IMPACT OF ARTIFICIAL INTELLIGENCE ON EDUCATIONAL MANAGEMENT

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ABSTRACT
At present, global education is in a critical period of digital transformation. Cutting-edge technologies with artificial intelligence as the core are profoundly changing the overall development pattern of educational management. In the process of building China into a country strong in education, the innovative application and development of artificial intelligence have become an important supporting force, as well as a key starting point for advancing educational reform and improving the level of educational management. Through reviewing the literature, it is found that the application of artificial intelligence in educational management helps to improve management efficiency, make decision-making more scientific and reasonable, and promote the fairness of educational resource allocation. However, at the same time, we cannot ignore the problems faced, such as insufficient artificial intelligence literacy of some educational administrators who are difficult to use relevant technologies proficiently; financial pressure on some educational institutions leading to insufficient investment in technology application; high security risks to the data security of teachers and students, which raises the issue of data protection; in addition, many technologies are divorced from reality and difficult to solve practical problems. This study aims to provide references for promoting the deep integration of artificial intelligence and educational management, offer certain theoretical support and practical guidance for improving the modernization level of educational management, and provide experience for subsequent relevant research and practice.
Keywords: Artificial Intelligence, Educational Management, Educational Digitalization

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INTRODUCTION

From the perspective of the theoretical development and practical innovation of educational management itself, the traditional management model can no longer meet the current needs of educational management development and is gradually withdrawing from mainstream application scenarios. On the contrary, the integration of artificial intelligence technology is gradually covering all aspects of educational management and becoming a key driving force for promoting the theoretical upgrading and practical innovation of educational management. At present, a series of new technologies have gradually come into people's vision, among which natural language processing, big data analysis and others have become key forces driving the global education industry into digitalization. As for the importance of educational management itself, educational management is the core content of the education system and an important foundation for realizing educational modernization and achieving the goal of building a country strong in education. The Outline of the Plan for Building a Country Strong in Education (2024–2035) issued by the Chinese government clearly proposes to strengthen the supporting role of artificial intelligence in educational reform and enhance its contribution to the modernization of the educational governance system and governance capacity, providing a clear policy orientation for the implementation and application of artificial intelligence in educational management (Ministry of Education of China, 2024). In recent years, scholars around the world have carried out extensive research on the application of artificial intelligence in educational management and formed a series of research results. From the literature review, international research pays more attention to the empirical test of technology application effects and the construction of ethical governance frameworks; domestic research in China is closely integrated with national education policies and local practical needs, focusing on exploring the application paths and optimization schemes of artificial intelligence in educational management (Wu, D., & Feng, Q. Y., 2025). In terms of research scope, existing studies have obvious deficiencies. Most studies only analyze a single application scenario, lack systematic sorting and in-depth investigation of the overall research context, and do not comprehensively summarize the practical challenges and solutions in the integration of technology and educational management. Based on this, this paper systematically sorts out and analyzes relevant literature, clarifies the application status and prominent problems of artificial intelligence in educational management, and finally puts forward targeted optimization paths.

APPLICATION STATUS OF ARTIFICIAL INTELLIGENCE IN EDUCATIONAL MANAGEMENT

The macro level of the state

National education authorities play a key role in education reform. In daily educational management, artificial intelligence has played a positive role in educational policy-making, educational resource allocation, educational dynamic monitoring and other fields. Relevant studies show that artificial intelligence helps to realize the comprehensive collection and in-depth analysis of regional education data, assist educational administrators in accurately grasping the

current situation and future trends of education development, provide scientific data support for policy-making, optimize the regional layout of educational resources, and promote educational equity. The Outline of the Plan for Building a Country Strong in Education (2024–2035) also clearly supports the application of artificial intelligence in macro educational management, highlighting its important role in promoting the modernization of educational governance (Ministry of Education of China, 2024).

The meso level of universities

Meso-level applications focus on internal school management. Schools are specialized places for educating and cultivating people. The introduction of new technologies not only helps restructure the operational logic of university education management, but also delivers multi-dimensional value benefits for the modernization of university governance through data-driven approaches, intelligent decision-making and process optimization（Chen, X. F. 2026）Compared with social education and family education, school education has distinctive particularity reflected in its single task. Artificial intelligence provides new technical support for educating and cultivating people, which is reflected in teacher management, student management, curriculum management, student life management and other aspects.it can optimize the curriculum scheduling process, reduce the burden of manual operation and improve the efficiency of curriculum management ; in teaching evaluation, it can realize comprehensive and objective assessment of teaching effects through multi-dimensional data integration and analysis. Artificial intelligence has shifted the goal of educational value from experience-driven to data-driven, transformed the objective of educational governance from periodic planning to real-time dynamic optimization, and changed the educational governance system from one-way imperative management to intelligent collaborative governance（Wu, W., & Feng, L. 2025）.Learning analysis is an important part of student affairs. Artificial intelligence helps to build a multi-dimensional student profile, which integrates information such as students' classroom interaction performance, homework completion quality, daily consumption patterns, and campus social status. Through real-time analysis of such information using machine learning models, students' academic difficulties can be identified in a timely manner（Kong, D. L. 2026）.

The micro level of students

The micro-level is mainly reflected in students’ actual performance. Adhering to people-oriented education is the unremitting pursuit, and the application and innovation of all new technologies will eventually be reflected in students. The integration of computer technology and artificial intelligence has brought new vitality to the innovative development of modern education. It helps to realize intelligent teaching and promotes the development of teaching towards intelligence and personalization（Zhang, F. 2025）.The application of a series of new technologies provides technical support for students’ personalized learning. AI large models can provide students with personalized learning support, efficient and intelligent daily convenience, and scientific and effective career guidance（Dai, L., & Chen, X. L. 2025）In addition, artificial intelligence can monitor students’ mental health status in real time and provide data support for school mental health education.

PRACTICAL EFFECTS AND EXISTING DIFFICULTIES OF ARTIFICIAL INTELLIGENCE IN EDUCATIONAL MANAGEMENT

Practical Effects

Combined with existing research results, the application of artificial intelligence in educational management has achieved remarkable practical effects, which are specifically reflected in management operation, management decision-making, educational equity and other aspects. Artificial intelligence can help to improve management efficiency. There is a lot of repetitive work in the traditional educational management model, which is time-consuming and laborious.

With the introduction of new technologies, artificial intelligence can effectively replace routine work in traditional educational management, help reduce the workload of educational administrators, and ultimately make the management process more efficient and smooth. Artificial intelligence helps to optimize management decision-making. In the traditional educational management model, human experience plays a key role, making it difficult to make scientific and accurate decisions, while artificial intelligence helps to avoid this problem. From the perspective of decision-making process, relying on big data analysis, artificial intelligence helps to achieve precise control over all links of educational management, thereby improving the scientificity and pertinence of educational decisions and reducing deviations caused by subjective human decision-making. Artificial intelligence helps to promote educational equity. The traditional educational management model inevitably has gaps between urban and rural areas and regions, and due to capital, technology and other reasons, the gap is constantly widening, making the digital divide inevitable. With the introduction of new technologies, traditional regional and resource barriers are gradually broken, high-quality educational resources are shared across regions, thus effectively narrowing the educational development gap between regions and between urban and rural areas (Ministry of Education of China, 2024).

Existing Difficulties

With the continuous popularization of artificial intelligence technology, many unprecedented problems have gradually emerged, mainly reflected in four aspects: insufficient artificial intelligence literacy of educational administrators, unbalanced regional development, prominent security risks, and technology divorced from reality. First, educational administrators have insufficient artificial intelligence literacy. As an emerging technology, most educational administrators do not have relevant professional backgrounds, thus lacking systematic understanding of artificial intelligence technology. There is a shortage of professionals who not only master artificial intelligence algorithm development and system maintenance but also understand the business logic of educational management. In reality, a purely technical team cannot accurately grasp the needs of educational scenarios, while an educational management team lacks basic knowledge of AI technical principles. This leads to problems such as mismatched demand docking, disjointed scheme design, and repeated adjustments in the implementation process（Li, R. C. 2025）. Meanwhile, the training system for artificial intelligence literacy of educational administrators carried out by relevant departments is imperfect, with lack of targeted and practical training content, which ultimately cannot effectively improve administrators' technology application ability (Peng, C. L., Shi, Y. H., & Yang, H. 2021). Due to the high cost of artificial intelligence-related applications, economically underdeveloped areas are difficult to provide financial support, leading to unbalanced regional development. The deep integration of artificial intelligence into educational management requires a lot of capital, technology and human investment, which brings heavy financial pressure to schools in underdeveloped areas, especially rural and remote areas. Artificial intelligence technology has brought data security problems and relevant ethical risks.In the process of promoting artificial intelligence, a large amount of data needs to be collected, including personal privacy of teachers and students and sensitive educational information. However, the current data security supervision system in the education field is not sound, leading to high risks of data leakage and illegal use. AI can serve as a tool in educational supervision, but it may also give rise to new ethical issues（Chen, W., Hou, Y. H., & Yang, J. 2025）. There is a problem of insufficient adaptability in the popularization of artificial intelligence technology. Some new technologies are divorced from the reality of educational management and difficult to solve specific problems. At present, most artificial intelligence applications in the field of educational management are general solutions, with insufficient personalized design for different regions, schools and management scenarios, making it difficult to meet diverse management needs (Peng, C. L., Shi, Y. H., & Yang, H. 2021). Currently, the smart education systems in

various universities are often developed by different vendors, who adopt different technical architectures and data standards, resulting in data silos between different institutions. The training data of large models may contain social biases, leading to algorithmic bias when the models provide services and exacerbating educational inequity. Furthermore, the excessive application of large models may weaken the importance of teacher-student interaction, resulting in a mechanized educational process（Zhang, L. 2025.The popularization of At present, the internal management of colleges and universities is complex and requires massive data support for digital transformation. However, some colleges and universities have multiple separate management systems and platforms, which fail to realize dynamic data management, resulting in data barriers between different departments（Wang, Y. L. 2026）.

OPTIMIZATION PATHS FOR THE INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO EDUCATIONAL MANAGEMENT

Improve the Relevant Training System and Enhance the Artificial Intelligence Literacy of Educational Administrators

Faced with the popularization and application of new technologies, the literacy of educational administrators themselves is crucial. In addition to the self-learning of educational administrators, education authorities should actively build a comprehensive, hierarchical and classified training system, actively develop training content combining theory and practice, and focus on improving educational administrators' technology application ability and scientific decision-making ability. It is necessary to optimize resource allocation, appropriately incline high-quality training resources to rural, remote and underdeveloped areas, and ensure that all educational administrators have equal training opportunities (Ministry of Education of China, 2024). In addition, a training assessment mechanism can be established to ensure the effectiveness of training (Peng, C. L., Shi, Y. H., & Yang, H. 2021).

Increase Policy and Financial Support and Promote Balanced Regional Development

Education authorities can issue special support policies, increase financial investment in artificial intelligence application, focus on supporting schools in rural and remote areas, and reduce the cost of technology application (Ministry of Education of China, 2024). It is necessary to make full use of existing resources, especially encourage enterprises and social organizations to participate in investment, so as to build a diversified investment mechanism. Strengthen regional cooperation and exchanges, promote the sharing of high-quality artificial intelligence educational management resources, and gradually narrow the regional development gap.

Improve the Supervision System and Prevent Data Security and Ethical Risks

Faced with security and ethical risks, restrictions should be imposed through laws and regulations to clarify what can and cannot be done. Specifically, laws, regulations and industry standards related to education data security can be improved, clarify the specifications for data collection, storage, use and transmission, and severely crack down on data leakage and abuse.

In addition, a sound education data security supervision mechanism can be established to realize real-time monitoring and whole-process supervision of data security. Strengthen artificial intelligence ethics education, clarify the boundaries of human-machine responsibilities, and establish an artificial intelligence ethics review mechanism.

Deepen Technology Integration and Actively Create Personalized Solutions

The digitalization of education management is not simply a technological upgrade, but a means to promote the all-round development of students and cultivate outstanding talents. This requires the construction of a student-centered, full-process management and service system, the innovation of teaching models, the optimization of administrative processes, and the restructuring of student services, so that digitalization can truly become a system supporting the all-round development of students（Gu, Y., & Liu, P. Y. 2026. General solutions cannot solve

personalized problems. It is necessary to conduct in-depth research on the actual needs of different regions, schools and management scenarios, and then develop intelligent management systems and personalized solutions that fit educational management practice. Through technological innovation based on research, ensure that technology adapts to the real needs of educational management (Wu, D., & Feng, Q. Y., 2025). Promote the deep integration of artificial intelligence and the core process of educational management, and give full play to the value of technology in key links such as educational decision-making, teaching evaluation and teacher management.

CONCLUSION

Taking literature analysis as the core method, this paper systematically sorts out important literature in the field of artificial intelligence and educational management at home and abroad in recent years, including core journal papers and authoritative policy documents such as the Outline of the Plan for Building a Country Strong in Education (2024–2035), and analyzes the application status, practical effects, practical difficulties and optimization paths of artificial intelligence in educational management. The research process is divided into three key stages: first, literature retrieval, using "artificial intelligence", "educational management" and "educational digitalization" as keywords to retrieve and screen literature in authoritative databases and eliminate irrelevant and low-quality literature; second, literature sorting, classifying and sorting the selected literature according to research content, methods and conclusions; third, literature analysis, summarizing the current situation and practical effects of technology application based on the sorted literature, analyzing the causes of difficulties and putting forward improvement strategies. The analysis results show that artificial intelligence has broad application prospects in the field of educational management, helps to enhance decision-making accuracy and ensure educational equity, and ultimately promotes the digitalization and intelligentization of educational management. At the same time, the current technology application still faces many challenges, including insufficient intelligent literacy of educational administrators, high application costs, prominent data security and ethical risks, and insufficient adaptability of technology to management scenarios. This study adopts the method of literature analysis and lacks empirical data to verify the conclusions, so it has certain limitations. In the future, empirical research can be carried out on specific application scenarios of artificial intelligence in educational management to explore more practical technical schemes and application paths; meanwhile, international exchanges and cooperation should be strengthened to learn from advanced international experience, continuously improve the application level of artificial intelligence in educational management in China, and provide solid support for building a country strong in education.

REFERENCES

Wu, D., & Feng, Q. Y. (2025). Educational reform in the artificial intelligence era: Development situation and practical path. Journal of Central China Normal University (Humanities and Social Sciences Edition), 44(6).

Dai, L., & Chen, X. L. (2025). Research on the digital transformation of higher education in the era of AI large models. Education Exploration, (12), 82–87.

Zhang, L. (2025). Research on large model empowering smart education in colleges and universities. Journal of Liaoning Institute of Science and Technology, 27(05), 59–61.

Li, R. C. (2025). Exploration on the opportunities and dilemmas of artificial intelligence integration in university education management. Chengcai (Success), (18), 21–24.

Di Wu, Hejiang Wu. (2024). Potential Risks of the Application of General Large Model Education and Their Avoidance: From the Perspective of Technology Ethics[J]. Journal of East China Normal University(Educational Sciences), 42(8): 64-75.

Peng, C. L., Shi, Y. H., & Yang, H. (2021). A relationship between smart classroom environment perception and internet self-efficacy. Modern Educational Technology, 31(12), 89–96.

Zhang, F. (2025). The application of the integration of computer technology and artificial intelligence in the field of education. China Computer & Communication, 37(16), 215–217.

Kong, D. L. (2026). Research on the informatization transformation path of higher vocational education management empowered by artificial intelligence. Modern Vocational Education, (03), 177–180.

Wang, Y. L. (2026). Research on digital transformation of higher education management driven by artificial intelligence technology. Journal of Jiamusi Vocational Institute, 42(02), 146–148.

Wu, W., & Feng, L. (2025). The internal logic, practical tensions and optimization paths of artificial intelligence embedded in educational governance. Modern Education Management, (10), 44–54.

Chen, W., Hou, Y. H., & Yang, J. (2025). The role and transformation of artificial intelligence in postgraduate education management. Education Teaching Forum, (47), 1–4.

Chen, X. F. (2026). Research on digital-intelligent information technology empowering university education management. Office Automation, 31(04), 25–27.

Gu, Y., & Liu, P. Y. (2026). Empowering effects and challenges of generative artificial intelligence on digital education management in universities. University Education, (03), 41–46.

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