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Book review of K. Pulk & R. Koris (Eds., 2025). *Generative AI in higher education. The good, the bad, and the ugly*. Edward Elgar.

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Generative AI (GAI) has swept through higher education with a force that demands ongoing scrutiny of its promise and its perils. While exploring recent scholarship on AI in academia, I encountered *Generative AI in higher education: The good, the bad, and the ugly*, edited by Estonian professors Kätlin Pulk and Riina Koris. This roughly 200-page volume stands out for its blend of practical insights, critical reflections, and wide-ranging perspectives on how educators, researchers, and students alike are adapting to AI in university settings.

Rather than offering quick fixes, the book challenges readers to reconsider their assumptions about the purpose and value of higher education. It explores student discomfort with AI, the phenomenon of AI 'hallucinations', and the technology's evolving role in academic research. Although I have reservations about some contributors' arguments, the volume's comparative approach—from enthusiastic early adopters to sceptics—proved valuable for clarifying my own views on the pedagogical complexities of GAI. *Generative AI in higher education* does more than catalogue pros and cons: it challenges readers to ask tough questions about the future of teaching, learning, assessment, and scholarship in an AI-driven landscape.

Overview

The book consists of four parts, divided into 13 chapters, written by 23 international contributors. The first three chapters set the scene. In the introductory chapter, editors Riina Koris and Kätlin Pulk introduce the core question driving the volume: is GAI destined to be the 'best friend' of teachers, learners, and researchers, or does it harbour deeper threats to academic integrity, pedagogical quality, and the overall mission of university education? They emphasise that GAI's rapid expansion calls for careful and thorough consideration across a range of areas: classroom practice, scholarly research, and institutional policy.

One of the key questions that Chapter 1 asks is whether GAI is a student's 'best friend', drawing on ChatGPT's promise of comprehensive academic support. ChatGPT offers clarifications on course content, assistance with homework

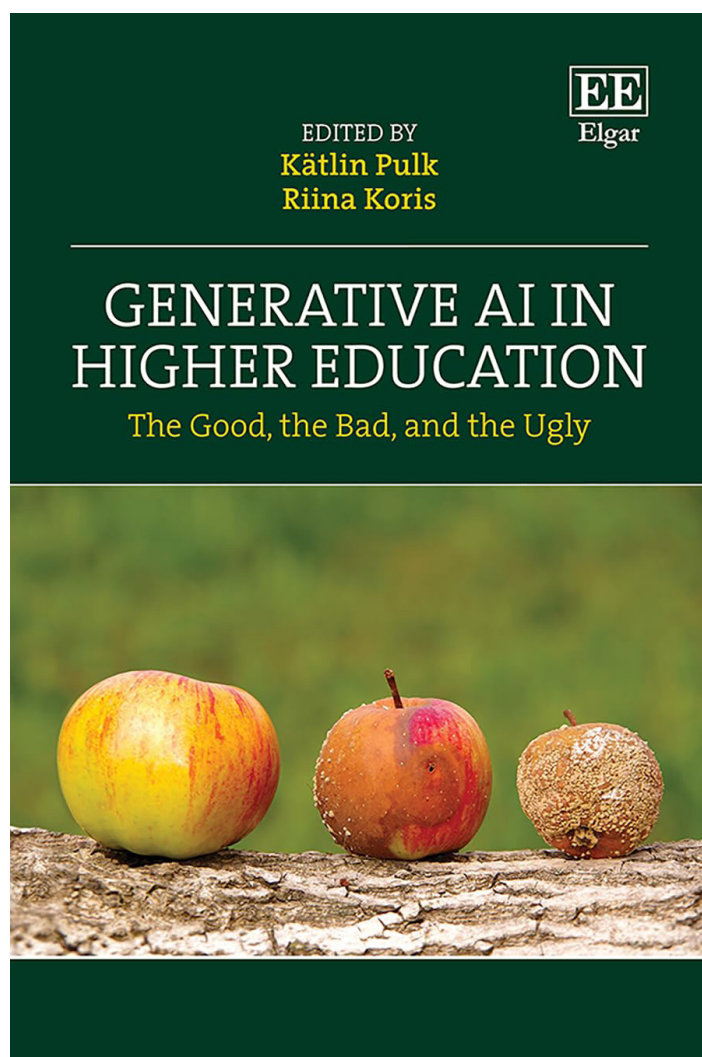


Figure 1: Book cover.

and writing assignments, exam preparation tips, and help with structuring or refining essays. It can also generate ideas for research or creative writing, advise on career development, and even provide emotional support and coping strategies. In other words, GAI, as exemplified by ChatGPT, appears to deliver a broad range of services that could streamline students' academic and personal lives. However, Koris and Pulk's introduction also raises concerns about GAI's

potential to stunt students' cognitive development by curtailing their interpretive range. In a world flooded with information, sensemaking becomes the most difficult task, yet true insight emerges only through a deeper and more sustained engagement with texts. The implication is that while GAI's immediate assistance might prove valuable, it risks cultivating a superficial mode of thinking—both for students and teachers—if not accompanied by rigorous critical inquiry.

The second chapter, authored by Wayne Martin and Deidre Williams, explores Hubert Dreyfus's "Critique of Artificial Reason"—a concept cleverly alluding to Kant's philosophical critiques, including the Critique of Pure Reason. While the lengthy discussion in Chapter 2 may feel tangential for some readers, it updates Dreyfus's philosophical critique of the shortcomings of AI. Martin and Williams also reflect on the intriguing concept of 'extended mind cyborgs', which is applicable to all humans as our cognition relies on external technological enhancements that act as integral parts of our thinking. It illustrates how we are 'natural-born cyborgs' who routinely offload tasks to smartphones, computers, and the internet. Rather than science-fiction implants, 'extended minds' function as extra-corporeal boosts to human intellect, expanding our mental capabilities far beyond the physical boundaries of our skulls.

Closing Part 1, Chapter 3 by Chahna Gonsalves and Oguz Acar examines the varied discourses framing GAI in higher education. The authors highlight opportunities, such as boosting innovation, alongside challenges that risk undermining core educational values. They further propose that AI should supplement students' learning only after foundational skills are established, suggesting an approach more suited to later-stage undergraduates or postgraduates. The rest of the book is divided into the good, the bad, and the ugly, reminding us not only of the title of Sergio Leone's epic 1966 spaghetti western but also of Iñiguez et al.'s 2023 article in this journal: "Chatbots and AI in Education (AIED) tools: The good, the bad, and the ugly". Part 2's 'The Good' Chapters 4–7 collectively make the case that, given GAI's inevitability, educators should focus on harnessing its benefits to enrich learning, teaching, and assessment.

In the fourth Chapter, John Pavlik advocates applying constructivist learning theory to integrate AI tools in a way that bolsters student engagement and critical thinking. Chapter 5, by Christian Hendriksen, provides practical strategies for students and educators to use AI ethically and effectively. Hendriksen underscores the value of digital literacy and reflective practice, illustrated by his revisiting of Benjamin Bloom's 'two-sigma problem'—the finding that learners who receive one-on-one or very small group tutoring consistently outperform peers in traditional classroom settings. He further notes early evidence that both teachers and students can deepen their learning experiences with GAI, highlighting that chatbot tools can remain patient, available at any time, and capable of adapting to a wide range of student abilities. The Chapter concludes with an array of practical advice, including techniques for optimising GAI interactions and a collection of annotated chat sessions, provided in a downloadable companion document.

Chapter 6 by Katri Kerem examines the escalating pressures on academics, exacerbated by overwork and precarity driven by neoliberal policies. Against this backdrop, she presents ChatGPT as a 'virtual colleague' with the potential to enhance teaching productivity, particularly for time-poor lecturers juggling endless administrative obligations. Kerem highlights three key areas where ChatGPT could streamline teaching practices: (1) AI-enhanced course design, (2) assistance with assignments, assessments, and marking, and (3) content preparation. Beyond efficiency, she emphasises the platform's capacity to personalise content, aligning with constructivist principles to foster a more interactive, student-centred environment.

Importantly, Kerem tempers her optimism by cautioning that, although GAI might free educators for deeper scholarly pursuits, universities often redirect this extra capacity to further 'measurable' outputs in their relentless metrification of academic work. Rather than alleviating the burdens of overwork, the tool could unwittingly reinforce unrealistic demands on teaching staff. Kerem's Chapter thus highlights the need for institutional cultures that genuinely value reflective practice and sustainable workloads.

The seventh Chapter, by Michael Dowling and Yue Li, shifts the focus to academic research, showing how GAI can aid scholars with tasks ranging from literature reviews to data analysis, albeit with caveats regarding reliability and ethics. They note that GAI could revive the possibility of solo research by eliminating downtime for collaborators, yet caution that treating AI as a 'partner' poses important questions about the future of collaboration, apprenticeship, and authorship. Dowling and Li provide a GAI toolkit to guide researchers, encompassing everything from idea generation to strategies such as embeddings, prompting, and fine-tuning. They cite findings that workers who use GAI outperform those who do not and see no reason to expect otherwise in research. However, they also predict that the success of GAI may diminish the need for human research assistants, raising concerns about how early-career academics will acquire the experience necessary to become senior researchers.

Shifting the focus to the potentially harmful effects of GAI, Part 3, 'The Bad', looks at creativity, assessment, equity, and ethical dilemmas through Chapters 8–11. Chapter 8, by Abdullah Clark and Kathleen Denman, explores whether GAI stifles creativity by supplying ready-made solutions that could diminish experimentation and personal expression. They define creativity as the capacity to produce something genuinely new in relation to oneself and others. By contrast, GAI merely predicts likely sequences of words based on existing data, never truly generating a fresh idea. Although its output can appear novel, Clark and Denman contend that it lacks the inventive depth of human creativity.

Chapter 9, authored by Peter Matheis and Jacob-John Jubin, addresses how AI tools can compromise assessment integrity, calling instead for a more authentic framework that resists automated shortcuts. They recommend linking assignments to current events and up-to-date research to foster genuine engagement with real-world, profession-related problems and advocate multimodal assessments as a strategic way to mitigate the influence of GAI. I was gratified

to be appropriately acknowledged in this Chapter, as an article I co-authored more than two years ago promoted these very approaches (see Rudolph et al., 2023).

The tenth Chapter, by Margriet van Gestel, tackles the concern that AI may deepen existing inequalities in both research communities and society at large by amplifying issues of access, bias, and privacy. She recognises AI's potential to boost writing efficiency, foster creativity, and provide editorial support—particularly for non-native speakers—while also enabling literature summarisation and translation. However, while free versions of GAI exist, the paid alternatives offer superior performance—a cost researchers in the Global North can more readily absorb, potentially widening the gap with those in the Global South. Chapter 11, by Ilia Protopapa and Bochra Idris, exposes the ethical dilemmas of using GAI in academic writing, highlighting risks of unintentional plagiarism, intellectual complacency, and diminished scholarly rigour. They delineate four stages in the traditional literature review—design, conduct, data abstraction and analysis, and writing—and discuss how AI might automate each step. However, Protopapa and Idris conclude that GAI falls short across the board.

Part 4, The Ugly (Chapters 12–13), intends to expose the more disconcerting aspects of GAI's infiltration into higher education. Chapter 12, by Jukka Mäkinen et al., explores how GAI's growing influence in labour relations should push higher education institutions to reconsider their role as producers of rigorous academic knowledge. Drawing on Johnson and Acemoglu (2023), the authors describe how digital technologies in the United States since the 1980s have automated work, undermined labour, and heightened wage inequality—a pattern they link to Milton Friedman's shareholder model, which upholds profit maximisation as a business's chief social responsibility. According to Mäkinen et al., the anti-human tendencies of digital tech and AI reflect the Friedman doctrine's sway. They, therefore, call for a stronger commitment to contextual, socially responsible teaching—one that fosters knowledge and skills extending beyond sheer calculative rationality.

The final chapter, by Michelle Miller, concludes the volume by addressing the challenge of faculty overburdened by constant AI developments. Miller observes that while academics are frequently urged to train students in AI, they often lack practical starting points or illustrative examples. She opposes such 'ugly advice' that merely emphasises the pressing need for professional development that evolves alongside AI tools. Miller warns that deterrence-based approaches run the risk of sparking an endless cat-and-mouse cycle between faculty and students. Complicating matters further, AI-detection tools can unfairly target non-native writers, raising ethical and legal concerns for institutions that rely on them.



Figure 2. Movie poster of the 1966 movie 'The Good, the Bad, and the Ugly'. Fair use.

Assessment

One aspect I find particularly appealing is that the volume is co-edited by two women from Estonia, a country not typically associated with cutting-edge AI work—especially in such a male-dominated field. Although many contributors are based in Western nations (Denmark, England, Estonia, Finland, Ireland, the Netherlands, and the US), there are also authors from Türkiye and China, making the collective perspective refreshingly international. It is especially encouraging to see participation from European countries like Estonia and Finland, which are often perceived to be at the periphery of the GAI discourse. Another commendable feature is the extensive referencing, which introduced me to new scholarship I had not previously encountered. I was also gratified to see more than a handful of citations from JALT.

Although the volume is newly released, it shows signs of obsolescence—a consequence of the inherent delay between writing and publication in academic settings. The book focuses heavily on OpenAI's ChatGPT up to GPT-4, yet omits mention of more recent iterations (e.g. 4o, 4o with scheduled tasks, 4.5, o1, o3 mini) and offers no insight into newer developments like Deep Research or 'agentic' AI. Nor does it address emerging initiatives such as France's Mistral or Chinese models from Baidu's Ernie to Deepseek. Consequently, certain passages, including the claim that "in contrast to ChatGPT, Copilot has a current knowledge base and a more comprehensive one" (p. 49), are already

outdated in light of the field's hypercompetitive pace. This observation does not undermine the value of the book; rather, it highlights a broader limitation of academic publishing cycles when dealing with rapidly evolving technologies.

In some Chapters, the tendency to anthropomorphise AI seems excessive—for instance, the assertion that “this ability to understand, produce, synthesise, and creatively manipulate language... allows these models to participate in the knowledge-creation process” (p. 90). While such humanising language is widespread in AI literature, it remains misleading; all that GAI does is *mirror* human intelligence (Chomsky et al., 2023; Vallor, 2024).

Other statements that critical readers may take issue with are:

“The rise of decent AI collaborators at a low cost will probably most benefit emerging country researchers, who traditionally haven't had access to strong research guidance and assistance due to cost issues. We should see a greater levelling of expertise across countries as research guidance and assistance all rise to a new higher standardised level... will eventually allow a greater spectrum of ideas to enter the marketplace of research” (p. 100).

Such statements are, for instance, countered in Chapter 10 of the book. AI development is largely concentrated among a handful of tech giants in the United States and China, whose immense wealth highlights the stark inequalities in access to cutting-edge technologies. My view is that without specific investments in infrastructure, digital literacy, and capacity-building, these disparities will likely widen—not only in areas with traditionally limited access to technology but also within wealthy nations (Rudolph et al., 2025).

Overall, the book's 13 chapters—arranged under ‘setting the scene,’ ‘the good,’ ‘the bad,’ and ‘the ugly’—provide a broad range of perspectives on whether GAI can (and should) become a reliable ally for educators, students, and researchers. The collective scholarship offers incisive commentary on the ethical, pedagogical, and institutional dimensions of AI in higher education. Laudably, the book contributes to a much-needed critical AI literacy. Although certain chapters would have benefited from more rigorous critical engagement, the breadth of perspectives assembled in this volume remains intellectually stimulating and worthy of serious attention. I therefore recommend it to anyone seeking a deeper understanding of GAI's expanding presence in contemporary university contexts.

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