

THE APPLICATION OF AI EMPOWERED EDUCATION AND ADMINISTRATION IN CHINA

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Abstract

With the rapid development of technology, artificial intelligence (AI) has been applied to various fields, including education management. In China, education management faces many challenges and opportunities. China's "New Generation Artificial Intelligence Development Plan" clearly states that artificial intelligence (AI) technology should be used to promote educational reform, including a new education system of intelligent learning and interactive learning. This article aims to explore the application of AI empowering education management in China, providing theoretical basis and direction guidance for further in-depth research in this field.

Keywords: Artificial Intelligence (AI); Educational management; Personalized learning;

Introduction

With the rapid development of information technology, artificial intelligence (AI) has played an important role in various fields of society, including education. In today's society, the rapid development of technology has put forward higher requirements for talent cultivation, and traditional education and teaching models are facing many challenges. The individual differences among students are constantly increasing, and unified teaching is difficult to meet the learning needs of each student. The speed of knowledge updating is accelerating, and students need to master more efficient learning methods to adapt to the development of future society. It can break the limitations of time and space, providing students with more convenient and abundant learning resources. No matter where they are, students can access high-quality educational content through the internet. Artificial intelligence (AI) can achieve personalized learning, tailor learning plans for students based on their learning progress, knowledge mastery, and study habits, and improve learning outcomes. The application of artificial intelligence (AI) technology in the teaching process, such as intelligent tutoring systems, virtual laboratories, etc., can stimulate students' interest in learning and enhance their learning enthusiasm. For teachers, artificial intelligence (AI) can help reduce teaching burden, improve teaching efficiency, and enable teachers to devote more energy to teaching design and personalized guidance for students. The empowerment of AI in education and teaching has brought new opportunities and momentum to the development of China's education industry, and plays an indispensable role in cultivating innovative talents that meet the needs of the times.

The Application of Artificial Intelligence (AI) in the Allocation of Educational Management Resources

Intelligent decision support system: Artificial intelligence (AI) analyzes a large amount of educational data to provide objective basis for education policy makers and help them make more scientific and reasonable decisions (Release source: Lahore Garrison University Journal of Computer Science and Information Technology Research). For example, the Education Commission of a certain city has collaborated with domestic artificial intelligence (AI) companies to develop an intelligent decision support platform. By analyzing data on the city's educational resources, it provides decision support to policy makers, helping them optimize the

allocation of educational resources and improve educational equity. Simulation prediction: Artificial intelligence (AI) can simulate different policy options, predict the possible impacts that may arise next, and provide reference suggestions for decision-making (Release source: Lahore Garrison University Journal of Computer Science and Information Technology Research). For example, a school system has introduced an intelligent resource scheduling system that uses artificial intelligence (AI) technology to analyze the educational resource needs of each campus, achieving dynamic balance of resources and effectively alleviating the problem of resource imbalance, thereby improving the operational efficiency of the entire school system.

Artificial Intelligence (AI) Helps Optimize Education Evaluation System

The traditional education evaluation system often focuses on students' exam scores, which has certain limitations. The emergence of AI provides strong support for building a more comprehensive and scientific education evaluation system (source: Santosh Kumar, Vivek D. Patil, Parikshit N. Mahalle, Vishal Ambadas Meshram). Artificial intelligence (AI) can achieve diversified evaluation. It can collect various data from students during the learning process, such as classroom performance, homework completion status, online learning duration, and participation in discussions. These data are no longer limited to exam scores, but can more comprehensively reflect students' learning status and abilities. They can not only record students' focus and speech quality in the classroom, but also develop unique evaluation criteria based on individual differences of students. For students who excel in practical operations, the evaluation system can focus more on their experimental results and practical application abilities; For students who have a good grasp of theoretical knowledge, more evaluation weight can be given in areas such as thinking expansion.

Artificial Intelligence (AI) drives the realization of personalized learning

In the vast student population in our country, there are significant differences between individual students. Artificial intelligence (AI) technology provides great convenience for achieving personalized learning (source: Haijun Kang-Higher Education, Skills and Work-Based Learning), allowing for precise evaluation of each student's learning starting point. By analyzing students' knowledge reserves, learning abilities, learning styles, and other aspects, determine their initial learning state. Develop personalized learning paths for students based on the evaluation results. For example, for students with strong logical thinking but weak language expression ability, the system can arrange more course content and practice tasks that focus on language expression training. During the learning process, the artificial intelligence (AI) system can also adjust the learning plan in real time to solve the difficulty of understanding a certain knowledge point for us. Artificial intelligence (AI) can also provide personalized learning feedback for students. It is no longer a simple judgment of right and wrong, but a detailed identification of students' problems, providing improvement suggestions and targeted learning resources, so that each student can achieve maximum improvement on their own foundation.

The Application of Artificial Intelligence (AI) in Educational Management Decision making

Educational management decisions are related to the development and quality of the education industry. Artificial intelligence (AI) has significant application value in this field, as it can provide scientific basis for educational management decisions through the analysis of large amounts of educational data (source: Yuqi Zhao. "The Optimization Path of Higher

Education Resource Allocation in China Based on Fuzzy Set Theory.") . For example, by analyzing historical enrollment data, employment situation analysis, and changes in social demand for talent, the future development needs of education can be predicted. In terms of curriculum design in schools, artificial intelligence (AI) can suggest adding or reducing certain courses based on market demand and students' employment directions. In the development plan of schools, artificial intelligence (AI) can analyze the education competition situation and student source situation in surrounding areas, and help schools formulate reasonable development strategies, such as whether to expand enrollment scale, whether to add new professional directions, etc.

Artificial Intelligence (AI) Promotes Home School Collaboration in Educational Management

Good home school cooperation is crucial for students' growth, and artificial intelligence (AI) provides a new way to strengthen home school cooperation in educational management (source: Xiaobo Shi, Ningning Li, Bingying Zhao, Weiwei Lian, Gongli Li. "A Summary of Research on China Basic Education Evaluation with the Help of Intelligent Technology). Artificial intelligence (AI) platforms can achieve efficient transmission of information between home and school. Schools can use artificial intelligence (AI) systems to timely push parents about students' academic performance, including grades, attendance, and school performance. Parents can also provide feedback to the school on their students' learning status, lifestyle habits, and other information at home through this platform, making it convenient for both parties to timely grasp the comprehensive situation of their students. Artificial intelligence (AI) can organize interactive activities between home and school. For example, online parent teacher conferences, educational lectures, etc. break the limitations of time and space, allowing more parents to participate in the school's educational management activities, while also providing guidance on family education for parents. Based on the characteristics of students and the educational goals of the school, provide personalized educational advice to parents, such as how to cultivate their children's study habits, how to improve their comprehensive quality, etc., so that parents can better cooperate with the school's educational work, form a joint force between home and school education, and jointly promote the healthy growth of students.

Challenges and Countermeasures Faced by Artificial Intelligence (AI) in Education Governance

The first is privacy protection and ethical ethics. When collecting and using student data, relevant privacy protection regulations must be strictly followed to ensure the security and compliance of the data. The second obstacle is technology and implementation, which requires strengthening infrastructure construction and teacher training to ensure the smooth implementation of technology. The third is teacher training and adaptation. Teachers, technicians, and managers need to receive corresponding training to learn how to work in conjunction with AI technology and fully leverage its role in educational governance. The fourth is policy and regulatory support, and the government should introduce relevant policies and regulations to provide legal protection for the application of AI in education governance.

Discussion

The application of artificial intelligence in educational governance is in a rapid development stage. It can not only improve the efficiency of educational resource allocation, but also promote the improvement of educational quality and the realization of educational

equity. With the continuous advancement of technology and the deepening expansion of applications, artificial intelligence will play a more important role in future education governance. In order to fully utilize the advantages of artificial intelligence (AI), we need to overcome various challenges, establish a sound institutional framework, and ensure that the application of technology conforms to the essence and development goals of education.

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