



## AI GENERAL EDUCATION IN CHINA: INSIGHTS FROM THE 2025 MOE GUIDELINES

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<https://doi.org/10.5281/zenodo.17330985>

**Abstract:** Sun'iy intellekt (SI) tobora ko'proq global ta'lim tizimlarini o'zgartirmoqda. 2025-yilda Xitoy Xalq Respublikasi Ta'lim vazirligi (MOE) boshlang'ich va o'rta maktablarda generativ SI dan foydalanish bo'yicha ikkita rasmiy yo'riqnoma chiqardi. Ushbu hujjatlar SI ni rasmiy ta'lim muhitiga integratsiya qilishdagi imkoniyatlar va muammolarni ta'kidlaydi. Ular boshlang'ich maktab o'quvchilarining mustaqil ravishda ochiq-oxirgi generativ SI vositalaridan foydalanishini taqiqlaydi hamda o'qituvchilarning asosiy dars berish vazifalarini SI bilan almashtirishini cheklaydi. Aksincha, SI savodxonlikni rivojlantirish, innovatsiyani rag'batlantirish va ta'lim boshqaruvini kuchaytirishga yordam beradigan qo'shimcha resurs sifatida ko'riladi.

Ushbu kontseptual maqola Xitoyda SI umumiy ta'limining siyosiy asoslari va amaliy qo'llanilishini tahlil qiladi. Uchta asosiy yo'nalishga e'tibor qaratiladi: o'quvchilarning rivojlanishi, o'qituvchilik amaliyoti va ma'muriy boshqaruv. Unda SI qanday qilib shaxsiylashtirilgan ta'limni qo'llab-quvvatlashi, pedagogik innovatsiyani kuchaytirishi va ma'lumotlarga asoslangan qaror qabul qilishni rag'batlantirishini ko'rsatadigan asosiy stsenariylar muhokama qilinadi. Misollar sifatida SI asosidagi aqlli arqon tashlash tizimi, VR yordamida poeziya darslari va maktab arxivlarini raqamlashtirish keltiriladi; bu SI ning ta'lim sharoitidagi imkoniyatlari va cheklovlarini namoyish etadi. Maqola yakunida SI umumiy ta'limining modernizatsiyani jadallashtirish, ta'limdagi tenglikni ta'minlash va kelajak avlodlar uchun SI savodxonligini rivojlantirishdagi strategik ahamiyati ta'kidlanadi.

**Keywords:** AI ta'limi, talabalar rivojlanishi, o'qitish, boshqaruv

**Аннотация:** Искусственный интеллект (ИИ) все больше преобразует глобальные системы образования. В 2025 году Министерство образования Китая (МОЕ) выпустило два официальных руководства по использованию генеративного ИИ в начальном и среднем образовании. Эти документы подчеркивают как возможности, так и вызовы, связанные с интеграцией ИИ в формальную образовательную среду. В них запрещается самостоятельное использование открытых генеративных инструментов ИИ учащимися

начальной школы, а также ограничивается замена учителями основных учебных обязанностей ИИ. Вместо этого ИИ позиционируется как вспомогательный ресурс для поддержки развития грамотности, стимулирования инноваций и укрепления управления образованием.

Данная концептуальная статья анализирует политическую основу и практическое применение общего образования в области ИИ в Китае. Сосредоточив внимание на трех ключевых измерениях — развитие учащихся, педагогическая практика и административное управление — работа рассматривает основные сценарии, показывающие, как ИИ может поддерживать персонализированное обучение, педагогические инновации и принятие решений, основанных на данных. В качестве примеров приводятся такие кейсы, как система «умной» скакалки на базе ИИ, преподавание поэзии с использованием VR и цифровизация школьных архивов, что демонстрирует как потенциал, так и ограничения ИИ в образовательной среде. В заключение подчеркивается стратегическая важность общего образования в области ИИ для ускорения модернизации, продвижения образовательного равенства и формирования ИИ-грамотности у будущих поколений.

**Ключевые слова:** Образование в сфере искусственного интеллекта, развитие студентов, преподавание, управление.

**Abstract:** Artificial intelligence (AI) is increasingly reshaping global education systems. In 2025, China's Ministry of Education (MOE) issued two official guidelines on generative AI use in primary and secondary education. These guidelines highlight both the opportunities and challenges of integrating AI into formal learning environments. They prohibit primary school students from independently using open-ended generative AI tools and restrict teachers from substituting core instructional duties with AI. Instead, AI is positioned as an auxiliary resource to support literacy development, foster innovation, and strengthen educational governance.

This conceptual paper analyses the policy framework and practical application of AI general education in China. Focusing on three core dimensions: student development, instructional practice, and administrative management, it explores key scenarios illustrating how AI can support personalized learning, pedagogical innovation, and data-informed decision-making. Case studies, including an AI-enabled smart skipping system, VR-assisted poetry instruction, and the digitalization of school archives, serve to illustrate both the potential and limitations of AI in educational settings. The paper concludes by emphasizing the strategic importance of AI general education in driving modernization, promoting educational equity, and cultivating AI literacy for future generations.

**Keywords:** AI education, student development, teaching, management

## INTRODUCTION.

The incorporation of artificial intelligence (AI) into general education marks a significant evolution in teaching practices and learning environments. AI tools have demonstrated strong potential to support personalized learning by delivering adaptive feedback and customized learning trajectories, thereby increasing student engagement and accommodating diverse learner needs [1, 2]. However, the effectiveness of such integration relies heavily on educators' preparedness. Teachers with adequate training and a solid understanding of AI ethics are better positioned to create innovative and impactful curriculum [3, 4].

Importantly, the adoption of AI in education is influenced not only by technological advancements but also by broader sociocultural and institutional dynamics. These include curriculum design, pedagogical values, and concerns related to equity, ethical usage, and data privacy [5]. Consequently, comprehensive policy frameworks are essential to guide responsible AI integration, ensuring both educational benefits and necessary protections.

In response, China's Ministry of Education (MOE) released two Guidelines on General AI Education for Primary and Secondary Schools in 2025. These guidelines prohibit primary school students from independently using open-ended generative AI tools and restrict the replacement of core teaching activities with AI. At the same time, they advocate for AI literacy, pedagogical innovation, and broader educational modernization.

Against this backdrop, the present study explores two primary research questions:

1. How is AI integration into general education conceptualized in China's 2025 MOE guidelines?
2. What practical scenarios across student learning, teacher instruction, and educational administration reveal the opportunities and limitations of AI in educational settings?

### **CHINA'S MOE 2025 GUIDELINES ON AI GENERAL EDUCATION.**

In May 2025, China's Ministry of Education released new guidelines on AI education for primary and secondary schools, marking a key effort to integrate AI into formal learning. The policy aims to enhance education through AI while safeguarding against its misuse. It bars primary students from independently using generative AI and prevents teachers from replacing essential instruction with AI tools. This reflects the need to preserve human-led teaching.

The document outlines a phased approach: encouraging curiosity and exploration in early years, strengthening technical knowledge in junior levels, and fostering innovation and ethical thinking by senior secondary. This structure aligns with students' cognitive and academic development. Implementation focuses on three practical goals: helping students grow, supporting teachers in instruction, and reinforcing educational governance. These areas promote AI's role in enriching learning, improving teaching efficiency, and guiding school management. The policy positions AI as a tool for long-term educational advancement.

### **APPLICATION SCENARIOS AND CASE ANALYSIS.**

#### **1. Promoting Student Growth**

AI supports diverse learning needs and encourages holistic development. It enables personalized learning paths, monitors progress, and provides real-time feedback. These functions help students develop self-regulation and problem-solving abilities. Interactive tools, like simulations and AI storytelling, also foster curiosity and cultural understanding. Kharis, Ediyanto [6] indicated that AI enhances student self-confidence and task efficiency, ultimately improving academic outcomes.

#### *Case: AI Smart Skipping System*

This system, used in several Chinese schools, applies computer vision to track skipping performance. It detects errors, offers personalized feedback, and ranks performance through visual dashboards. By merging sports with intelligent feedback, it turns physical education into a personalized learning space, encouraging self-improvement and health awareness.

#### **2. Assisting Teacher Teaching**

AI enhances teaching by automating routine tasks such as grading and feedback. This allows teachers to focus on engagement and creativity. It supports lesson planning and helps adapt instruction to student needs. Rather than replacing teachers, AI strengthens their ability to deliver student-centered education. As educators become more proficient with AI tools, their ability to design and implement innovative and effective curricula increases, ultimately benefiting student outcomes [7, 8].

*Case: VR-Enhanced Classical Poetry Class*

In this class, students use VR headsets to experience the world described in Tang poetry. Immersed in a digital landscape, they explore the imagery of poems like Early Departure from Baidi City. Teachers guide students through the cultural and aesthetic elements. This use of AI deepens literary understanding through experience-based learning.

### **3. Supporting Educational Management**

AI strengthens school management by analyzing student records, assessments, and planning documents to guide decision-making. These insights support efficient resource use and long-term development. Research further indicates that AI can bridge administrative functions with classroom practice. For example, Alenezi [9] noted that systems like Blackboard integrate personalized learning pathways and predictive analytics, enabling teachers to adapt strategies and improve overall learning outcomes.

*Case: School Archive Digitalization*

Using OCR and AI analysis, schools convert paper records into digital formats. Data becomes searchable and visualized through dashboards. Teachers access student learning histories quickly, and administrators review teaching trends. This reduces manual workload and enables data-informed management.

### **DISCUSSION AND CONCLUSION.**

China's 2025 MOE guidelines reveal both the potential and responsibility involved in integrating AI into education. Rather than replacing teachers or traditional learning, AI is framed as a supportive tool that enhances student development, strengthens instruction, and improves school management. The examples of AI skipping systems, VR poetry classes, and digital archive upgrades show how AI, when applied thoughtfully, can enrich different aspects of education. A key advantage lies in its capacity for personalization, and this personalization is crucial in addressing diverse learning capabilities and preferences, providing educators with tools to better support all learners [10, 11]. Moreover, the positive perceptions of both teachers and learners regarding AI in educational settings contribute to its effective implementation and integration within curriculum [12, 13].

However, effective implementation depends on supportive systems and cultural readiness. Schools must build adaptive environments, promote AI literacy through clubs and outreach activities, and ensure layered training for teachers and students to build both skills and awareness. Strong governance is essential. Schools are required to evaluate AI tools carefully, considering safety, suitability, and data protection before use. Ongoing monitoring and age-specific approaches help ensure that technology serves clear educational purposes. Data management must also follow strict protocols to protect student privacy. Families also play a critical role. Parents should guide safe AI use, prevent misuse of personal data, and

avoid over-reliance. At the same time, they can use AI tools at home to encourage learning, communication, and curiosity.

In summary, successful AI education requires more than access to technology. It demands cultural engagement, institutional oversight, and joint efforts between schools and families. When these elements align, AI can become a meaningful driver of educational quality, equity, and student growth.

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