



Economic and Social Council

Question of: Limiting the Role of AI in Education to Enhance Learning Without Replacing Human Interaction in East Asia

Chair

Introduction

The integration of Artificial Intelligence (AI) into educational systems has become a critical issue for global development, gaining particular attention from the Economic and Social Council (ECOSOC), especially in highly technological and academically competitive regions such as East Asia. While AI has the potential to personalize learning and improve educational resources through applications like automated grading, adaptive learning systems, and AI tutors, it also poses significant challenges. These tools offer efficiency and accessibility, but their rapid and unregulated implementation risks destroying crucial human interactions necessary for comprehensive learning, critical thinking, and social development. The concern is that over reliance on AI may gradually replace rather than complement essential human interaction. Replacing teacher-student relationships, peer collaboration, and classroom engagement are some of the key concerns. As AI becomes more embedded in classrooms, there is a growing risk that students will become overly dependent on technology as their main source of information and education, potentially overlooking essential human elements entirely.

In East Asia, where respect for teachers and group-based learning is central to education, the integration of AI raises cultural and practical challenges. While AI offers personalized learning, it may reduce human interaction and isolate students, potentially undermining traditional values. Unequal access to advanced technologies could also deepen the gap between urban and rural areas. The COVID-19 pandemic highlighted both the strengths and limitations of digital tools, especially in providing social and emotional support. As the region continues to advance technologically under high academic pressure, finding a balance between AI integration and preserving essential human elements in education is increasingly important not only for East Asia, but as a model for responsible global adoption.

The integration of AI in education closely aligns with the AMMUN theme “Deliberate to Liberate” by encouraging communities to voice how technology can empower learners while preserving essential human values. Rather than simply enhancing efficiency, AI should be used to liberate learners from traditional barriers such as limited access to educational resources and geographic constraints. However, if the addition of AI is not carefully monitored, it may disrupt opportunities for human interaction, collaboration, and emotional development key elements of well-rounded learning. Through deliberate dialogue, countries can thoughtfully integrate AI to improve education while safeguarding creativity,

critical thinking, and social engagement, truly unlocking the potential of future generations.

Definition of Key Terms

Artificial Intelligence (AI)

Artificial intelligence is the ability of machines and software's to perform tasks that typically require human intelligences, such as analyzing data, recognizing patterns, and making decisions. In education, AI is used to personalize learning, give instant feedback and automate teaching tasks.

Digital Divide

The digital divide refers to the gap between individuals or communities that have access to modern technology like AI, high speed internet and digital devices and those who do not. In East Asia, rural students often face this divide, limiting their ability to benefit from AI enhanced education.

Human Teacher Interaction

This refers to the real time, emotional and social connection between students and educators. Teachers provide mentorship, motivation, and support which AI cannot fully replicate. Many East Asian cultures value teacher student relationships

Hybrid Learning Model

A hybrid learning model blends traditional classroom instruction with digital or AI based tools. This model aims to combine the strengths of technology like personalization with human connection and guidance from teachers.

Data Privacy

Data privacy refers to the right of individuals to control how their personal information is collected, used, and shared. AI systems in classrooms often gather student data, raising concerns about who can access it and whether it is used ethically.

EdTech (Educational Technology)

EdTech stands for educational technology, tools, software, and platforms designed to

improve teaching and learning. In East Asia, EdTech includes AI tutors, digital textbooks and classroom apps aimed at enhancing student performance.

General Overview

Rise of the Conflict

Since the COVID-19 pandemic sped up the reliance on digital technologies, East Asian countries such as South Korea, China, and Singapore have quickly integrated AI into their educational systems as part of broader national strategies to improve digital literacy and maintain global competitiveness in an increasingly technology-driven world. Consequently, the conflict over limiting AI's role in education escalated as governments in the region pushed for rapid modernization of their systems. For example, countries like China and Singapore have implemented extensive AI strategies, including AI-specific curricula in primary and secondary schools. China's Ministry of Education added AI courses to the national curriculum in 2018, while Singapore launched initiatives such as "AI for Everyone" and "AI for Students" to give both students and teachers a basic understanding of AI. These programs aim not only to boost digital literacy but also to create a future-ready workforce capable of thriving in a fast-evolving technological landscape. Similarly, AI-based textbooks like those South Korea plans to introduce by 2025 offer personalized learning by adapting content to each student's needs and progress. These textbooks can adjust difficulty levels, provide targeted resources, and offer real-time feedback to create a more customized learning experience. However, many argue that over reliance on AI could diminish fundamental cognitive and social skills, raising concerns about students' ability to focus and engage in critical thinking without sufficient human interaction. This concern has grown as debates and petitions have emerged, reflecting fears about the pace of technological change and its potential to undermine the human-centered aspects of education.

The situation further escalated due to ethical and equity challenges revealed by AI. In China despite progress in AI education, disparities between urban and rural areas became apparent through clear differences in infrastructure, teacher qualifications, and educational outcomes with rural students lacking access to quality AI resources and trained teachers, deepening the digital divide. For example, only 14.3 % of teachers in rural secondary schools held a bachelor's degree compared to 32% in urban schools. In addition, rural students had

lower high school enrollments with just 7.1% of rural middle school students enrolling in high school compared to 9.4 times higher enrollment in urban areas. (National Bureau of Statistics China 2000 Population Census) The hukou system exacerbated these inequalities by limiting educational opportunities for rural populations. Similarly, concerns about AI's cultural relevance and bias arose because many generative AI models were trained on western data, raising fears about their suitability for east Asian contexts. These issues fueled debates about the fairness and inclusiveness of AI in education, prompting calls for more localized, fair, and ethically guided AI implementation.

Cultural values and social expectations also boosted the resistance to AI replacing human interaction. East Asian education has traditionally been centered around strong mentorship and teacher-student relationships, and many feared these would be lost if AI took over. The introduction of AI challenged these long-held norms, leading to resistance from parents and educators who valued the social and emotional components of education. Moreover, public controversies around AI's negative social impacts across East Asian countries like South Korea, including privacy violations and algorithmic discrimination broadened skepticism about unchecked AI adoption. These multifaceted tensions culminated in demands for stricter regulations and policies that limit AI's role to supporting, rather than replacing, human teachers, reflecting a broader struggle to balance technological innovation with preserving essential human elements in education.

Major Developments in AI Integration in Education

AI integration in education in East Asia has intensified at a rapid pace fueled by a mix of new AI tools, government policies and private sector participation

- AI tools: Programs and applications like adaptive learning software's (ex. Smart Learning by Baidu in China) use data to change lessons according to each student's individual progress. AI powered chatbots (like Sirius, the AI powered tutor in South Korea) provides real time academic support answering student questions 24/7. Personalized tutoring programs such as Squirrel AI in China offer customized courses based on individual learning needs, improving understanding and retention.
- Government Policies: In China, the MOE launched a national initiative to integrate AI in classrooms as part of the AI+Education plan. South Korea's "Digital Textbook

Project,” set to fully implement by 2025 aims to bring AI powered textbooks to every student enhancing personalized learning experiences. Similarly, Singapore’s “Smart Nation Initiative” is pushing for widespread AI adoption to enhance both teaching and learning outcomes.

- Private sector participation: Companies like Tencent and Alibaba in China have partnered with schools to provide AI based learning platforms and online educational tools, further embedding AI in everyday education. Pearson also collaborated with East Asian countries to offer AI powered learning solutions. Such as adaptive assessments and smart content delivery systems.

These advancements in AI are helping move education away from standardized memorization toward more student-centered approaches that prioritize personalized engagement and critical thinking skills. AI tools can accommodate various learning styles, allowing students to learn at their own pace with real-time feedback and tailored resources. This shift creates a more dynamic and interactive educational experience, empowering students to take ownership of their learning. However, while these benefits are significant, there are also concerns that over reliance on AI might reduce opportunities for human interaction and critical social development, highlighting the need for a balanced approach. Governments in East Asia have launched national initiatives to integrate AI into educational systems. China is a leading example, with AI teaching models and curricula currently being tested through pilot programs in 184 schools, with the aim of introducing AI education from primary to secondary school levels by 2030. AI education will involve personalized tutoring where AI adapts lessons to each students learning pace, as well as AI teaching assistants to help with grading and classroom management. AI could also extend to sports education, providing real time feedback on technique and performance, enhancing both academic and extracurricular learning. The Chinese Ministry of Education's "National Smart Education Platform" includes an exclusive AI section to enhance high-quality digital resources, facilitating equitable access to educational tools and ensuring that learning is more tailored and efficient. This platform uses AI- driven insights to identify student’s strengths and weaknesses, allowing teachers to provide more focused support. Similarly, Singapore's EdTech Masterplan 2030 propels AI adoption through the introduction of AI modules in secondary schools and the spread of AI degree courses at universities such as the National University of Singapore. South Korea and others also emphasize AI literacy and responsible

use of AI as part of their STEM education reforms. Such state led initiatives place AI at the core of future education and national competitiveness.

Private technology companies play a crucial role in driving AI adoption in education across the region. Firms like Microsoft collaborate with governments and nonprofits through initiatives such as the AI TEACH for ASEAN program, which aims to train thousands of educator's skills relating to AI. Edtech startups like prep and Genie book leverage AI to personalize learning content and improve student outcomes. Moreover, corporate partnerships support large scale AI skilling programs targeting millions of learners to build an AI ready workforce aligned with regional digital masterplans. These combined efforts by governments and private sectors create a diverse and rapidly evolving AI education ecosystem in East Asia, reflecting both the scale and variety of current developments.

Balancing Innovation and Human Connection in the Classroom

Balancing AI with human connection in East Asian classrooms is a critical challenge as AI becomes more integrated into education. The balance to this is a teacher student dynamic which traditionally means mentorship, personalized guidance, and emotional support. Teachers play an irreplaceable role in understanding students unique needs, motivation, and social elements that AI despite its data driven personalization struggles to replicate fully. Human teachers and educators provide empathy, encouragement and adaptability in real time responding to subtle cues like body language, emotions, which are essential for creating a supportive learning environment and building students confidence and resilience.

While AI excels at making personalized content and immediate feedback, its lack of genuine empathy and actual understanding means it cannot replace the emotional intelligence that human teachers bring to the classroom. For example, AI can identify a student's learning gaps but cannot offer the same encouragement or address anxieties that may underlie academic struggles. Recognizing this many schools in East Asia are adopting a hybrid approach that leverages AI's strengths in data analysis and personalized instruction while preserving and enhancing the teacher's role as a mentor and social guide. This approach aims to use AI as a tool that supports teachers, freeing them from administrative burdens and allowing more time for meaningful human interaction. Human teaching, unlike AI is also

more inclusive, as teachers can tailor their approaches to meet the unique needs of students, including those with disabilities. providing the personalized support and emotional guidance that technology alone cannot offer.

To maintain this balance, educational institutions in east Asia are investing in teacher training programs that focus on integrating AI technologies without diminishing human connection. For instance, professional development initiatives in countries like Singapore and South Korea emphasize how educators can use AI insights to tailor their teaching strategies while remaining attentive to student's emotions and social needs. Schools in East Asia are also redesigning curricula to include collaborative projects and social emotional learning components that AI cannot replicate. This deliberate blending of AI innovation with human empathy reflects a growing impact in East Asia showing that technology should enhance, not replace the vital human relationships, especially in education.

Challenges and Ethical Considerations

The implementation of AI in education across East Asia creates great challenges and ethical issues that need to be addressed to achieve responsible and equitable implementation. Surveillance and data privacy of students are some of the primary areas of concern. Classroom AI devices collect massive amounts of personal data to personalize learning and track progress, but it brings risks in terms of how the information is stored, who receives access and how it might be utilized beyond educational purposes. In some cases, the tracking enabled through AI technology can infringe upon students' rights to privacy and create an environment of constant surveillance which may make students feel unsafe and uncomfortable in their learning environment.

Another issue is unequal access to AI technologies. While urban schools in East Asia often benefit from innovative AI tools and infrastructure, many rural and underprivileged areas fall behind due to limited resources, poor internet connectivity, and a shortage of trained teachers. This digital divide risks deepening existing educational inequalities, as students without access to AI-enhanced learning tools may fall further behind their peers. The disparity in access raises concerns about fairness and inclusivity in education systems increasingly reliant on technology.

Furthermore, the cultural and ethical diversity within East Asia adds complexity to how AI in education is perceived and regulated. Different countries have varying social norms, values, and legal frameworks that influence opinions, actions toward AI ethics, data protection and the acceptable role of technology in classrooms. For example, China's approach to AI governance is more centralized and stricter, emphasizing data security and control, while countries like Japan and Singapore prioritize more transparency and ethical AI use with more flexible regulatory frameworks.

Major Parties Involved

China

China's Ministry of Education (MOE) is the primary authorizer of AI education policy, issuing comprehensive guidelines to integrate AI into curricula from primary through secondary education. The government has mandated AI education nationwide by 2025, starting with pilot programs in Beijing and expanding to 184 designated schools across the country. The MOE emphasizes building an AI education system that combines both technical skills and ethical training while restricting independent use of AI tools by younger students. China's approach is highly centralized with strong government oversight to promote AI literacy, innovation, and digital transformation in education.

Japan

Japan's AI education efforts are part of broader initiatives like Society 5.0, which aims to integrate advanced technologies into all aspects of society, including education. The government promotes AI literacy and ethical considerations through national curricula reforms and supports teacher training to ensure effective AI integration. Japan emphasizes balancing technological innovation with cultural values, focusing on transparency and responsible AI use. While less centralized than China, Japan encourages collaboration between government, academia, and industry to develop AI education frameworks aligned with societal needs.

South Korea

South Korea has implemented national strategies to embed AI education in schools, focusing on STEM and digital skills development. The government supports AI literacy programs and ethical AI education, often through partnerships with private tech companies and universities. South Korea focuses the importance of human centered AI education, aiming to preserve teacher- student interaction while leveraging AI tools for personalized leaning. The country also addresses data privacy and digital equity concerns as part of its AI governance framework.

Singapore

Singapore's (MOE) leads AI integration through initiatives like the EdTech Masterplan 2030 which promotes AI modules in secondary schools and expands AI- related degree programs at universities. Singapore prioritizes transparency, ethical AI use, and flexible regulatory frameworks. Public- private partnerships, such as the AI Verify Foundation, support responsible AI adoption and teacher training. Singapore approach balances innovation with strong ethical guidelines, focusing on inclusivity and preparing students for an AI- driven economy.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO plays a vital role in guiding the ethical use of artificial intelligence in education on a global scale. Through reports such as "AI and Education: Guidance for Policy- makers," UNESCO encourages nations including those in East Asia to adopt human centered approaches to AI that enhance learning without diminishing human interaction. It emphasized that while AI can personalize education and increase access, the teacher student relationship must remain at the heart of leaning. UNESCO supports governments in developing policies that maintain this balance and promotes training programs to help educators use AI tools effectively. In East Asia, UNESCO works with national ministries to promote safe and balanced integration of AI, ensuring students social emotional development is not compromised by technological advancement.

National Smart Education Program (China)

The National Smart Education Program, led by the Chinese MOE, is a major initiative to adopt AI into schools nationwide and place China as a global leader in AI driven education. The program allows access to high quality digital resources through platforms

such as the National Smart Education Platform, which includes an exclusive AI section to support customized learning and improve teaching efficiency. This initiative supports the use of AI for flexible learning, automated assessment, and customized academic support, focusing to lower geographic disparities in education. While concentrated on innovation, the program also recognizes the need to ensure wide range access and responsible use, especially in under resourced areas. In collaboration with local governments and schools, the program focuses training for teachers and oversight mechanisms to balance technological efficiency with meaningful human interaction in classrooms.

Timeline of Events

Date	Event
March 2020	Covid 19 caused widespread school closures in East Asia, leading to China, Japan, and South Korea to shift to online learning where AI powered platforms such as Squirrel AI in China and Riid in South Korea were depended on for remote learning raising concerns about screen fatigue and needed teacher interaction
March 2021	Japan expanded its GIGA School Program to provide one device per student and digital infrastructure which ensured equitable access to digital tools and empowered teachers to use AI technologies aside traditional methods
February 2023	South Korea launched AI-driven digital textbooks as part of a broader education modernization plan. Which allowed teachers to retain central roles in customizing AI-generated lessons, ensuring students remained engaged and connected.
March 2024	China's Ministry of Education launches a national AI

education campaign. Which introduced an “AI learning” section on national platforms and promoted a global AI education exchange. The campaign stressed ethical use

August 2024

UNESCO Bangkok hosted a webinar on AI and equitable education in Asia- Pacific, where experts urged AI to support, not replace human teachers, and to close not widen gaps in education access.

December 2024

China issued a formal guidance on AI literacy for K-12 schools and AI was to be introduced in age- appropriate ways with awareness in early grades,

March 2025

Beijing mandates AI instruction in public schools from fall 2025 schools will teach AI for at least 8 hours annually. And the policy stresses integration with existing subjects

June 2025

Major Chinese tech companies (suspend chatbot features during college entrance exams preventing cheating

Attempts to solve the issue

Empowering minds: a round table on Generative AI and Education in Asia-Pacific (23/1/2024) Summary report

This UNESCO resolution aims to support the ethical and inclusive integration of generative AI in education across the Asia-Pacific. By offering training, hands on learning and access to resources, it empowers educators and learners to use AI effectively. While it has not yet been formally implemented, the resolution works as a guiding framework that

promotes proper access to AI tools, addresses associated risks, helps reduce digital gaps, and encourages ethical AI use in learning environments.

Seizing the opportunities of safe, secure, and trustworthy artificial intelligence systems for sustainable development (21/3/2024) Resolution (78/265) Document A/RES/78/265

This resolution by the United Nations focuses on promoting the safe, secure, and trustworthy development and use of artificial intelligence to advance sustainable development. It calls for international cooperation, in sections such as capacity building, knowledge sharing, and cross border research to make sure that all countries, especially the ones developing, benefit from AI enhancements. It also focuses on collaborative policy making, where countries join to create ethical and legal standards. To guarantee that AI tools are used responsibly, the resolution encourages countries to adopt regulatory frameworks, promote transparency and accountability in AI systems, and prioritize human rights, privacy and fairness in AI development and deployment. This resolution provides a global structure for guiding AI innovation in a way that is sustainable, helping to reduce technological divides and supporting long term development goals.

Possible Solutions

One solution to limit the overreliance on AI in education while still enhancing learning in East Asia is to implement AI assisted hybrid learning models. Rather than replacing teachers, AI can be used to support and personalize student learning under the supervision of teachers and educators. For example, AI can help assess student progress, identify areas of weakness, and suggest specific exercises or resources, while the teacher provides human interaction, mentorship, and emotional support. Governments and MOE'S in East Asian countries such as Japan, South Korea and China can invest in professional development programs that train teachers to use AI tools easily and effectively without losing control and authority. This ensures AI remains only as a supportive tool not replacing human connection.

Another effective strategy is to establish national policies and ethical guidelines that define the limits of AI in educational settings. These guidelines should be developed in collaboration with educators, technologists, psychologists, and policymakers. For example,

South Korea's (MOE) could enforce limits on screen time and require that all AI based education platforms include human instructor oversight. Also, Japan, known for its advanced technology adaptation, and growing interest in mental health awareness among the youth, could mandate scheduled assessments of the psychological effects of AI use in schools to ensure student's mental health and social development are not compromised. Clear policy frameworks would help maintain a healthy balance between technology and human interaction in classrooms and schools.

Community engagement and teacher student interaction initiatives can also help preserve the human aspect of education. In East Asia where academic pressure is high, and technology adoption is rapid, extracurricular programs focused on collaborative learning, critical thinking, and peer to peer interaction can help develop social and emotional skills that AI cannot develop. NGOs and educational institutions could launch programs where students participate in hands on group activities or service-learning projects that rely on interpersonal skills rather than algorithmic feedback. These real-world interactions could reinforce the importance of empathy, communication, and cooperation in a way that AI cannot replace.

Finally, public awareness campaigns can be launched through platforms such as YouTube, TikTok, or LINE to educate students, parents and educators about the pros and cons of AI in education. These campaigns can showcase real stories of classrooms where a balanced approach to AI is benefiting students without diminishing human interaction. Influencers, education experts and student voices can be used to encourage responsible technology usage and spark public dialogue. This can pressure policymakers and technology companies to design and implement AI systems that serve as collaborative tools not replacements for human teachers.

Guiding Questions

1. How is AI currently being used in education in your delegation's country?
2. What are the main benefits your country has experienced from integrating AI into education?
3. What concerns does your country have about AI potentially replacing human teachers or reducing human interaction?
4. How important is human interaction in the learning process from your delegation's

perspective?

5. Has your country developed any policies or guidelines to regulate the use of AI in education?
6. What challenges does your delegation face in balancing AI technology with traditional teaching methods?
7. How can AI be used to support teachers rather than replace them in your country?
8. What steps measured can be taken to ensure that AI enhances learning without harming students social and emotional development?
9. How does your delegation view the importance of teachers and human mentorship compared to the use of AI tools in education?
10. How can community involvement and extracurricular activities help maintain human connection in education alongside AI?
11. How can your delegation raise public awareness about the benefits and risks of AI in education?
12. How can East Asian countries work together in limiting AI's role while enhancing education?
13. What kind of collaboration between governments, educators and technology companies is needed to regulate AI use in schools?
14. What are the potential long-term impacts if AI replaces too much human interaction in education?

Appendix

- AI's role in education worldwide, including ethical guidelines and policies:
<https://www.unesco.org/en/digital-education/artificial-intelligence>
- AI education policies and progress in China, Singapore, and South Korea:
<https://www.linkedin.com/pulse/ai-driven-education-asia-whats-ahead-2025-a-atp-ndboc>
- Regional cooperation and AI strategies in East Asia including educational implications <https://eastasiaforum.org/2025/04/13/asia-needs-an-ai-third-way/>
- How Beijing mandates AI instruction in schools
http://education.chinadaily.com.c/2025-03/13/c_1078517.htm
- SouthKorea's digital textbooks and teacher led AI integration idea:
<https://blogs.worldbank.org/en/education/teachers-are-leading-an-ai-revolution-in->

[korean-classrooms](#)

- Why teachers must remain as main central in the AI era in Asia Pacific:
<https://www.unesco.org/en/articles/empowering-minds-highlights-round-table-generative-ai-and-education-asia-pacific>
- Safe, and responsible AI implementations in classrooms
<https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>
- Supports teacher led AI use with ethical safeguards and focus on student wellbeing
<https://www.unesco.org/en/articles/artificial-intelligence-equity-education-drives-unesco-and-11th-equitable-education-alliance-event>

Bibliography

Asia Needs an AI Third Way.” *East Asia Forum*, 13 Apr. 2025,
eastasiaforum.org/2025/04/13/asia-needs-an-ai-third-way/. Accessed 17 June 2025.

Authors, Dahlia, et al. *AI Education in China and the United States a Comparative Assessment CSET Issue Brief*. 2021, cset.georgetown.edu/wp-content/uploads/CSET-AI-Education-in-China-and-the-United-States-1.pdf. Accessed 16th June 2025

“Controversial Cases on AI in Republic of Korea.” *Association for Progressive Communications*, 12 Jan. 2024, Accessed 17 June 2025.

“Controversy Breaks out in South Korea over the Introduction of Digital Textbooks on AI-Enabled Tablets.” *GIGAZINE*, 19 Aug. 2024, [gigazine.net/gsc_news/en/20240819-ai-textbooks-program-in-south-korea.](https://gigazine.net/gsc_news/en/20240819-ai-textbooks-program-in-south-korea/) / Accessed 17 June 2025.

Division, Asia. “Recent Breakthroughs, such as the Sudden Rise of Deepseek, Have Sparked a New Wave of Global Discussions about the Future of AI, Especially in China and across Asia. Today, AI Development Is a Critical Measure of National Competitiveness, Fueling a Surge of Strategic Investments in Talent Cultivatio.” *Linkedin.com*, 6 Mar. 2025, .

“TheoryChina - Statistics - Main Data of the 7th National Population Census.” *Theorychina.org.cn*, 2021, en.theorychina.org.cn/c/2021-12-01/1425922.shtml. Accessed 7 Aug. 2025.

UNESCO. “Artificial Intelligence in Education.” *UNESCO*, 2023, . Accessed 14th June 2025.

Unesco. “Ethics of Artificial Intelligence.” *Unesco.org*, 2023, . Accessed 15th June 2025.

“UNESCO Launches Landmark Study on Digital Transformation in East Asian Higher Education.” *Unesco.org*, 2025,

Contact Information

Aisha Al-Naser

Aisha_alnaser@abs.edu.jo

+962796000045