Rather than engaging in speculative discussions about the future of artificial intelligence, the contributors focus on technologies and assessment practices that are already influencing higher education. Chapters on automated grading, adaptive assessment, and AI-supported feedback demonstrate how these technologies may reduce administrative workloads while supporting more responsive and personalised learning. Equally important, discussions of inclusive assessment and AI-assisted support for students with dyslexia broaden the conversation beyond efficiency, emphasising that assessment technologies should respond to learner diversity rather than simply optimise institutional performance. Throughout the collection, AI is presented not as an end in itself, but as a pedagogical resource whose value depends upon thoughtful educational implementation.

The collection is less convincing, however, when considered in relation to the profound changes that generative AI has introduced into higher education. While the contributors acknowledge recent technological developments, the volume remains largely grounded in a pre-generative AI understanding of assessment, where AI is primarily valued for improving the efficiency, consistency, and scalability of existing assessment practices. Consequently, much of the discussion centres on automated grading, predictive analytics, plagiarism detection, and personalised feedback rather than on the more fundamental question of how assessment itself should be rethought when students routinely work with AI systems. In this respect, the volume consolidates an important body of scholarship but engages only indirectly with the paradigm shift that now defines much of the contemporary literature on assessment in higher education.

A second limitation concerns the coherence of the edited volume itself. Although the chapters are organised around a common theme, they often function as independent review essays rather than as components of a cumulative scholarly argument. Similar introductions to artificial intelligence, machine learning, and adaptive assessment recur across multiple chapters, as do discussions of algorithmic bias, data privacy, and responsible AI implementation. Such repetition is understandable in a multi-author collection, particularly in a rapidly evolving field. Nevertheless, stronger editorial synthesis could have transformed these parallel discussions into a more integrated conversation about the future of assessment. As it stands, readers are presented with a series of informative contributions whose conceptual connections are sometimes implied rather than explicitly developed.

More fundamentally, the collection remains theoretically modest. While it provides a comprehensive overview of AI applications in assessment, it engages less extensively with educational theories that might explain why assessment should change in response

to technological innovation. AI is frequently presented as a means of improving existing assessment practices rather than as a catalyst for reconsidering what should be assessed, how learning ought to be evidenced, or how assessment relationships between teachers, students, and technologies are being reshaped. As debates increasingly shift from AI-assisted assessment to assessment redesign in the age of generative AI, readers seeking a more critical engagement with educational transformation may therefore find the discussion less fully developed than its technological analysis.

Yet these limitations should not obscure the volume's broader contribution. The rapid development of generative AI has inevitably outpaced many academic publications, particularly edited collections that require extended periods of planning and production. Rather than diminishing the value of this volume, this context helps explain its significance. It captures a formative stage in the evolution of AI-supported assessment, bringing together the technologies, educational assumptions, and ethical concerns that shaped institutional practice immediately before generative AI fundamentally altered the conversation. In doing so, the collection provides readers not only with a practical introduction to AI-supported assessment but also with a valuable point of reference for understanding how current debates have emerged. Its contribution lies less in anticipating the future than in documenting an important moment in the recent history of educational change.

Overall, *Adopting Artificial Intelligence Tools in Higher Education: Student Assessment* is a thoughtful and well-organised introduction to AI-supported assessment in higher education. Although it does not fully engage with the conceptual shifts prompted by generative AI, this limitation reflects the extraordinary pace at which the field has evolved rather than any lack of scholarly rigour. The volume will be particularly valuable to researchers entering the field, university teachers exploring AI-supported assessment, and educational leaders seeking an accessible overview of current practices and challenges. Ultimately, its greatest achievement lies not in providing the final word on AI-enabled assessment, but in documenting the final stage of a conversation that has since evolved into something fundamentally different. For that reason, it deserves careful attention from anyone interested in the continuing transformation of assessment in higher education.