

BOOK REVIEW

NAVIGATING GENERATIVE AI IN HIGHER EDUCATION: ETHICAL, THEORETICAL AND PRACTICAL PERSPECTIVES

REVIEWED BY:

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Sabbaghan, Soroush (Ed.) (2025). *Navigating Generative AI in Higher Education: Ethical, Theoretical and Practical Perspectives*. Edward Edgar Publishing. Pages: 256. Price: 190.09 CDN (hardcover).

Navigating Generative AI in Higher Education is published at a pivotal moment when AI integration in universities raises major questions. Facing changes in research, teaching, and assessment, academic stakeholders seek guidance to understand this new reality. The book combines varied analyses, diverse methods, concrete examples, and broad literature-based examination. It covers technical, pedagogical, ethical, political and institutional perspectives, offering a comprehensive overview of current transformations. The book is primarily intended for professors, researchers, graduate students, and staff who support education and research. Instructional designers, IT teams, institutional leaders, and managers will also find it valuable. It provides clear guidance for rethinking teaching practices, reviewing assessments, supporting research, and making informed decisions. The volume offers examples and practices applicable in multiple contexts.

Chapter one presents AI fundamentals, explaining neural networks, deep learning, NLP, and LLMs. It traces AI's evolution from ELIZA to GPT-4, Claude 3.5 Sonnet, and Gemini Flash 2.0, and describes generative models (GPT, GAN, VAE) that create text, images, and videos. The chapter demonstrates how AI drives epistemological change by reshaping knowl-

edge production and understanding, presenting various uses in research and teaching across several disciplines.

Chapter two examines GenAI's rise in higher education, covering teaching, research, and administration. The authors explain how widespread access to AI tools transforms the practices of students, educators, and staff, describing LLMs' functioning and limitations. The chapter demonstrates AI's reshaping of pedagogy and knowledge production, emphasizing the need to rethink assessment practices and institutional frameworks.

Chapter three explores GenAI applications in higher education across research, teaching, and assessment through a synthesis of studies. It demonstrates how AI supports data analysis, generates teaching materials and assessments, provides personalized tutoring, and facilitates feedback. The chapter presents examples using GPT-4o, discusses the AI-TPACK framework, and addresses challenges related to reliability and prompts.

Chapter four describes a responsive instructional design approach for integrating GenAI into postsecondary education. The authors draw on their experiences as instructors and educational developers, using the Digital Skill Development Framework to guide design. The chapter

combines experiential learning and open educational practices. Examples include a persona simulator and design questions for structuring activities. The authors conclude that GenAI can strengthen engaged and autonomous learning.

Chapter five presents a systematic scoping review following the Arksey and O'Malley framework to document GenAI use, primarily ChatGPT, in classroom assessment. Analyzing peer-reviewed studies (2022-2024), five themes emerge: varied assessment tasks supporting learning, quality of AI feedback versus human feedback, AI-generated questions supporting student autonomy, grading accuracy, and ChatGPT assessment challenges. The chapter proposes an integration framework to guide educational practices.

Chapter six offers a prospective examination of GenAI's future in academia. Drawing on a synthesis of studies, the chapter explores key dimensions: personalized learning, research support, evolving teaching roles, assessment methods, and ethical considerations. Key concepts include adaptive learning, immersive virtual reality environments, and human-AI collaboration. The chapter emphasizes that while AI has significant potential, it requires clear frameworks, ongoing vigilance, and sustained human oversight.

Chapter seven examines how GenAI reshapes academic authorship through a quantitative survey of 155 participants using Likert-scale measures. The chapter introduces the concept of post-plagiarism and its six tenets, interpreting challenges of hybrid human-AI writing. Survey results show increasing AI acceptance in academic writing. The authors highlight the need for new attribution frameworks and clearer institutional policies.

Chapter eight examines the tension between GenAI efficiency and assessment homogenization risk, explaining why assessment practices need adaptation rather than abandonment. Through conceptual discussion supported by external data, including Turnitin's finding that 11% of papers display AI signals, the analysis describes faster production, reduced diversity, and traditional assessment limits. The chapter suggests hybrid presentations, multi-party projects, and personal portfolios, while highlighting trust challenges.

Chapter nine explores the black box dilemma in assessment, examining whether GenAI and explainable AI (XAI) can reduce assessment opacity. Combining a Bangladeshi case study (Maisha's story) with conceptual analysis, it explains black box and glass box concepts, demonstrating XAI explanations through decision trees and student interactions. Focusing on transparency and assessment inequities, the authors conclude GenAI can improve explainability despite technical and communication challenges.

Chapter 10 examines how GenAI transforms pedagogical ethics, reconceptualizing academic misconduct, learner agency, and assessment in a post-plagiarism environment. Drawing on scholarly literature, it introduces the AI reliance spectrum, the culpable control model, the RRUYO rule, and authentic assessment strategies including project-based tasks and peer review. The chapter concludes assessment must be redesigned to align with responsible, transparent learner engagement with AI.

Chapter 11 analyzes GenAI challenges and misuses, highlighting how over-reliance threatens essential knowledge, critical thinking, and education's human role. Drawing on research synthesis, the analysis describes three challenge types: pedagogical (erosion of foundational skills, diminished critical thinking, changing teacher roles), institutional (integration capacity, resource constraints), and societal (digital divide). Studies reveal negative effects on memory and creativity. The authors emphasize balanced integration with mitigation strategies.

Chapter 12 presents an AI competency framework for non-engineering postsecondary students, illustrating the transition from AI literacy to applied competency. Through qualitative co-design with sixteen Hong Kong students across iterative cycles, the framework comprises six domains: AI knowledge and application, ethical principles, impact, learning with AI, careers, and lifelong learning.

Chapter 13 examines G10 countries' national AI innovation strategies, focusing on training future leaders and researchers in higher education. Drawing on four theoretical frameworks, the chapter reveals economic objectives, strong industry presence in expert commit-

tees, absence of comprehensive AI laws, and humanities underrepresentation. Using OECD, Statista, and national reports data, the authors propose recommendations for strengthening AI literacy, integrating humanities, and updating strategic plans.

Chapter 14 examines intersectoral collaborations between AI developers and educational institutions for integrating generative AI in higher education. Using the Student-AI Collaboration (SAC) model, it analyzes three dimensions (curriculum, human-AI interactions, learning environment), presents concrete examples (Grammarly, NVIDIA, Canva, OpenAI), and identifies three barriers: communication, resources, and technological development pace.

Chapter 15 offers a prospective vision by synthesizing insights from previous chapters on ethical challenges, pedagogical shifts, governance, and collaboration in GenAI integration. It introduces a Human-Centered Design framework with four pillars: inclusivity, contextual awareness, adaptive processes, and collaborative participation. It concludes with recommendations for educators, institutions, developers, and policymakers, emphasizing human values in shaping AI's educational future.

This book offers a comprehensive overview of GenAI integration into higher education, bringing together technical, pedagogical, institutional, and governance perspectives. Its strength lies in author diversity, enabling rich examination of research, teaching, ethics, assessment, and cross-sector collaboration. International examples extend its relevance, showing AI challenges transcend national boundaries. The book has solid structure. Initial chapters lay technical groundwork and define concepts, while following sections explore uses, challenges, and institutional transformations. Readers understand that AI influences research practices, assessment models, educational decisions, administrative tasks, and national strategies. Chapter two notably includes non-teaching and administrative staff, a group often absent from literature, enriching the scope. Particularly relevant is the emphasis on assessment. Several chapters show how generative tools change evaluation, work structure, and student support.

Concepts such as post-plagiarism, AI dependency, and the black-box dilemma demonstrate commitment to understanding these technologies' real effects. Proposed approaches (hybrid assessments, authentic projects, portfolios) offer applicable solutions. The book highlights significant challenges: bias, privacy, digital divide, and skill loss. Some sections discuss dependency risks, declining critical thinking, and reduced human roles, showing AI requires sustained supervision rather than being a simple solution. Governance and policy chapters remind us that economic interests may outweigh educational priorities. This book is an essential guide for navigating GenAI complexities in higher education.