Chapter 6
Bridging the AI Divide: Equity, Integrity, and the Governance of Generative AI in Higher Education

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ABSTRACT

Generative artificial intelligence (GenAI) is rapidly reshaping higher education, offering personalised learning, administrative automation, and global reach. Yet these benefits are unevenly distributed and risk magnifying long-standing inequities. This conceptual chapter synthesises contemporary scholarship (2022–2025) to map GenAI's "dual reality": its capacity to enhance educational quality and its potential to entrench an AI divide driven by resource differentials, digital infrastructure gaps, and algorithmic bias. We analyse three structural fault lines—tiered access, resource disparities, and biased tools—and link our critique to The Manifesto for Teaching and Learning in a Time of Generative AI. Building on this diagnosis, we advance an integrated framework that couples democratised access (open-source platforms, equity-focused partnerships, and targeted funding) with transparent, inclusive governance rooted in data justice and AI literacy.

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INTRODUCTION

The swift and increasingly pervasive integration of generative artificial intelligence (GenAI) into the fabric of higher education represents not just an incremental technological upgrade but a profound, systemic transformation akin in its potential impact to the advent of the printing press, which democratized knowledge dissemination, or the internet, which redefined the very structure of information access (Malysheva et al., 2022).

The sheer speed and scale of this technological adoption are unprecedented, with projections indicating that many higher education institutions worldwide are currently exploring, experimenting with, or actively implementing GenAI tools within their pedagogical, administrative, and research frameworks (Shailendra et al., 2024). These tools, ranging from sophisticated large language models (LLMs) capable of generating human-quality text to AI-powered chatbots providing personalized learning assistance and advanced research tools that facilitate complex data analysis, are rapidly reshaping traditional teaching practices, redefining student learning experiences, and transforming the nature of academic inquiry.

While the potential of GenAI to revolutionize higher education, offering possibilities for personalized learning, automating time-consuming administrative tasks, and enhancing research capabilities, is widely acknowledged and frequently celebrated, there are mounting concerns that these transformative benefits may not be equally distributed across all institutions and student populations. Instead of acting as an equalizer, leveling the playing field and broadening access to high-quality education, GenAI risks further entrenching existing disparities related to access, resources, and opportunity, thereby deepening existing socio-economic divides and exacerbating long-standing inequities within and across higher education institutions (Zahnd et al., 2022). This uneven distribution of technological advantages presents a serious challenge to the core values of higher education and calls into question the foundations of equity and social justice in the educational landscape.

Generative AI, in its most fundamental sense, encompasses a wide array of machine learning technologies that can generate new content autonomously, ranging from text and code to images, audio, video, and even simulations, based on patterns identified by analyzing vast and varied datasets (Lv, 2023). In educational contexts, these technologies have been applied in a variety of ways, including the development of AI-driven tutoring systems that offer customized support to individual learners, advanced writing assistants that assist students in the drafting and refinement of their written work, automated research tools that help in analyzing large volumes of data or navigating complex literature, and real-time language translation services that facilitate communication across linguistic boundaries. Initial reactions to the sudden proliferation of GenAI in higher education have been sharply polarized, with some