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RESEARCH ARTICLE

The future of learning or the future of dividing? Exploring the impact of general artificial intelligence on higher education

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Abstract

This article examines the impact of generative artificial intelligence (GAI) on higher education, emphasizing its effects in the broader educational contexts. As AI continues to reshape the landscape of teaching and learning, it is imperative for higher education institutions to adapt rapidly to equip graduates for the challenges of a progressively automated global workforce. However, a critical question emerges: will GAI lead to a more inclusive future of learning, or will it deepen existing divides and create a future where educational access and success are increasingly unequal? This study employs both theoretical and empirical approaches to explore the transformative potential of GAI. Drawing upon the literature on AI and education, we establish a framework that categorizes the essential knowledge and skills needed by graduates in the GAI era. This framework includes four key capability sets: AI ethics, AI literacy (focusing on human-replacement technologies), human–AI collaboration (emphasizing human augmentation), and human-distinctive capacities (highlighting unique human intelligence). Our empirical analysis involves scrutinizing GAI policy documents and the core curricula mandated for all graduates across leading Asian universities. Contrary to expectations of a uniform AI-driven educational transformation, our findings expose significant disparities in AI readiness and implementation among these institutions. These disparities, shaped by national and institutional specifics, are likely to exacerbate existing inequalities in educational outcomes, leading to divergent futures for individuals and universities alike in the age of GAI. Thus, this article not only maps the current landscape but also forecasts the widening educational gaps that GAI might engender.

Policy Significance Statement

This study underscores the critical need for policy and education leaders to adopt and implement comprehensive and inclusive policies in higher education to effectively leverage the capabilities of general artificial intelligence (GAI). Our analysis shows sharp disparities in GAI readiness across top universities, which implies an impending widening of educational inequalities in the absence of effective policy measures. Policymakers must prioritize the development of robust GAI integration strategies that not only enhance curricula with essential AI skills and ethics but also ensure equitable access for all individuals and institutions. By systematically aligning educational frameworks with the evolving demands of the AI era, we can equip graduates with the necessary tools to thrive in a digitally driven future under transformative technological advancement.

1. Introduction

Generative artificial intelligence (GAI), including transformative technologies such as ChatGPT, is rapidly changing the contours of various sectors of human life (Zawacki-Richter et al., 2019; Galindo et al., 2021). One domain standing at the center of this monumental transformation is higher education (Hannan and Liu, 2023). As policymakers and leaders navigate the threshold of an era where AI technologies possess the power to redefine traditional learning and teaching methodologies (Novak and Gowin, 1984; Jung, 2018; Li, 2023; Welsh, 2023), some critical questions arise: What capacities should be offered to university students in the era of GAI, and what curriculum reforms are needed accordingly? How prepared are our higher education institutions to embrace this transformation? More crucially, will the future of GAI-enhanced education be a future of expanded opportunity or a future of deepening divides, where only the privileged few benefit while the majority are left behind?

The advent of GAI presents a dual challenge for higher education worldwide (OECD, 2023). The first challenge is awareness and comprehension: educational institutions must comprehend the meanings and implications of the rise of GAI for the future of work and the teaching and learning of higher education. This understanding will help them identify the essential knowledge and skills in the AI era. The second, and conceivably more significant challenge, is reconfiguration and transformation. Major changes, including curriculum reforms and institutional restructuring, are often necessary to incorporate or strengthen the capacities essential for the AI era in university education, preparing them for a future increasingly intertwined with AI automation. Addressing these challenges requires an analysis from both theoretical and empirical perspectives, which constitutes the essence of this study.

While GAI adoption is gaining traction worldwide, the strategies, priorities, and challenges differ remarkably across cultural contexts (Wong and Hinnant, 2023). In the Global North, particularly across North America, Europe, and Oceania, many universities initially took a cautious, fragmented approach to GAI adoption, centered around concerns for academic integrity, ethical use, and the development of advisory mechanisms (Moorhouse et al., 2023). Despite growing interest, these institutions often lack cohesive, curriculum-wide frameworks and struggle with comprehensive stakeholder engagement and equitable access (Mollick and Mollick, 2023). Furthermore, much of the existing literature on GAI in education has focused disproportionately on these Western contexts, leaving a gap in understanding how GAI is being integrated into other global regions (Jin et al., 2025).

This study argues that Asia provides a particularly compelling and underexplored region for testing and analyzing the integration of GAI in higher education. It is home to both highly Westernized institutions and traditionally influenced universities (Capano et al., 2025), making it a unique region for comparative analysis. This coexistence is reflected in the contrast between highly modernized and Westernized universities, such as those in Hong Kong, Singapore, and South Korea, and institutions that remain deeply influenced by traditional pedagogical norms and sociocultural values, as seen in parts of Japan, China, and Southeast Asia. Moreover, given their openness to technological innovation and proactive stance in educational reform (Jin et al., 2025), Asian universities are particularly well positioned to showcase the early and more structured forms of GAI adoption. If such transformations are to be observed at scale, they are likely to emerge first in this region.

This study embarks on an examination of this pressing issue, with a concentrated focus on the role and readiness of top Asian universities in the current rising tide of GAI. First, Asian universities would be more likely to become the pioneers in adopting GAI in their teaching and learning. Asia is often the forerunner in blending technology and higher education to promote its national competitiveness and global soft power (Nye, 2004; Wojciuk et al., 2015). With the legacy of the developmental state, heavy investment in higher education and human capital is one of the main aspects of advanced Asian countries and regions for sustaining their economic miracle and enhancing their competitiveness in the global marketplace (Cummings, 1996; Marginson, 2011; Woo, 2018). They will serve as the standard of global education under the norms and pressures of enhancement and progress in institutional development (DiMaggio and Powell, 1983; Karens et al., 2015; Fay and Zavattaro, 2016). At the same time, Asia is a region with good variations, such as cultural norms and pedagogical modes shaped by national and

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institutional contexts (Deem et al., 2008; Knight, 2008; Mok, 2015). Focusing on Asian universities provides a unique vantage point for the analysis to understand if there will be divergence in paths and paces in GAI adoption and application due to contextual and institutional differences.

In essence, this study aims to address the research questions of how GAI can transform university education and learning and to what extent universities are prepared to equip their graduates with the necessary knowledge, capacities, and skills for the GAI era from both theoretical and empirical perspectives. In the theoretical section, based on a critical review of the literature concerning AI and the future of work, this study will construct a theoretical framework that identifies essential capacities needed to prepare university students for the AI era. In the empirical analysis, by examining AI policy documents related to teaching and learning, as well as core curricula for all graduates, this study assesses how ready top Asian universities are to embrace GAI by implementing the proposed framework.

2. GAI and the future of work

AI has begun to redefine job roles and functions, automate repetitive tasks, and transform various industries (Taeihagh, 2021; Heaven, 2023; Noy and Zhang, 2023). One of the most prominent impacts of AI, and particularly GAI, on the future of work is automation (Frey and Osborne, 2017; Wong, 2020). The ability of AI systems to learn from data and make decisions can automate a wide range of tasks, from mundane, repetitive tasks to complex, cognitive tasks (Brynjolfsson et al., 2023). For GAI, it can generate human-like text, design websites, or even compose music, demonstrating its potential to disrupt fields of knowledge workers once thought to be the exclusive domain of human cognition (Choi et al., 2023).

AI automation does not necessarily mean a replacement of human jobs (Kane et al., 2022). Instead, it often results in job transformation. AI is likely to automate specific tasks within jobs rather than eliminate entire jobs. Therefore, workers may need to shift their focus to tasks that require human strengths, such as emotional intelligence, critical thinking, creativity, and complex problem solving—skills that AI currently cannot replicate (Wirtz and Müller, 2019).

AI is not only automating and transforming existing jobs but also creating new ones. As the AI industry grows, there is a rising demand for AI specialists, data scientists, and machine learning engineers (Muller, 2018). Besides, industries are recognizing the need for AI ethicists to navigate the ethical complexities of AI deployment (Heimans et al., 2023). In the educational sector, for instance, the introduction of AI tutors and AI-driven learning management systems has created roles for AI education specialists who can bridge the gap between AI technology and educational needs (Molesworth et al., 2009; Hashmi and Bal, 2024).

The rise of AI has implications for the skills that will be in demand in the future of work. While technical skills related to AI and data analysis are gaining importance, soft skills such as emotional intelligence, adaptability, and complex problem solving are becoming increasingly valuable. These "human skills" complement AI systems and enable workers to perform tasks where humans have the edge over machines (Acemoglu and Autor, 2011). As argued by Lee (2018) (see Figure 1), the degree of automation of a job is determined by the elements of creativity and social intelligence; both are the strengths of humans. Jobs involving routine tasks are more susceptible to automation, while those involving complex problem solving and human interaction are less likely to be automated. Out of the four quadrants, AI would only replace jobs in the danger zone, which emphasizes optimization in the absence of social skills.

The impact of AI, however, is not unidirectional, nor is it uniformly distributed across sectors and geographies (Kuh, 2019). GAI presents a complex array of opportunities and challenges as economies step into a future intimately intertwined with these digital technologies. Workers in routine jobs, often with lower wages, face a higher risk of job displacement due to automation. Similarly, regions with a high concentration of such jobs may face significant economic challenges (Johansen, 2019). The rise of AI is automating tasks, transforming jobs, creating new roles, shifting skill demands, and potentially exacerbating inequalities. Policymakers, educators, and industry leaders must work together to mitigate the challenges and harness the opportunities that AI brings to the future of work. For higher education, this necessitates a rethinking of curricula to ensure that students are equipped with the skills needed for the

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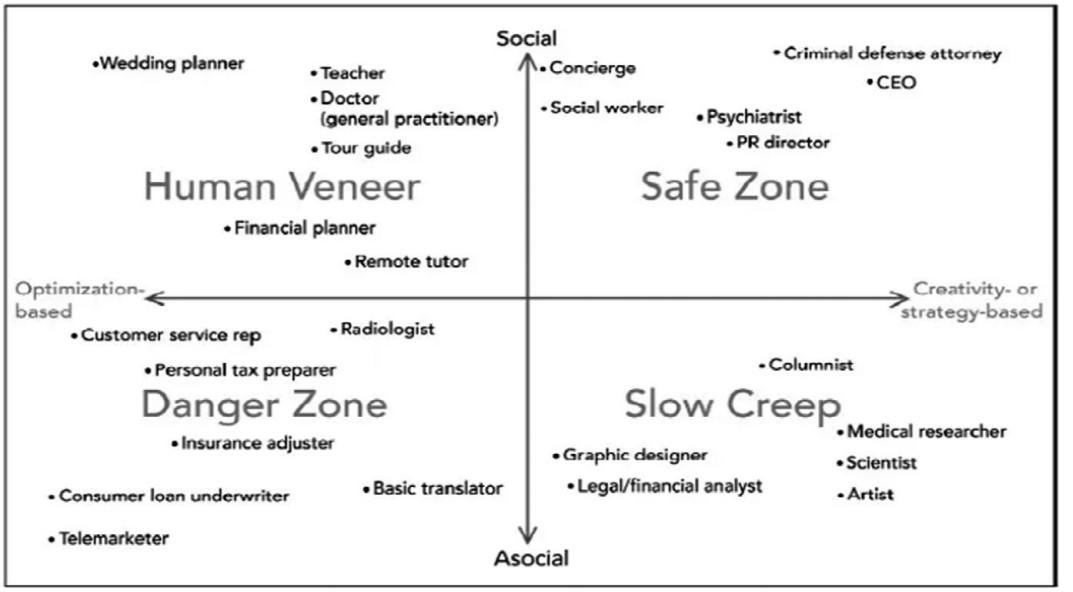

Figure 1. *AI and replacement of the human workforce.*
Source*: Lee (2018).*

AI-infused future of work. It also calls for a commitment to lifelong learning, acknowledging that education is a continuous process in the face of rapid technological change (Chan and Hu, 2023; Bowen and Watson, 2024).

Asian universities have the potential to lead the way in redefining and revolutionizing higher education for the future of work. By integrating GAI into their teaching and learning processes and reshaping their curricula, they can prepare their students for a future where AI is an integral part of work, fostering a workforce that can thrive in the age of GAI. From a broader perspective, this transformation also has implications for national competitiveness.

Countries that can successfully navigate the AI-driven shift in the future of work stand to gain in terms of economic growth and global influence (Johnson and Acemoglu, 2023).

3. Effects on higher education

GAI is a transformative force in higher education to reshape its contours (Yilmaz and Yilmaz, 2023). Its potential to radically enhance teaching, learning, and research is only just starting to be realized. Nevertheless, the integration of GAI in educational contexts also gives rise to concerns and challenges, including ethical considerations, infrastructure upgrades, and the necessity of identifying new capacities and transforming curricula to equip students for the future of work.

One of the most profound impacts of GAI on higher education lies in its capacity to transform pedagogical strategies (Dill and Soo, 2005). It can tailor study materials according to an individual student's learning needs, thereby optimizing learning outcomes. For example, GAI systems can create personalized quizzes or suggest additional reading materials based on a student's comprehension level. They can even generate illustrative examples to elucidate complex concepts, making learning more interactive and engaging (Downing et al., 2023). Moreover, GAI can foster a more dynamic learning environment. GAI-powered chatbots can provide instant responses to student queries, thereby freeing up instructor time for more complex discussions. These systems can also provide real-time feedback to students, enhancing their learning experience and boosting academic engagement.

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GAI is also a potent tool for academic research and training. In data-intensive disciplines like bioinformatics or climate science, GAI can generate hypotheses or identify patterns that would be nearly impossible for humans to discern alone. This capability can fast-track scientific discovery and enable researchers to tackle more complex and nuanced problems (Rudolph et al., 2023). For instance, Google's DeepMind used GAI to predict protein structures, a scientific problem that has eluded researchers for decades and could revolutionize drug discovery. In the humanities and social sciences, GAI can analyze large text corpora to unearth cultural trends, linguistic patterns, or social dynamics. This automation allows researchers to focus on interpretation and theory development. The Literary Lab at Stanford University, for example, uses GAI to analyze vast volumes of literature, revealing patterns and trends in literary history.

However, one significant concern is the ethical use of AI. Universities must ensure that GAI systems are used responsibly, respecting privacy and avoiding bias (Guenduez and Mettler, 2023; Moorhouse et al., 2023). In the process, university management needs to champion the ethical use of GAI and foster collaboration among faculty, IT staff, and administrators to ensure the successful integration of GAI into teaching, learning, and research (Harding, 2023). Furthermore, they need to advocate for equity in the adoption of GAI. They should ensure that all students, regardless of socioeconomic background, have access to GAI tools and receive the necessary training to use them effectively.

In resource and infrastructure management of universities, GAI offers significant benefits. It can predict student enrollment numbers, optimize course scheduling, manage library resources, and even monitor energy use on campus. These applications not only save resources but also enhance the overall student and staff experience within higher education institutions (Crompton and Burke, 2023; Labadze et al., 2023). Nevertheless, the successful implementation of GAI in higher education requires significant investment in infrastructure upgrades. This might entail scholarship programs for tech-based courses, free on-campus digital literacy workshops, or partnerships with tech companies to provide resources for students.

Importantly, higher education institutions have a responsibility to prepare students for a future where GAI is prevalent. This involves integrating GAI into the curriculum, not only within computer science and data science courses but also across all disciplines. Regardless of their major, students need a technological literacy of GAI, its applications, and its ethical implications. In addition, universities must foster the development of "human capacities and skills" that complement technical abilities. These skills, which GAI cannot replicate, will allow students to thrive in the future of work (Mindell and Reynolds, 2022). Higher education leaders play a crucial role in navigating this transformation. As universities launch this transformation, they have the opportunity not just to adapt to the GAI era but to shape it, influencing how GAI is used and understood in society at large (Lynch, 2006). Ultimately, the goal is to create a synergistic and collaborative relationship between humans and AI, where both can learn from and enhance each other, fostering an enriched educational environment that is truly responsive to the needs and potential of all students.

4. New capacities for the GAI era

GAI demands a new set of capacities that can broadly be categorized into technical capacities and human intelligence, such as soft skills and ethical understanding (Lewis, 2007). The in-between capacity of fostering human–AI collaboration under the concept of human-centered AI is also highly relevant (Bates et al., 2020). With a focus on AI-specific capabilities, technical skills form the cornerstone of new capacities but go beyond simply writing code to include a foundational understanding of how AI algorithms function and can be improved. As data are the fuel that drives AI systems, data analysis skills are also paramount (Laato et al., 2023). These include the ability to extract, clean, and transform data into actionable insights and visualize data to summarize and present evidence and stories in a way that is accessible and meaningful.

In this connection, computational thinking is one of the essential skills that involve various techniques, such as abstraction (remove details and extract relevant information), decomposition (break down data

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and problems into smaller parts), pattern recognition (observe patterns and trends in data), and algorithmic thinking (determine what steps are needed to solve a problem) (Welsh, 2023). It encapsulates a mindset that enables people to use logical and analytical thinking to break down complex problems, examine them systematically, and come up with effective solutions with the support of computers. As AI technologies become more integrated into our daily lives and the workplace, computational thinking skills can enable individuals to better comprehend and utilize AI technologies, making them more effective in their interactions with these tools.

While computer and technology literacy is a crucial skill, it is insufficient for the job skills and capacities needed in the AI era (Acar, 2023). The ability to collaborate with AI and human intelligence is also critical (Lee, 2018). These capabilities are about creating a balance between utilizing technology and enhancing human capabilities that set us apart from machines (Shneiderman, 2022). There is an increasing demand for skills that AI systems cannot easily replicate—capacities and skills that are distinctively human. These include creative thinking, critical thinking, emotional intelligence, and complex problem solving. For instance, while AI can analyze data patterns, it may lack the creative thinking required to develop innovative solutions or the emotional intelligence needed to understand human needs and responses (Tlili et al., 2023). Furthermore, ethical considerations around AI use are becoming increasingly important, from issues of data privacy to algorithmic bias. Understanding these issues requires not just computational thinking but also ethical and critical reasoning under social and cultural contexts.

Despite the technical nature of AI, human strengths and intelligence remain an indispensable aspect of new capacities in the AI era. As shown in Figure 2, technical skills are not ranked at the top by the World Economic Forum as the most critical skills at present and in the future (World Economic Forum, 2023). Critical thinking skills, such as creative thinking and capacities unique to humans, including resilience, motivation, self-awareness, empathy, and leadership, are integral in the AI era. The ability to not only consume information but also to analyze, evaluate, and synthesize it is key (Jandrić, 2023). These skills enable mankind to make informed decisions, solve complex problems, and generate innovative ideas. They also provide a framework for understanding and questioning the assumptions and biases that underpin AI systems.

While AI can outperform humans in many tasks, it does not possess the capacity for genuine creativity. The ability to generate new ideas, think outside the box, and approach problems from novel angles is uniquely human (Madan and Ashok, 2023). Creativity is not limited to artistic endeavors; it is equally vital in scientific and technical fields, where it drives innovation and progress (Spector and Ma, 2019). Emotional intelligence—the ability to perceive, understand, manage, and use emotions—is another unique human trait (Mollick and Mollick, 2023). As AI systems take over more routine tasks, emotional intelligence becomes even more important. It enables effective collaboration, leadership, and customer service, and it underpins the empathy and ethical understanding that are critical in the AI era.

Given the rapid pace of GAI development, the ability and willingness to continually learn and adapt are crucial. Lifelong learning involves not only keeping up-to-date with the latest AI developments but also seeking out new skills and knowledge areas and being open to new ideas and perspectives. The rise of GAI

Top Skills of 2023	Top Skills on the Rise
1. Analytical thinking	1. Creative thinking
2. Creative thinking	2. Analytical thinking
3. Resilience, flexibility and agility	3. Technological literacy
4. Motivation and self-awareness	4. Curiosity and lifelong learning
5. Curiosity and lifelong learning	5. Resilience, flexibility and agility
6. Technological literacy	6. System thinking
7. Dependability and attention to detail	7. AI and big data
8. Empathy and active learning	8. Motivation and self-awareness
9. Leadership and social influence	9. Talent management
10. Quality control	10. Service orientation and customer service

Figure 2. *Top skills in work jobs.*
Source*: World Economic Forum (2023).*

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brings with it a host of ethical considerations. This includes understanding the implications of AI for privacy, bias, accountability, and the broader societal and economic impacts.

To equip students with these capacities, universities need to adapt and transform their teaching methods and curricula. AI should be integrated into the curriculum across a range of disciplines. This could involve offering new courses on GAI, data science, and machine learning, as well as incorporating AI-related content into existing courses. Universities should also place greater emphasis on developing soft and human skills. This could be achieved through pedagogical strategies, such as group projects, case studies, and debates, which foster teamwork, communication, creativity, and critical thinking. Universities could provide resources and support for emotional intelligence development, such as workshops, counseling services, and self-assessment tools. They need to ensure that students understand the ethical implications of AI by encouraging students to contemplate and debate ethical dilemmas related to AI, such as privacy concerns, algorithmic bias, and the impact of AI on jobs and inequality.

5. Research design, methods, and data

This study conducts a content analysis to evaluate GAI policy documents and the core curricula required for all graduates from top Asian universities, using data collected between September and November 2024. Core curriculum is defined as the set of courses or academic requirements mandated for all students regardless of major. It focuses specifically on undergraduate curricula rather than graduate programs because most universities have a more uniform and standardized curriculum structure at the undergraduate level, particularly in core or general education requirements that all students must complete regardless of major. In contrast, graduate programs tend to be more specialized, diverse, and decentralized, often varying significantly across departments, faculties, and research tracks, which make cross-institutional comparisons more complex. Moreover, this focus aligns with one of the main objectives of this study to examine how foundational skills and capacities related to GAI are being integrated into the foundation and core mission of higher education, preparing the younger generation for the AI-driven future.

"Top Asian universities" in this study refer to universities located in Asia that are ranked among the top in either the Quacquarelli Symonds (QS) or Times Higher Education (THE) rankings. They include all Asian universities that are ranked in the Top 100 in either of the two rankings in 2024. The decision to focus on these top-ranking universities is guided by the assumption that these institutions are more likely to have the resources and capacity to implement GAI strategies and reforms. Asia is a major hub of technological development and innovation, and policies from top Asian universities can provide valuable insights into the region's approach to GAI in higher education. These top universities often set the benchmark for educational standards and are frequently the early adopters of new educational trends and technology. Their policies can thus offer a glimpse into the future directions of higher education reform in response to GAI.

Content analysis is a major research method for interpreting and understanding the context of textual data (Radu, 2021). It involves systematically coding and identifying themes or patterns within the data through a systematic classification process. Specifically, qualitative content analysis is applied to GAI policy documents and the core curricula required for all graduates, regardless of their majors, as issued by the selected universities and made available in English on their publicly accessible websites. Similar to the research on national AI strategies (Ulnicane et al., 2021; Papyshev and Yarime, 2023), these documents will be collected and then coded based on the theoretical framework developed in previous sections, particularly the dimensions of GAI integration and the four core capacities needed for the AI era: AI ethics, AI literacy, human–AI collaboration, and human-distinctive capacities.

For the GAI policy documents, this coding process will categorize their content into major themes related to GAI and education, such as curriculum reforms, access rights, decision-making, defined areas of use, academic honesty, and institutional strategies. By coding and analyzing these documents, the research aims to identify the extent to which the GAI strategies and core curricula of these universities align with the recommended reforms and new capacities under GAI. Through the analysis, the research will shed light on the current state of adaptation and transformation with GAI in higher education and the

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potential gaps that may exist. Initially, coders identified relevant keywords and phrases related to the major themes of the study, such as "curriculum reforms," "access rights," "academic honesty," "curriculum redesign," "prompt engineering," "ethical use," "AI literacy," "AI ethics," "human–AI collaboration," and "GAI tools." These keywords were guided by the framework's categories and the core capacities needed for the AI era.

After identifying keywords and phrases, each document was read in full by all coders to ensure contextual understanding beyond surface-level mentions. The coding was conducted manually by a team of three coders. The coding process followed an iterative and collaborative approach to ensure intersubjective reliability. Coding disagreements were discussed collectively until a consensus was reached, thereby enhancing the interobjectivity and consistency of the analysis. This collaborative process ensured that the coding was both conceptually grounded and responsive to the nuances of institutional language and framing.

6. Analysis and findings

The analysis of AI policy documents from the Top 25 Asian universities revealed several key findings. As shown in Table 1, out of the 25 top-ranking Asian universities, only 11 had policies explicitly related to GAI. It can be seen in Table 2 that, notably, none of the Chinese universities within the sample had a policy on GAI. This disparity underscores the varying degrees of GAI adoption across different countries and areas in Asia and suggests that the integration of GAI into higher education is not yet widespread, even among top universities.

The analysis identified several issues addressed in the GAI policies of the universities under study. These policies typically encompassed a wide range of areas, each with its unique implications:

6.1. Access rights

Policies often detail who has the right to access and use GAI technologies. For instance, some universities allowed only faculty members and certain students enrolled in specific programs to access GAI resources, thus ensuring that these powerful tools are used responsibly.

6.2. Academic honesty

Policies highlighted the importance of maintaining academic integrity when using GAI. This included guidelines on plagiarism and the misuse of AI-generated content, emphasizing that students should use GAI as a tool for learning and not as a means to bypass academic work.

6.3. Prompt engineering

Policies emphasized the need for timely implementation and integration of GAI in curricula. This might include directives for faculty to adopt GAI tools in their teaching practices or initiatives to introduce GAI-related courses.

6.4. Awareness of its importance

Policies underscored the significance of GAI in the future of education and the workforce. They stressed the need for awareness campaigns or educational programs to inform students and staff about the transformative potential of GAI.

6.5. Balancing the risks and benefits of GAI

Policies acknowledged the potential risks and benefits associated with GAI. These might include discussions on how GAI can enhance learning but also the potential for misuse or overreliance on technology.

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Table 1. *Top Asian universities and generative AI policies: the full list*

Universities	Country/region	QS ranking	THE ranking	Generative AI policies
National University of Singapore	Singapore	8	19	Yes
Peking University	China	17	14	No
Tsinghua University	China	25	12	No
Nanyang Technological University	Singapore	26	32	No
The University of Hong Kong	Hong Kong SAR	26	35	Yes
The University of Tokyo	Japan	28	29	Yes
Seoul National University	South Korea	41	62	No
Zhejiang University	China	44	55	No
Kyoto University	Japan	46	55	No
The Chinese University of Hong Kong	Hong Kong SAR	47	53	Yes
Fudan University	China	50	44	No
Shanghai Jiao Tong University	China	51	43	No
KAIST—Korea Advanced Institute of Science & Technology	South Korea	56	83	No
The Hong Kong University of Science and Technology	Hong Kong SAR	60	64	Yes
The Hong Kong Polytechnic University	Hong Kong SAR	65	87	Yes
Universiti Malaya	Malaysia	65	N/A	Yes
National Taiwan University	Taiwan	69	N/A	Yes
City University of Hong Kong	Hong Kong SAR	70	82	Yes
Yonsei University	South Korea	76	76	No
Korea University	South Korea	79	N/A	Yes
Osaka University	Japan	80	N/A	Yes
Tokyo Institute of Technology	Japan	91	N/A	Yes
Pohang University of Science and Technology	South Korea	100	N/A	No
University of Science and Technology of China	China	N/A	57	No
Nanjing University	China	N/A	73	No
Total: 25				Yes: 12 (48%); No: 13 (52%)

6.6. Future of work

Policies reflected on how GAI could influence the future job landscape. This might involve outlining the types of jobs that could be affected by AI and the skills that students would need to acquire to stay competitive.

6.7. Availability and manual of practices

Policies provided guidelines on how to use GAI and where to access it. This could involve creating user manuals or online resources to help students and faculty navigate GAI tools.

6.8. Ethics and student accountability

Policies stressed the ethical aspects of using GAI and students' responsibility. This could include sections on data privacy, informed consent, and the ethical use of AI technologies.

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Table 2. *Generative AI policies and Asian top universities by country*

Country	Number of top universities	Number (%) with GAI policies	Number (%) without GAI policies
China	7	0 (0%)	7 (100%)
Hong Kong SAR	5	5 (100%)	0 (0%)
South Korea	5	1 (20%)	4 (80%)
Japan	4	3 (75%)	1 (25%)
Singapore	2	1 (50%)	1 (50%)
Malaysia	1	1 (100%)	0 (0%)
Taiwan	1	1 (100%)	0 (0%)

6.9. Value and potential in teaching and learning

Policies recognized the potential of GAI to enhance teaching and learning. They might highlight examples of how GAI can be used to personalize learning or assist in complex research tasks.

6.10. Defined areas of use

Policies specify the areas of teaching, learning, and research in which GAI should be employed.

6.11. Importance of traditional learning and human interaction

While acknowledging the benefits of GAI, policies also emphasized that technology should not replace traditional learning methods and normal human interactions. They might stress the continued importance of classroom discussions, one-on-one tutoring, and other traditional forms of pedagogy.

6.12. Target users

Policies identified both students and teachers as the primary users of GAI. They might outline specific ways in which these different groups can benefit from GAI, such as students using GAI for learning and teachers using it to enhance their teaching strategies.

6.13. Decision-making

Policies clarified who is responsible for determining when and how GAI should be used. This could range from individual teachers making decisions for their classes to university-wide committees setting guidelines.

6.14. Contextual and situational approach

Policies advocated for the adoption of a contextual and situational approach in the use of GAI. This suggests that the use of GAI should be adapted based on the specific learning context and situation, rather than applying a one-size-fits-all approach.

Despite the wide range of issues addressed in the GAI policies, few universities mentioned full-scale curriculum reforms, a key area identified in the literature review as necessary for preparing students for the AI era. This observation is further confirmed by the second stage of analysis, in which we examined the core curriculum required for all graduates in some of the top Asian universities. Table 3 shows the Top 10 Asian universities based on their average ranking in THE and QS that have their core curriculum available in English online. Among them, only one university has courses in all categories (computer and digital literacy, AI, human intelligence and capacities such as creativity and innovation, and human–AI collaboration) to equip their graduates well for the future of work under GAI. Although many universities

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Table 3. Core curricula required for all graduates in top Asian universities in the GAI era

Universities	Computer and digital literacy	AI	Human intelligence and capacities	**Human–AI collaboration**
1. National University of Singapore	Yes	No	No	No
2. University of Tokyo	No	No	No	No
3. Nanyang Technological University	Yes	No	No	No
4. University of Hong Kong	No	No	No	No
5. The Chinese University of Hong Kong	Yes	No	No	No
6. Kyoto University	Yes	No	No	No
7. Seoul National University	Yes	No	No	No
8. Hong Kong University of Science and Technology	No	No	No	No
9. KAIST—Korea Advanced Institute of Science & Technology	No	No	No	No
10. Hong Kong Polytechnic University	Yes	Yes	Yes	Yes
Total	6	1	1	1

examined do offer those courses, they are elective courses, meaning that students can graduate from those universities without completing them.

These findings indicate a notable discrepancy between the theoretical recommendations and actual practices in these top Asian universities. The lack of mention of comprehensive curriculum reforms in the GAI policies suggests a need for greater alignment between university policies and the evolving demands of the AI era. These findings highlight the current state of GAI integration in top Asian universities and reveal a critical gap in addressing the need for full-scale curriculum reforms.

7. Discussion: selective adoption, equity, and divergence

With a focus on Asia, this study initiated an exploration into how top universities are preparing for the GAI era and the implications of these policies and measures on higher education. We aim to understand the GAI policies within higher education institutions, the areas they cover, and how they align with the evolving needs of the AI era, particularly in relation to comprehensive curriculum reforms.

GAI is adopted selectively rather than universally by universities. Our findings indicated that only 11 out of the top 25 Asian universities had explicit policies on GAI, with none from Chinese universities. These policies encompassed a broad range of areas, from access rights and academic honesty to the roles of students and teachers in GAI usage. However, a significant gap was identified in the absence of full-scale curriculum reforms in the GAI policies, which are affirmed by the examination of the core curricula of some of the top Asian universities. These findings carry significant implications for equity and quality of higher education at both the student and institutional levels. They underscore the urgent need for universities to develop comprehensive GAI policies that cover all relevant areas and align with the demands of new capacities of the AI era. These policies should be rooted in a clear understanding of the potential benefits and risks of GAI, guiding students and faculty toward ethical and effective use of this technology. The results point toward a need for education policies that foster the integration of GAI into the curriculum and promote the development of crucial skills for the AI era, such as creative thinking, social intelligence, and ethical reasoning.

In addition, the variations observed in GAI policies and reforms across the seven countries/regions in the study reflect broader national characteristics, including differing education policies, technological

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priorities, and levels of digital infrastructure. For instance, universities in Hong Kong tend to show more explicit integration of GAI into their education, matching its agendas for digital innovation and AI ambition. In contrast, institutions in South Korea and China demonstrate strong research orientation but more limited curricular reform at the undergraduate level, possibly due to centralized curriculum standards or slower institutional adaptation. These cross-country differences underscore how national education strategies and governance models shape the pace and form of GAI adoption in higher education.

From an equity perspective, these variations carry particularly significant implications. The divergence in GAI policies among top Asian universities suggests varying levels of readiness for this new era. This divergence could lead to disparities at the individual, university, and country levels, as different entities adopt GAI at various rates and in multiple ways. For instance, as education and training on AI and new capacities remain optional in many prestigious institutions, the impact of AI on personal performance and achievement depends on individual discretion and choice.

Looking ahead, the impact of GAI on higher education is expected to grow. As GAI technologies become more advanced and accessible, they have the potential to significantly transform teaching and learning practices, enabling more personalized and efficient education. However, they may also exacerbate existing inequalities if access to and use of these technologies are unevenly distributed (Luo, 2024). Therefore, universities need to carefully navigate these challenges, balancing the pursuit of innovation with the commitment to equity and inclusivity.

Based on the current state of GAI integration in top Asian universities, there is a need for more comprehensive and aligned GAI policies. They should emphasize the importance of a nuanced understanding of GAI's implications and a balanced approach to harnessing its benefits while mitigating its risks. As we venture deeper into the AI era, such an approach will be crucial to shaping a future of higher education that is innovative, equitable, and beneficial for all—a future that will, in turn, play a pivotal role in national development and competitiveness.

To a considerable extent, the ability of GAI to generate "social good for all" depends on how effectively it is integrated into higher education. If GAI is used to enhance personalized learning, facilitate research, and equip students with vital AI skills, it could significantly boost national competitiveness by creating an AI-savvy workforce and fostering AI-driven innovation (Miller, 2023). However, if GAI is not well integrated or if its potential risks and challenges are not adequately addressed, it could exacerbate educational inequalities and lead to a workforce that is ill prepared for the AI era.

8. Policy recommendations and future research agenda

Policymakers and educators need to carefully consider how to best integrate GAI into higher education. This includes developing comprehensive GAI policies, investing in faculty training, and ensuring equitable access to AI resources (Bradford, 2023). By doing so, they can ensure that higher education serves as a powerful driver of both personal development and national competitiveness for ensuring that students and educators rise with AI.

Furthermore, to support a more cohesive and equitable adoption of GAI in higher education, the following specific policy recommendations are proposed. First, universities should develop comprehensive institutional frameworks that guide the integration of GAI across teaching, learning, and research. These frameworks must address ethical concerns, pedagogical opportunities, and infrastructure needs, ensuring that GAI is deployed responsibly and effectively. Regular reviews and updates of these frameworks are essential to keep pace with the rapid evolution of AI technologies.

Second, there is a pressing need for core curriculum reforms that embed GAI-related competencies across all disciplines. These reforms should include AI literacy, ethical reasoning, human–AI collaboration, and the cultivation of human-distinctive capacities, such as creativity, empathy, and critical thinking. Making these components mandatory for all students, and not just for those in Science, Technology, Engineering, and Mathematics (STEM) fields, will ensure that graduates across the board are equipped for the AI-driven future of work.

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Third, policymakers and university leaders must ensure equitable access to GAI tools, platforms, and training. This includes investing in infrastructure, offering inclusive digital literacy programs, and providing targeted support for students from disadvantaged or underrepresented backgrounds. Without such measures, the benefits of GAI could inadvertently deepen existing educational and social inequalities.

Fourth, faculty development should be a central focus of GAI policy. Institutions should implement continuous professional development programs that enable educators to effectively incorporate GAI into their pedagogy and research. Moreover, fostering interdisciplinary collaborations can help universities explore the full potential of GAI across diverse academic domains.

Last, but not least, regional cooperation is imperative. Establishing cross-country networks or consortia among universities across countries and regions can facilitate the sharing of best practices, policy innovations, and research related to GAI in higher education. Such collaborative platforms could play a pivotal role in reducing disparities in GAI readiness and promoting a more unified, strategic response to the opportunities and challenges posed by this transformative technology.

Due to the scope and methodological limitations of this study, institutional heterogeneity could not be explored in depth. It is important to recognize that universities differ significantly in terms of national contexts, enrollment sizes, faculty composition, undergraduate-to-graduate student ratios, disciplinary emphases (including the prominence of engineering and AI-related programs), and available resources or budgets. Moreover, distinguishing between public and private universities could shed light on how differing levels of government oversight, funding structures, and policy mandates shape the pathways through which GAI is adopted and implemented. These variations may influence the adoption and implementation of GAI policies and curricula in ways not fully captured in this analysis. Future research should adopt a more granular, comparative case study approach to investigate how different institutional attributes mediate the integration of GAI in higher education.

Future studies could further refine the analysis by employing advanced qualitative content analysis techniques, such as grouping institutional policies into higher-order thematic categories. This would allow for a more systematic comparison across universities and help reveal broader patterns in how GAI is being conceptualized and operationalized in higher education. Universities from other regions and graduate-level curricula could also be included in future studies. In particular, incorporating leading non-Asian institutions, such as those in the United States, one of the global AI powers where much of the development and early adoption of GAI technologies has taken place, would provide valuable international benchmarks and highlight global contrasts in policy, pedagogy, and institutional strategy.

9. Conclusion

This article aims to explore whether GAI will lead to a more inclusive educational future or deepen existing divides. In the exploration of the impact of GAI on higher education, this paper reveals a critical juncture for the future of learning in universities. The essential knowledge and skills framework established, which encompasses AI ethics, AI literacy, human–AI collaboration, and human-distinctive capacities, identifies the crucial areas where curricula must evolve to prepare graduates effectively for the future of work in the AI era. Despite the transformative potential of GAI, without strategic intervention and comprehensive policy adaptations, there is a real risk that GAI could also become a divisive force, exacerbating disparities across educational institutions and among individual learners. Our research underscores a significant variance in GAI readiness and implementation. This variance, influenced by distinct national and institutional contexts, risks widening the educational gap rather than closing it.

Our findings indicate that the adoption of GAI in higher education is not yet comprehensive or universal. The disparities in GAI policy adoption and curriculum integration could lead to divergent futures, where some institutions advance rapidly while others lag behind. This potential divergence brings into sharp relief the dual possibilities posed by GAI: it can either foster unprecedented educational advancements or contribute to increasing educational inequity. Universities, policymakers, and educational leaders must collaborate to implement robust GAI policies that are inclusive and comprehensive. These policies should not only address technological integration but also ensure equitable access to GAI

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resources, fostering an environment where all students can benefit from AI advancements. By achieving "AI for All," higher education can harness the benefits of GAI to enhance learning and innovation while safeguarding against deepening educational divides, thus steering the future towards greater equity and inclusion in the GAI era.

While this study focuses on the current state of GAI adoption in higher education, it is likely that adoption will continue to increase, driven by rapid technological advancement, growing student familiarity, and institutional pressure to remain competitive. However, this adoption will not be uniform. Institutional and contextual factors, such as technological capacity, national culture, organizational values, regulatory environments, and resource availability, will shape the pace and nature of integration. As a result, we are likely to see greater divergence rather than convergence across institutions and regions, further exacerbating existing inequalities in educational outcomes and institutional innovation.

Data availability statement. The data that support the findings of this study are openly available on the official websites of the universities included in the study.

Author contribution. All authors have contributed to the major tasks and stages of the research, including conceptualisation, methodology, data curation, formal analysis, project administration, and writing.

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References

Acar OA (2023) AI prompt engineering isn't the future. *Harvard Business Review*. Available at https://hbr.org/2023/06/ai-promptengineering-isnt-the-future

Acemoglu D and Autor DH (2011) Skills, tasks and technologies: implications for employment and earnings. In Ashenfelter O and Card DE (eds.), *Handbook of Labor Economics*, Vol. *4*. Amsterdam: Elsevier, pp. 1043–1171.

Bates T, **Cobo C**, **Mariño O and Wheeler S** (2020) Can artificial intelligence transform higher education? *International Journal of Educational Technology in Higher Education 17*, 1–12.

Bowen JA and Watson CE (2024) *Teaching with AI*. Baltimore: Johns Hopkins University Press.

Bradford A (2023) *The Global Battle to Regulate Technology*. New York: Oxford University Press.

Brynjolfsson E, **Li D and Raymond LR** (2023) Generative AI at work (No. w31161). National Bureau of Economic Research.

Capano G, **He AJ and McMinn S** (2025) Riding the tide of generative artificial intelligence in higher education policy: an Asian perspective. *Journal of Asian Public Policy*, 1–15. Available at https://doi.org/10.1080/17516234.2025.2450571

Chan CKY and Hu W (2023) Students' voices on generative AI: perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education 20*(1), 43. https://doi.org/10.1186/s41239-023-00411-8.

Choi JH, **Hickman KE**, **Monahan A, and Schwarcz DB** (2023) ChatGPT goes to law school. *Minnesota Legal Studies Research Paper*, No. 23-03, Available at SSRN: https://ssrn.com/abstract=4335905 or https://doi.org/10.2139/ssrn.4335905.

Crompton H and Burke D (2023) Artificial intelligence in higher education: the state of the field. *International Journal of Educational Technology in Higher Education 20*(1), 22.

Cummings WK (1996) Asian values, education and development. *Compare 26*(3), 287303. https://doi.org/10.1080/0305792960260304.

Deem R, **Mok KH and Lucas L** (2008) Transforming higher education in whose image? Exploring the concept of the "world-class" university in Europe and Asia. *Higher Education Policy 21*, 83–97.

Dill DD and Soo M (2005) Academic quality, league tables, and public policy: a crossnational analysis of university ranking systems. *Higher Education 49*, 495–533.

DiMaggio PJ and Powell WW (1983) The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2),147–160.

Downing K, **Loock PJ and Gravett S** (2023) *The Impact of Higher Education Ranking Systems on Universities*. London: Routledge.

Fay DL and Zavattaro SM (2016) Branding and isomorphism: the case of higher education. *Public Administration Review 76*(5), 805–815.

Frey CB and Osborne MA (2017) The future of employment: how susceptible are jobs to computerisation? *Technological Forecasting and Social Change 114*, 254–280.

Galindo L, **Perset K and Sheeka F** (2021) An overview of national AI strategies and policies. OECD Going Digital Toolkit Notes, No. 14, OECD Publishing.

Guenduez AA and Mettler T (2023) Strategically constructed narratives on artificial intelligence: what stories are told in governmental artificial intelligence policies? *Government Information Quarterly 40*(1), 101719.

Hannan E and Liu S (2023) AI: new source of competitiveness in higher education. *Competitiveness Review 33*(2), 265–279.
Harding V (2023) *AI Needs You*. Princeton: Princeton University Press.
Hashmi N and Bal AS (2024) Generative AI in higher education and beyond. *Business Horizons.* https://doi.org/10.1016/j.bushor.2024.05.005.
Heaven WD (2023) The education of ChatGPT. *MIT Technology Review.*
Heimans S, **Biesta G**, **Takayama K and Kettle M** (2023) ChatGPT, subjectification, and the purposes and politics of teacher education and its scholarship. *Asia-Pacific Journal of Teacher Education 51*(2), 105–112.
Jandrić P (2023) On the hyping of scholarly research (with a shout-out to ChatGPT). *Postdigital Science and Education 6*(2), 383–390.
Jin Y, **Yan L**, **Echeverria V**, **Gašević D and Martinez-Maldonado R** (2025) Generative AI in higher education: a global perspective of institutional adoption policies and guidelines. *Computers and Education: Artificial Intelligence 8*, 100348.
Johansen M (2019) *Social Equity in the Asia-Pacific Region: Conceptualizations and Realities*. London: Palgrave Macmillan.
Johnson S and Acemoglu D (2023) *Power and Progress: Our Thousand-Year Struggle over Technology and Prosperity.* London: Hachette UK.
Jung J (2018) Higher education in Korea: Western influences, Asian values and indigenous processes. *Journal of Asian Public Policy 11*(1), 1–13.
Kane GC, **Phillips AN**, **Copulsky JR and Andrus GR** (2022) *The Technology Fallacy: How People Are the Real Key to Digital Transformation.* Cambridge: MIT Press.
Karens R, **Eshuis J and Klijn E-H** (2015) The impact of place branding: an experimental study on the effects of branding policy on citizen trust. *Public Administration Review 76*(3), 486–494.
Knight J (2008) The role of cross-border education in the debate on education as a public good and private commodity. *Journal of Asian Public Policy 1*(2), 174–187.
Kuh, G. D. (2019). Why skills training can't replace higher education. *Harvard Business Review*. Available at https://hbr.org/2019/10/why-skills-training-cant-replace-higher-education
Laato S, **Morschheuser B**, **Hamari J and Björne J** (2023) AI-assisted learning with ChatGPT and large language models: implications for higher education. In *2023 IEEE International Conference on Advanced Learning Technologies* (ICALT). IEEE, pp. 226–230.
Labadze L, **Grigolia M and Machaidze L** (2023) Role of AI chatbots in education: systematic literature review. *International Journal of Educational Technology in Higher Education 20*(1), 56.
Lee K-F (2018) *AI Superpowers: China, Silicon Valley, and the New World Order*. Boston: Houghton Mifflin Harcourt.
Lewis, H. (2007). *Excellence without a Soul: Does Liberal Education Have a Future?* New York: PublicAffairs.
Li F-F (2023) *The Worlds I See*. New York: Flatiron Books
Luo JJ (2024) A critical review of GenAI policies in higher education assessment: a call to reconsider the "originality" of students' work. *Assessment & Evaluation in Higher Education 49*(5), 651–664. https://doi.org/10.1080/02602938.2024.2309963.
Lynch K (2006) Neo-liberalism and marketization: the implications for higher education. *European Education Research Journal 5*(1), 1–17.
Madan R and Ashok M (2023) AI adoption and diffusion in public administration: a systematic literature review and future research agenda. *Government Information Quarterly 40*(1), 101774.
Marginson S (2011) Higher education in East Asia and Singapore: rise of the Confucian model. *Higher Education 61*, 587–611.
Miller M (2023) AI for Educators: Learning Strategies, Teacher Efficiencies, and a Vision for an Artificial Intelligence Future. Dave Burgess Consulting, Inc.
Mindell DA and Reynolds E (2022) *The Work of the Future: Building Better Jobs in an Age of Intelligent Machines*. Boston: MIT Press
Mok K (2015) Higher education transformations for global competitiveness: policy responses, social consequences and impact on the academic profession in Asia. *High Education Policy 28*, 1–15. https://doi.org/10.1057/hep.2014.27.
Molesworth M, **Nixon E and Scullion R** (2009) Having, being and higher education: the marketization of the university and the transformation of the student into consumer. *Teaching in Higher Education 14*(3), 277–287.
Mollick ER and Mollick L (2023) Using AI to implement effective teaching strategies in classrooms: five strategies, including prompts. The Wharton School Research Paper
Moorhouse BL, **Yeo MA and Wan Y** (2023) Generative AI tools and assessment: guidelines of the world's top-ranking universities. *Computers and Education Open 5*, 100151.
Muller JZ (2018) *The Tyranny of Metrics*. Princeton, NJ: Princeton University Press.
Novak JD and Gowin DB (1984) *Learning how to Learn*. New York: Cambridge University Press.
Noy S and Zhang W (2023) Experimental evidence on the productivity effects of generative artificial intelligence. *Science 381*(6654), 187–192.
Nye, J.S. (2004) *Soft Power*. New York: PublicAffairs.
OECD (2023) *OECD Digital Education Outlook 2023: towards an Effective Digital Education Ecosystem*. Paris. https://doi.org/10.1787/c74f03de-en.
Papyshev G and Yarime M (2023) The state's role in governing artificial intelligence: development, control, and promotion through national strategies. *Policy Design and Practice 6*(1), 79–102.

https://doi.org/10.1017/dap.2025.10011 Published online by Cambridge University Press

Radu R (2021) Steering the governance of artificial intelligence: national strategies in perspective. *Policy and Society 40*(2), 178–193.

Rudolph J, **Tan S and Tan S** (2023) ChatGPT: bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching 6*(1), 342–363.

Shneiderman B (2022) *Human-Centered AI*. New York: Oxford University Press.

Spector JM and Ma S (2019) Inquiry and critical thinking skills for the next generation: from artificial intelligence back to human intelligence. *Smart Learning Environments 6*(1), 1–11.

Taeihagh A (2021) Governance of artificial intelligence. *Policy and Society 40*(2), 137–157.

Tlili A, **Shehata B**, **Adarkwah MA**, **Bozkurt A**, **Hickey DT**, **Huang R and Agyemang B** (2023) What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments 10*(1), 1–24.

Ulnicane I, **Knight W**, **Leach T**, **Stahl BC and Wanjiku WG** (2021) Framing governance for a contested emerging technology: insights from AI policy. *Policy and Society 40*(2), 158–177.

Welsh M (2023) The end of programming. *Communications of the ACM 66*(1), 34–35.

Wirtz BW and Müller WM (2019) An integrated artificial intelligence framework for public management. *Public Management Review 21*(7), 1076–1100.

Wojciuk A, **Michałek M and Stormowska M** (2015) Education as a source and tool of soft power in international relations. *European Political Science 14*, 298–317.

Wong, W. (2020). AI and the future of work: a policy framework for transforming job disruption into social good for all. In Association for Pacific Rim Universities (APRU) (ed.), *Artificial Intelligence for Social Good*. pp. 244–275. Japan: APRU.

Wong W and Hinnant CC (2023) Competing perspectives on the big data revolution: a typology of applications in public policy. *Journal of Economic Policy Reform 26*(3), 268–282.

Woo JJ (2018) Educating the developmental state: policy integration and mechanism redesign in Singapore's SkillsFuture scheme. *Journal of Asian Public Policy 11*(3), 267–284. https://doi.org/10.1080/17516234.2017.1368616.

World Economic Forum (2023) *Future of Jobs Report 2023*. Geneva, Switzerland: World Economic Forum.

Yilmaz R and Yilmaz FGK (2023) The effect of generative artificial intelligence (AI)based tool use on students' computational thinking skills, programming self-efficacy and motivation. *Computers and Education: Artificial Intelligence 4*, 100147.

Zawacki-Richter O, **Marín VI**, **Bond M and Gouverneur F** (2019) Systematic review of research on artificial intelligence applications in higher education–where are the educators? *International Journal of Educational Technology in Higher Education 16*(1), 1–27.

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