International Journal of Education and Humanities
ISSN: 2770-6702 | Vol. 24, No. 1, 2026

Reflections on the Impacts of AI-Driven Mode on Global Educational Management and Transnational Education Policies

Yiyang Ran

School of Nottingham, Nottingham University, Nottingham, UK

Abstract: Artificial Intelligence is Changing the Mode of Education Governance. Based on policy text analysis and cross-border comparison of the five dimensions, this paper studies the impact of AI-driven models on global education management and cross-border education policies. Based on the overseas case studies, artificial intelligence can enhance the precision of decision-making and optimisation of resource use by changing assessment modes. UNESCO has selected artificial intelligence as the theme for International Education Day in 2025 and will add it to the main tasks of world education. According to the OECD's 2024 survey, about 40% of teachers are now using artificial intelligence in their classes; however, a small number have been formally trained, such as only 9% in France. Governance problems have also arisen, such as algorithmic bias and data privacy issues, and at the same time, different technical standards and governance concepts are difficult to align across borders. In other words, the construction of a governance system for technology, ethics and policy provides support for the modernisation of education administration.

Keywords: Artificial Intelligence, Educational Management, Education Policy, Transnational Governance, Education Digitalization.

1. Introduction

AI is spreading through education at a faster rate than many institutions anticipated. Intelligent teaching assistants, decision support, personalised recommendations, quality monitoring and other applications are changing the operation of education management and are also affecting the thinking of policy formulation. In January 2025, UNESCO Director-General Audrey Azoulay announced that the theme of International Education Day for that year would be artificial intelligence and urged member countries to increase investment in AI training for teachers and students, thus bringing AI education governance under the purview of global education policies.

The Foundation of the entire education system is education management, and its intelligent transformation directly impacts the process of modernising governance [1]. In 2026, the Ministry of Education and the five other departments issued the "Artificial Intelligence + Education" Action Plan to build a smart education brain and establish a national education big data centre. In August 2024, the EU's AI Act took effect and listed artificial intelligence systems in education as high-risk. The White House AI Education Task Force was established in the United States in April 2025.

Although many countries have introduced a variety of policies, the corresponding progress in technology has not kept pace with these policies. According to the OECD's Digital Education Outlook in early 2024, none of the 18 countries and regions it covers have issued specific regulations on generative AI in education. According to the 2025 UNESCO survey, only 40 per cent of primary schools, 50 per cent of lower secondary schools and 65 per cent of upper secondary schools around the world have Internet access, and the digital divide may take on a new form in the age of AI. Different countries have different ideas of good governance, institutions and technical standards, and thus cooperation among them is more difficult.

How AI-powered models are changing global education administration and cross-border policy coordination. Trace the development of global AI education policies, compare governance paths in major economies, evaluate the effectiveness of AI-enabled governance, analyze cross-border coordination issues, and propose an ethical governance framework at the end.

2. The Global Policy Landscape and Evolutionary Logic of AI-Driven Education Management

The development path of the world's AI education policies is quite clear; they have been evolving in response to the progress of technology, moving from the initial exploration of technology applications, to the construction of capacity-building systems, and now to the establishment of all-encompassing governance frameworks. UNESCO has been doing so. In 2019, the Beijing Consensus on Artificial Intelligence and Education laid the foundation for the development of AI education around the world for the first time.

The Formation of ethical norms also progresses at a similar speed. The AI Ethics Recommendations of 2021 are the first normative documents for AI ethics in the world and have been unanimously approved by all 193 member states. It provides a value system for the design of policies at all levels in the country, covering aspects such as people-oriented development, sustainability, openness and transparency, and is much more far-reaching in practice than in theory.

In September 2023, UNESCO released the "Guidelines for the Application of Generative AI in Education and Research", which is the first official guide in the world on the application of generative AI in education, and clarified that children under the age of 13 should not use AI tools in the classroom. In 2024,

UNESCO released the two AI competency frameworks for teachers and students during the Digital Learning Week to help countries develop corresponding policies [2].

Generative AI is gaining popularity, and the corresponding policies have been lagging. In September 2025, the special report "AI and the Future of Education" was released, which systematically introduced the disruptive effects of artificial intelligence on education. Based on the survey in conjunction with the report, nearly two-thirds of the universities that have established UNESCO chairs or joined university cooperation networks have developed or are in the process of developing guidance frameworks for the use of AI, and the speed of institutional response has exceeded expectations [3].

The governance of AI education around the world is also transitioning from "soft law" to "hard law" in terms of policy tools. In the beginning, the main type of non-binding document was an initiative or guideline; now, in recent years, some mandatory tools, such as regulations and standards, have gradually been introduced. The European Union's AI Act classifies AI used in education as high-risk, and therefore, governance of AI education has entered the rule-of-law regime.

Developed countries in Europe and America are the usual cases, and more and more countries in the Global South have also begun to join this trend. According to the 2024 OECD survey, 56 per cent of Brazilian teachers have begun using artificial intelligence and are performing above the national average. A World Bank study shows that AI tutoring tools can reduce the learning gap to some extent, and some projects have increased grades by as much as 0.3 standard deviations in six weeks; students with weaker foundations have benefited more from this. It is not a simple North-South division in the picture.

3. Comparative Analysis of AI Education Management Policies in Major Economies

The world has drawn a general policy map, and each country has taken a different administrative route. The three large economies of China, the United States and the European Union have responded to the same wave of technological change and have also established very different governance systems due to their different institutional backgrounds [4].

China is following the way that country set. In 2017, the "New Generation Artificial Intelligence Development Plan" elevated AI education to the level of national strategy, and since then, policy efforts have been intensifying. In 2025, nine departments issued the "Opinions on Accelerating the Digitalisation of Education" to clarify the direction of development for large AI models in education; in 2026, five departments released the "Artificial Intelligence+Education" Action Plan, which outlines systematic deployment at the infrastructure, resource, application and governance levels. The first type of distribution in China is top-down and systematic. As one of the first pilot cities, the proportion of school AI applications in Beijing has reached 87.7% and is leading the world.

The Governance of AI Education in the United States is a different ecology. In April 2025, the President signed an executive order to make AI literacy a national goal for K-12 and lifelong education. A special task force for AI education has been established in the White House to coordinate the policy work of all departments. Decentralisation of educational management power means that the central government issues broad policies, and the various states implement them differently [5]. Google and other technology companies have used their technology and funds to support the digitalisation of education to some extent.

The EU will choose a form of government based on the rule of law. The first all-encompassing regulation for artificial intelligence in the world, the AI Act classifies educational AI systems as high-risk and demands conformity assessment, risk management and transparency disclosure. Article 4 of the Act also stipulates mandatory requirements for AI literacy, and organisations employing AI systems are required to have staff with these abilities. Uniform Rules help to give people a sense of security in the market, but at the same time, they can inhibit innovation; this contradiction has long been one of the most challenging problems for the EU.

Singapore and South Korea in Asia have also done well. Singapore's teachers use AI more than 75% of the time and have been trained in AI by 76 per cent. South Korea has established the "Artificial Intelligence Development and Trust Foundation Creation Act" to provide institutional support for AI education.

These different paths reflect various institutional logics, but they all point to the same goal: AI literacy is considered a basic ability for citizens in the digital era, teacher capacity building is essential for the implementation of AI education, and the line of ethics and safety is off-limits.

4. The Practice Path and Governance Efficiency of AI-Driven Education Management

Only when they work in practice do the policies matter. AI technology in education management has moved from the conceptual stage to an all-encompassing implementation, and the effectiveness of governance has gradually shown some results. AI is changing how education management is conducted in terms of decision-making, resource allocation, quality monitoring, risk prevention and control, etc., and governance is no longer based solely on experience; more and more data are used to conduct governance, and responses are now proactive rather than reactive; management is naturally much more detailed.

First, all the data from across the country will be processed by AI and analytical models to offer strong support for the construction of educational policy [6]. Tongji University has built an indicator system for almost 600 monitoring points in the decision-making cockpit under three dimensions: digital campus, physical campus, and integrated campus. The "Shuzhi Hongjiao" platform in Hongkou District, Shanghai has launched 177 teaching intelligent agents to promote generative AI-enabled teaching across the whole area.

AI will optimise the use of resources to meet different demands for supply at the same time. The intelligent scheduling system will consider all the necessary conditions and determine a good plan by itself, thus reducing the work of academic affairs. As shown by a study from the World Bank, AI tutoring tools have been successful in reducing the learning gap. A pilot project in Nigeria raised students' English grades by 0.3 standard deviations in six weeks, which is about the same as a year and a half of study. It has a relatively low cost compared with the old way.

AI is now being used to improve educational assessment, and instead of focusing only on test scores, it is expanding to

cover all kinds of evaluations that consider the learning process, values, and overall development. Minhang District in Shanghai is constructing an AI-driven "Five Education" integrated education system, creating scenarios such as smart playgrounds, digitising and visualising students' exercise processes, and providing traceable empirical evidence for all-around quality assessment.

The Scope of AI application in daily campus management is continually expanding [7]. The "AI+Campus Meal Intelligent Management" platform in Liangjiang New Area, Chongqing, has five main businesses and 24 characteristic indicators for all-weather intelligent supervision of the entire chain. The Quanzhou Education Cloud Platform has added digitalisation to several key links, including enrollment, class scheduling, supervision and home-school collaboration, and is now a data-driven governance model.

The good effects of AI-assisted education management will not be realised automatically; they depend on factors such as data quality, algorithm design and scenario adaptation. Data barriers, inconsistent standards and a disconnection between technology and business are all relatively common problems. In short, the main problems in educational digitalisation at present are a lack of departmental cooperation, dispersed data resources and insufficient coordination between technology and management.

5. Mechanism Innovation and Practical Difficulties of Cross-Border Education Policy Coordination

The application of AI technology is not limited to a single country, and its cross-border dissemination characteristics are in line with the global mobility of education; thus, cross-border policy coordination has become both more necessary and more difficult to achieve. The old cooperative system is still in use, and policy coordination in the AI era has taken many forms but faces some practical problems.

The Bologna Process is now the primary vehicle for integrating higher education across Europe, and at the same time, it also provides a required reference system for cross-border policy coordination. Since 1999, it has added many new countries and built a single system for degrees, credits and quality assurance. AI technology will provide a new impetus, and the corresponding problems have been addressed through reform.

The Coordination Mechanism of the EU is relatively mature. The Artificial Intelligence Act has created a unified regulatory system, and most of the compliance requirements for AI education applications in the 27 member states are now the same. Erasmus+ will provide financial support and an exchange platform for digital education cooperation among the countries [8]. The European Commission is promoting cooperation among the digital entities of education in various countries and has introduced the following three forms of collaboration to address policy fragmentation.

UNESCO is a first-tier centre for policy coordination in the world. Many norms have been released by the world's leading institutions for AI education, including general directions and competency systems [9]. On International Education Day in 2025, UNESCO will choose "AI" as the theme and ask countries to increase investments in training. The OECD Organizes joint learning for its member countries on policy evaluation and data comparison. TALIS and other foreign studies have provided relevant data support for AI education applications in different countries.

Policy coordination for cross-border trade has achieved some results but still has many problems. There is no common technical standard, varying governance ideas, different levels of development and disjointed governance institutions; all of them have limited the progress of cross-border cooperation. A study by the World Bank shows that AI patents in Latin America account for only 0.21% of the world's total, and the technological capability gap will inevitably lead to a governance capability gap.

Innovating Cross-border Education Policy Coordination Mechanisms is the Trend. Strengthen UNESCO's leading and coordinating role to construct an all-encompassing system of global governance. At the same time, the multiple-party governance mode that considers the perspectives and strengths of the government, enterprise and academy is also worth studying further. In the end, more cooperation among countries and adjustments to policies will help AI serve the common cause of educational equity and high quality around the world.

6. Ethical Risks and Governance Framework of Education Management in the AI Era

Cross-border coordination problems and the ethics of AI education governance. The four main problems of data privacy, algorithmic bias, educational equity and dissolution of subjectivity have all affected the traditional system of education ethics and governance. Construction of an education ethics governance system that can cope with the era of artificial intelligence is now a problem in education governance around the world.

The top item is a problem with data privacy. Student data in educational institutions is highly confidential, and since AI systems are based on this data, there is a relatively high risk of over-collection and misuse, as well as data leakage [10]. Under the scope of special protection for personal data under the General Data Protection Regulation, EU students' data are also subject to strict control rights for data subjects. China's Personal Information Protection Law and Data Security Law have formed a general data governance system, but detailed rules for educational institutions have not been released.

Algorithmic Bias is also a problem. If the training data contains biases such as gender, race, region and class, the AI output will also be biased and thus exacerbate existing inequalities. UNESCO has added a stricter ethical requirement to the list of algorithm audits to prevent a new educational divide from arising due to these technologies. The Algorithms are also "black boxes" and thus difficult to regulate.

Educational equity has taken on new forms in the AI era. On the other hand, AI can help create an educational equality model, and high-quality resources are now more readily available for remote and disadvantaged areas via intelligent platforms. The World Bank's Africa pilot has shown that AI tutoring tools have reduced the gap substantially. However, at the same time, the new form of disparity may be a digital divide. According to UNESCO data, 80-90% of the schools in the Americas, Europe and the Commonwealth of Independent States have internet access; the proportion in other areas is relatively small.

Another is the loss of learning autonomy. If too many students rely on AI for their studies, they may lose the will to

learn independently; if teachers use AI too frequently in their daily work, they will feel a lack of professional autonomy [11]. UNESCO has repeatedly pointed out that AI cannot replace the teachers' professional judgment in evaluation, and thus the same defect exists in educational administration.

To address the above ethical risks, a three-in-one governance system of law, ethics and standards is proposed. In 2026, the World Digital Education Alliance released the "Artificial Intelligence Education Ethics: Reference Framework" which proposed four principles to provide a reference for the ethical governance of AI education. Development of technology must be accompanied by ethical constraints, or else AI will not serve the educational cause.

7. Conclusion

All of the above have changed how the world manages education through AI. It will promote the reform of governance in an all-weather way and cause new problems for cross-border policy coordination.

Many countries have begun applying artificial intelligence in the administration of education. China's smart education brain is teaching intelligent agents in Shanghai and other places, and the EU has introduced regulatory approaches based on the rule of law; all these cases show that technology can be applied in various ways. As shown by the World Bank's data, AI tools can help students learn to some extent and narrow the educational gap.

The government still has some serious problems. Different forms of ethical risks are manifesting in different ways in the specific case of educational administration, such as data privacy and algorithmic bias, the digital divide, and the loss of subjectivity. In addition, there are problems of uneven governance, various technical standards, and different levels of development in different countries that make cross-border policy coordination more difficult. How to balance innovation and risk, and how to achieve autonomy and coordination, are still unsolved problems.

Construction of a world-class education governance system for the AI era requires cooperation among all parties. At the same time, build the legal and ethical framework and set standards. At the grassroots level, schools need to promote the application of artificial intelligence steadily and enhance the digital literacy of both teachers and students. The company will focus on social responsibility and develop a safer and fairer educational product. Further cooperation among all parties to the international forum of UNESCO will also be strengthened. Technology itself does not have morals; whether it is applied to education will depend on the choices and wisdom of the people. At the same time, technology will be developed to serve people's all-round development and promote the goal of equitable education globally.

References

[1] Dai, R., Thomas, M. K. E., & Rawolle, S. (2025). The roles of AI and educational leaders in AI-assisted administrative decision-making: A proposed framework for symbiotic collaboration. *The Australian Educational Researcher*, 52(2), 1471–1487.

[2] Okada, A., Sherborne, T., Panselinas, G., & Kolionis, G. (2025). Fostering transversal skills through open schooling supported by the CARE-KNOW-DO pedagogical model and the UNESCO AI competencies framework. *International Journal of Artificial Intelligence in Education*, 1–46.

[3] Jin, Y., Yan, L., Echeverria, V., Gašević, D., & 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.

[4] Brattberg, E., Rugova, V., & Csernatoni, R. (2020). *Europe and AI: Leading, lagging behind, or carving its own way?* (Vol. 9). Washington, DC: Carnegie Endowment for International Peace.

[5] Williamson, B., Molnar, A., & Boninger, F. (2024). *Time for a pause: Without effective public oversight, AI in schools will do more harm than good*. Commercialism in Education Research Unit.

[6] Aldowah, H., Al-Samarraie, H., & Fauzy, W. M. (2019). Educational data mining and learning analytics for 21st century higher education: A review and synthesis. *Telematics and Informatics*, 37, 13–49.

[7] Zhang, Y., Yip, C., Lu, E., & Dong, Z. Y. (2022). A systematic review on technologies and applications in smart campus: A human-centered case study. *IEEE Access*, 10, 16134–16149.

[8] Aler Tubella, A., Mora-Cantallops, M., & Nieves, J. C. (2024). How to teach responsible AI in higher education: Challenges and opportunities. *Ethics & Information Technology*, 26(1), 1.

[9] Mouta, A., Pinto-Llorente, A. M., & Torrecilla-Sánchez, E. M. (2024). Uncovering blind spots in education ethics: Insights from a systematic literature review on artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 34(3), 1166–1205.

[10] Regan, P. M., & Jesse, J. (2019). Ethical challenges of edtech, big data and personalized learning: Twenty-first century student sorting and tracking. *Ethics and Information Technology*, 21(3), 167–179.

[11] Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024). Exploring the impact of AI on teacher leadership: Regressing or expanding? *Education and Information Technologies*, 29(7), 8415–8433.