

The Challenges and Countermeasures of Artificial Intelligence Technology in the Field of Education Management

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Abstract: The advent of the era of artificial intelligence has brought about earth-shaking changes in people's lives. At the same time, the development of artificial intelligence technology has also brought many challenges to the field of education management, making educators have to re-examine their own positioning. In order to better solve the challenge of artificial intelligence technology to education management, this paper proposes a teaching mode based on "AI recording and broadcasting". Based on big data technology and artificial intelligence technology, this model generates teaching videos through "AI synthesis" of teaching resources, which helps more students to solve knowledge difficulties more pertinently, and at the same time, it can better liberate teachers' resources and make them invest in guiding and inspiring students' work orientation.

Keywords: Artificial intelligence; AI recording and broadcasting; Teaching resource

Many teachers think that the development of artificial intelligence technology is a kind of impact and challenge to the field of education and teaching, which makes them unable to find an accurate position in education. Based on my own years of experience, the author thinks that teachers can not only reduce the heavy teaching workload, but also effectively improve students' learning efficiency and interest as long as they make rational use of artificial intelligence technology. Based on this, this paper puts forward the solution to the impact and challenge of artificial intelligence technology on the field of education management, hoping to provide some reference for all educational colleagues.

1. The challenges brought by artificial intelligence technology to the field of education management

1.1 The issue of educational equity

The rapid development of artificial intelligence technology may aggravate the unfairness of education. In some schools with relatively good educational resources, teaching methods and resources are advanced, and more cutting-edge and high-quality knowledge resources can be obtained through artificial intelligence technology. However, in some remote mountainous schools, the teaching resources are scarce, the teaching methods are too simple, and they lack the mastery of more advanced teaching models, let alone the use of artificial intelligence technology to achieve teaching goals. Therefore, the emergence of artificial intelligence technology will further aggravate the unfairness of education in different regions ^[1].

1.2 The role of teachers change

Artificial intelligence technology can replace teachers' work to some extent, such as automatically correcting homework, automatically evaluating test scores, and automatically analyzing students' difficult points. This also makes the role of teachers change to a certain extent, and needs to change from a simple knowledge imparting to a learning guide and an innovator. However, at present, many roles have not adapted to their own accurate positioning in the era of artificial intelligence, and even more, they do not recognize the idea of changing teaching roles, which leads to differences in teaching modes and teaching methods among different teachers, so that students can not adapt better ^[2].

1.3 Changes in access to knowledge

With the popularization of artificial intelligence technology, the ways for students to acquire knowledge will become more diversified. Traditional classroom teaching mode may no longer be the only source of knowledge, which requires educators to rethink teaching methods and curriculum design, and try to combine traditional teaching mode with artificial intelligence technology^[3].

1.4 The speed of technology update is fast

In the era of artificial intelligence, students acquire knowledge more quickly and accurately, and even some knowledge fields have exceeded the scope of teachers' understanding. In this case, educators need to constantly learn and update their knowledge reserves to ensure that their professional knowledge level can catch up with the pace of artificial intelligence technology, so this also poses a higher challenge to teachers' professionalism and learning.

2. Artificial intelligence technology to solve the dilemma of education management—"AI recording and broadcasting" mode

With the advent of the Internet era, the education, teaching and management mode has also undergone earth-shaking changes. Nowadays, the teaching mode has changed from the "one-to-many" mode of traditional classroom to the direction of educational diversification. As a rising online teaching mode in recent years, distance teaching is gradually recognized and loved by students. At present, distance teaching can be divided into the following modes: (1) "online+one-on-one teaching": this teaching mode is highly targeted and can carry out "fixed-point blasting" for students' difficult points, but due to the priority of teachers, it will lead to a situation of "more wolves and less meat". (2) "Online recording and broadcasting class", which solves the problem of limited teaching resources and teachers, and can share excellent teachers' resources online, but this mode is similar to the traditional teaching mode, lacking the interaction between teachers and students, and also limiting students' independent thinking ability. (3) "Online live class", which takes into account the advantages of "online+one-on-one teaching" and "online recording and broadcasting class", can make limited teaching resources serve more students, but the disadvantages of lack of interactivity and pertinence are also prominent. (4) "Double-teacher classroom", this teaching mode means that one teacher is responsible for recording teaching videos and conducting live teaching. In the live broadcast process, another teacher refines the knowledge points in the videos online and answers students' questions synchronously^[4].

The above teaching modes have their own advantages and limitations, but with the development and popularization of artificial intelligence technology, a teaching mode based on "AI recording and broadcasting" proposed in this paper can integrate the advantages of the above teaching modes. "AI recording and broadcasting" is to collect and summarize the face information, voice characteristics, language logic and teaching style of all teachers who have taught or recorded videos on the network through artificial intelligence technology, and at the same time automatically generate the teaching contents and knowledge points of various disciplines of outstanding teachers with the help of big data technology. When students study online, they can choose the appearance, voice and teaching style of teachers according to their own preferences, and they can ask various questions to AI teachers. AI teachers can also analyze the students' absorption and understanding of knowledge points through the students' facial information when answering knowledge points, so as to judge the students' learning status and whether they can explain better^[5].

Compared with the four teaching modes mentioned above, the teaching mode of "AI recording and broadcasting" is more targeted and less granular. The traditional teaching mode or video teaching is based on a chapter as a lesson, which covers more contents and knowledge points, but the content of "AI recording and broadcasting" is to take a knowledge point or a sliced knowledge point as a learning unit. In addition, different from the traditional recording and broadcasting mode, "AI recording and broadcasting" is aimed at the current learning situation of students and their specific needs. For example, when students are learning Su Shi's poem Huanxisha Youqiushui Qingquan Temple in the "AI recording and broadcasting", the AI teacher is explaining "Who knows that life is endless? The water in front of the gate can also flow to the west! Hugh will sing yellow chicken with white hair. " Sometimes, the artistic conception of this poem will be interpreted as "this is Su Shi's pursuit and yearning for life and the future, and it is a call for youth and vitality." It is also a thought-provoking and inspiring open-minded word made by Su Shi when he was relegated to life and faced with hopeless career, which embodies Su Shi's spirit of loving life and being positive and optimistic. " At this time, if the AI teacher concludes that the students don't fully understand the true meaning of this word through the recognition of the students' facial expressions, the AI teacher can change the interpretation method or change a poem with the same artistic conception but more easy to understand to help the students better understand, absorb and master. At this time, if students can understand the true meaning of this poem, but suddenly want to understand the road of Su Shi's demotion and the background of the times at that time, AI teachers can quickly switch the content of "recording and broadcasting" and quickly find the knowledge points and teaching content related

to Su Shi's demotion.

From the above, it can be seen that the teaching mode of "AI recording and broadcasting" based on artificial intelligence technology can better help the multi-form and diversified development in the field of education management. AI teachers can free the teachers in the school from the heavy teaching tasks, better change their role orientation, and create a mixed teaching mode by cooperating with AI teachers, that is, "AI recording and broadcasting" is responsible for explaining the knowledge points, and teachers are responsible for guiding students to understand the knowledge points, learning thinking modes and problem-solving ideas. In this case, teachers will also get more time to communicate with students, better understand students' ideas and obstacles in the learning process, and then guide them so that students are no longer afraid of the difficulties encountered in the learning process. In addition, in the process of teaching evaluation, teachers can use intelligent robots to correct test papers and evaluate their strengths and weaknesses according to each student's examination situation, which will make teachers more targeted in future teaching work and effectively improve teaching efficiency.

Conclusion:

To sum up, this paper first summarizes the challenges brought by artificial intelligence technology to the field of education management, and then puts forward a brand-new "AI recording and broadcasting" teaching mode to help teachers in all disciplines and fields better change their orientation and improve teaching efficiency in the era of artificial intelligence.

References:

- [1] Zhang Yue. The challenge of generative artificial intelligence technology to higher education-taking ChatGPT as an example [J]. Qin Zhi, 2023,(11):124-126.
- [2] Li Yongzhi. The impact of a new generation of artificial intelligence technology on education [J]. Education Reference, 2023,(04):2-3.
- [3] Tian Miao. On the impact of artificial intelligence technology on the publication of vocational education textbooks [J]. Publishing Reference, 2023,(07):26-29.
- [4] Tao Rong. Research on the influence of artificial intelligence technology on college students' labor education and countermeasures [D]. Guangdong University of Finance and Economics, 2023.
- [5] Xu Pengfei. The impact of artificial intelligence technology on education and teaching [J]. modern business trade industry, 2022,43(21):252-254.