

# **Analysis on the Innovation of Education Management in the Age of Artificial Intelligence**

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**Abstract:** With the development of the electronics industry, artificial intelligence has entered all aspects of my life. From factory management to education management, artificial intelligence is a big innovation in education. This paper analyzes the value of education in the era of artificial intelligence from the background of the times, and further expounds the significance of education management in the era of artificial intelligence, and analyzes the challenges that education management innovation needs in the era of artificial intelligence, hoping to enhance the innovation of education management in the era of artificial intelligence. To promote the development of the education industry.

## **1. Introduction**

Artificial intelligence has infiltrated into our daily production and life unconsciously. The introduction of AI technology has significantly improved the efficiency of enterprises. At present, the education management of many schools in China has begun to use artificial intelligence to implement management, which has improved to some extent. Management efficiency. But at the same time, the application of artificial intelligence has made the education management work face unprecedented challenges. Therefore, how to effectively manage education in the era of artificial intelligence, improve students' learning efficiency, and improve the school system has become a hot topic.

## **2. The Practical Significance of Artificial Intelligence to Education Management**

### **2.1 Education Management Forecasting Function**

The programmer writes certain programs, data, and preconditions into the intelligent system, and artificial intelligence can simulate and predict the final result. Forecasting is an important part of education management that cannot be ignored. Before artificial intelligence was invented, people used various methods to predict management results, such as Delphi. In addition to the results, the predicted objects include factors related to the management plan, such as the preconditions that affect the implementation of the plan, possible dilemmas, and feasible corrective measures. The artificial intelligence system integrating knowledge in cybernetics, information theory and statistics has powerful functions such as comprehensive processing of big data, complex program analysis, probability probability estimation, visual image simulation, multi-dimensional measurement modeling, etc. The forecasting effect is obviously much better than the single expert forecast. For example, the artificial intelligence expert system can comprehensively apply the professional experience provided by experts in a specific field, and use artificial intelligence reasoning technology to simulate. As shown in Table 1, the effect of the artificial intelligence teaching management mode in a university is compared with the traditional teaching mode. It is found that artificial intelligence can change the learning mode of students through pre-class, in-class and post-class learning efficiency, and improve students' learning. s efficiency.

Table 1 Effect of Artificial Intelligence Teaching Management Mode in a University

Learning efficiency	Traditional education management model	Artificial intelligence education management mode
Before class	10	20
In the class	40	60
After class	10	20

## 2.2 Making Teaching Management More Scientific and Reasonable

Artificial intelligence, characterized by deep learning, cross-border integration, human-machine collaboration, open intelligence, and autonomous control, has a premise of having a large amount of valid data. As the means and purpose of artificial intelligence, dataization will inevitably make education management no longer a fuzzy management, and everything will be evidence-based and evidence-based. Management dataization will inevitably lead to management transparency and management rationality. When most of the work metrics are based on data for planning, monitoring, or evaluation, one obvious benefit is that the work is more transparent and the black-box operation is significantly reduced. Citizens in the era of artificial intelligence should fully realize the importance of data for civic life, enhance their sense of data through their own or collective efforts, strengthen the use of data, and strive to obtain the corresponding data rights, so as to better achieve more Quality data survival. As far as the relevant subjects of education management are concerned, the quantification of indicators will make their work or learning more clear, purposeful, and comparable. This is a good incentive; in terms of leaders, management data will be maximized. On the basis of avoiding blind decisions and other emotional management, random decision management.

## 2.3 Improve Education Management Supervision

Artificial intelligence has powerful monitoring and early warning functions, which is one of the reasons why it is praised. When the real-time situation is inconsistent with the preset conditions, the early warning program is started, so that the manager can find the problem, take the emergency plan, and implement the corrective measures at the first time. With this feature, you can eliminate the loss caused by problems that are not found or not timely. At the same time, the digitization and visualization of artificial intelligence will facilitate the work of third-party educational assessment (or monitoring) organizations. In addition, the introduction of artificial intelligence will broaden the monitoring channels of education management and the monitoring methods of innovative education management. For example, in the past, examinations as the main way to monitor and evaluate the quality of education have produced many drawbacks of exam-oriented education, and the monitoring and evaluation of artificial intelligence will be comprehensive and comprehensive, which will circumvent the traditional education monitoring model to the greatest extent. The defamatory features such as squatting and squatting.

## 3. Education Management Needs to Face the Challenge of Artificial Intelligence

### 3.1 In Terms of Promotion

Although education managers have realized the rationality and scientific nature of artificial intelligence and comprehensively improved the quality of education and teaching, it is of great significance. However, the application cases of artificial intelligence at this stage are still relatively fragmented, and there is still a long way to go from comprehensive promotion. How can future education management make artificial intelligence widely and properly applied, how to maximize its intrinsic value, how to improve the ability of educational administrators to apply and control artificial intelligence, and to cultivate future education managers who meet the needs of artificial intelligence technology application How to balance smart and non-intelligent life and maximize the circumvention of the negative effects of technology has become a challenge before people. Whether artificial intelligence is fully “landed” in the field of education, and whether there is a mature application model that can be promoted is still a major problem that plagues the education sector.

### **3.2 The Problem of the Dual Attribute of Artificial Intelligence**

Artificial intelligence has deep learning capabilities, such as machine learning simulation or realization of human learning behavior, to acquire new knowledge and skills, and to update existing knowledge structures to improve their performance. Use predictive learning to solve how to develop over time, explore data, use integrated learning to solve problems, explore data in spatial distribution, and use instructional learning to solve how to explore the direction of data generation. Learning by artificial intelligence alone is not enough. As we all know, the lack of thinking is the biggest drawback of the existence of artificial intelligence. Artificial intelligence is just a kind of “imitation intelligence” written by the programmer. The diversity and variability of things, especially the uniqueness of students as growing people, highlights the limitations of this “imitation of intelligence”. Artificial intelligence only recognizes the “reason” input by the programmer, and cannot understand the “love” in the world according to the emotions at that time. How to deal with the “reason” set by the artificial intelligence programmer and the “love” that the school needs to understand is the problem of artificial intelligence.

### **3.3 Information Security Issues in the Management Process**

Artificial intelligence relies on data and programs to run. The more specific the data, the more accurate the corresponding service. In order to learn to suggest science, it must be connected with the Internet, and the quality and benefits of education can be more significant. However, the authorization of data and the security of the network have become an important factor in artificial intelligence, which directly affects the privacy of relevant personnel to a certain extent. For example, students' family status, academic performance, punishment records, and other information and data related to personal privacy are hidden in the process of being exploited by artificial intelligence. At the same time, artificial intelligence also involves ethical issues such as human rights, responsibility, ethics, and environment. For example, in education management, whether intelligent machines have systematically violated the human rights of teachers and students; how intelligent robots are set up in schools; intelligent machines in education and education management, who is responsible for accidents, this is artificial intelligence Enter the challenge of education management.

## **4. Innovative Measures for Education Management in the Era of Artificial Intelligence**

### **4.1 Achieve Student-Centered Individualized Teaching**

Teaching students in accordance with their aptitude has always been the main purpose of education. The educational value of artificial artificial intelligence is mainly manifested in two aspects: First, it can realize individualization, and learn to customize according to teachers' desires. The learning process and results of the students in the era of artificial intelligence will be recorded in real time and validated. With the support of blockchain and other technologies, cloud schools have been established, so that the resources of the school are well expanded to a certain extent. Students in the school can formulate learning goals and plans according to their own needs. Artificial intelligence can be achieved through goals and plans. Set the pace and content of the study, and even teach students the best teachers in the field. Second, it is possible to create a comprehensive study for students based on the concept of sustainable development. Through artificial data analysis and intelligent recognition, artificial intelligence can mine and match students' learning needs, accurately locate learning, and provide students with the most appropriate education mode. The artificial intelligence of cloud computing and big data technology has brought about diversification of resources, the scale of data and the intelligence of computing. It has solved the problem of individualization in education before, and truly realized the educational ideal of “teaching students according to their aptitude”. Vigorously promote intelligent education, let China's education truly realize the deep integration of information technology and education, and develop fair and quality education, which is conducive to the realization of scale and individualization of education. It is also an important way to solve the difficult problem of education development in China. Student-centered personalized teaching is already the value of

educational reform and innovation in the era of artificial intelligence.

#### **4.2 Introducing Artificial Intelligence Technology to Change the Educational Environment**

The educational environment in the era of artificial intelligence is more open and diverse than the educational environment. The artificial intelligence of the Internet of Things, blockchain and other technologies will break the barriers between the various education systems, so that the teaching elements can not only be “joined” but also more “moving”. The fixed classroom space has also been broken by artificial intelligence education, and the layout of teaching and learning scenes will be more flexible. The classroom layout centered on the podium was gradually replaced by a movable table and chair. In the same classroom, students of different classes, different grades, and different disciplines will become more and more common. The learning places will expand from the classroom to the outside of the classroom, and the learning environment from the online and offline will become the norm. The network of information has accelerated the flow of educational resources, and the traditional closed education pattern will cease to exist. Based on the actual needs of different types of learners, the individualized elements constructed by the learning environment are formed by multi-dimensional and multi-variables for learners to choose. With the core of openness, interconnection and innovation, intelligent education creates a new teaching concept, which enables education culture to truly realize “education is life, school is society”. The “ubiquitous” learning culture and environment created by intelligent education breaks the exclusive phenomenon of educational resources in the region, schools and people. Artificial intelligence can be used as a generation agent for learning content. It automatically searches for, correlates and aggregates appropriate learning resources according to students' personality characteristics and development appeals. The future teaching form will be the same as Figure 1. On the other hand, artificial intelligence can connect formal learning environment and informal learning environment, and ubiquitous learning is becoming the norm. The ubiquitous intelligent terminal and interpersonal network have laid a solid foundation for lifelong learning.

#### **4.3 Giving Full Play to the Individual Traits of Each Subject of Teachers and Students**

For teaching, the future thinking mode of teachers will change to the thinking system of human-computer collaboration. The future education in the era of artificial intelligence is the era of man-machine co-teaching. Giving full play to the respective advantages of machines and humans will be the key to improving the efficiency of education in the era of artificial intelligence. Artificial intelligence can replace teachers' many tasks in education, such as correcting assignments, daily Q&A, batch grouping and other relatively low-end intellectual and manual labor. Therefore, teachers should actively embrace artificial intelligence, actively respond to the challenges brought by artificial intelligence, and cultivate independent learning ability. This also means that the requirements of teachers' ability in the era of artificial intelligence will change greatly, especially the requirements for teachers' information literacy and innovative literacy are promoted to an unprecedented important position. Teachers' ability standards will be redefined, and teachers' professional qualities will be Fully updated.

For students, the era of survival and development with smart devices has arrived, and the combination of human-machine and human-machine symbiosis will become the main learning method in the future. It can be said that the learning subject in the era of artificial intelligence is a community of human and machine integration. Students in the era of artificial intelligence must not only use their own brains to learn, but also learn from artificial intelligence supported by computers and robots. The future learning process must be a highly collaborative process of self-learning and artificial intelligence learning. Therefore, cognitive outsourcing will become a common feature of learning in the era of artificial intelligence. Many problems that need to be solved by traditional learning methods can be solved by machines. Machines can significantly speed up the traditional learning process, or can directly replace part of the learning process.

## 5. Conclusion

Artificial intelligence can bring people some convenience. It has certain advantages in education management innovation than traditional ones, but school management should recognize the advantages and disadvantages of artificial intelligence, and recognize the situation to make good use of artificial intelligence. To improve the management of the school, the management of the school can play its role in the era of artificial intelligence.

## References

- [1] Ouyang Peng, Hu Yucheng.(2019).Research on the Transformation of Educational Management in the Age of Artificial Artificial Intelligence[J]. University Education Science,vol.173,No. 01,pp.84-90+127.
- [2] Zhong Shaochun, Tang Weiwei. (2018).Research on the direction and path of educational innovation development in the artificial artificial intelligence era [J]. Research on Audio-Visual Education, vol.39,No. 10,pp.17-22+42.
- [3] Zhu Ming, Sun Yuting, Chen Li, et al.(2019). Research on the Cultivation of Innovative Practice Talents in Rehabilitation Specialty in Artificial Artificial Intelligence[J]. Medical Education Management, No. 04.
- [4] Li thickening. (2019).Education of “Education” in the Age of Artificial Artificial Intelligence [J]. Innovative Talent Education, vol.25,No. 01,pp.35-38.