Innovation of Computer Teaching Strategy in Colleges and Universities under the Background of Artificial Intelligence

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Absrtact: Under the background of artificial intelligence, the operation mode of various industries has changed to a certain extent. Computer teachers in colleges and universities should also fully affirm the practical advantages of artificial intelligence in the teaching system, guide students to actively explore the relationship between professional knowledge and artificial intelligence, and then improve the depth and breadth of teaching. Based on this, this paper first briefly analyzes the problems existing in computer teaching in colleges and universities, and then puts forward some effective teaching strategies, in order to provide reference for computer teachers.

Keywords: Artificial intelligence; Efficient computer; Teaching strategy

With the rapid development of science and technology, the requirements for talents are becoming more and more strict. Colleges and universities focus on cultivating high-quality compound talents, while computer teaching focuses on improving students' practical skills, so that students can adapt to the changes brought

about by artificial intelligence faster. Therefore, in order to meet the current development needs, computer teachers in colleges and universities should keep pace with the development of the times, actively innovate and optimize teaching methods, rely on artificial intelligence, strengthen computer teaching innovation, so that students can obtain the corresponding knowledge and ability, and facilitate their future employment and entrepreneurship. With the rapid development of science and technology, the requirements for talents are becoming more and more strict. Colleges and universities focus on cultivating high-quality compound talents, while computer teaching focuses on improving students' practical skills, so that students can adapt to the changes brought about by artificial intelligence faster. Therefore, in order to meet the current development needs, computer teachers in colleges and universities should keep pace with the development of the times, actively innovate and optimize teaching methods, rely on artificial intelligence, strengthen computer teaching innovation, so that students can obtain the corresponding knowledge and ability, and facilitate their future employment and entrepreneurship.

1. Problem in Computer Teaching in Colleges and Universities

(1) Imperfect curriculum system

Based on the current computer course teaching innovation, to create a perfect theoretical system, students need to have a certain professional quality, and have a preliminary understanding of the development of computer under the background of artificial intelligence, so as to learn professional knowledge. However, the construction of computer curriculum system in colleges and universities has not comprehensively expounded this aspect, which leads to the imperfect theoretical teaching system, is not conducive to students' learning and growth, and also affects the learning of computer information under the background of artificial intelligence.

(2) Single teaching mode

The theoretical teaching mode has little value for teaching practice, which leads to students losing interest in major and problems found in learning not being solved in time, thus leading to students' lack of certain independent thinking ability. As far as the actual teaching situation is concerned, knowledge dissemination is too abstract, which leads to too boring and single content, and students' practical ability is not strong, and the teaching effect is not ideal.

2. Computer Teaching Strategy in Colleges and Universities under the Background of Artificial Intelligence

(1) Building a perfect curriculum system

The development of artificial intelligence technology is the product of social and economic growth, and it is also a development trend in the future. Computer teachers in Colleges and Universities should keep up with the trend, pay attention to the development of artificial intelligence, and build a perfect computer curriculum system. For example, the application of artificial intelligence to computer-aided teaching activities can guide students to carry out comprehensive learning in a certain subject, and dynamically adjust according to students' learning behavior, so as to ensure that students can effectively judge and select knowledge with the help of intelligent form, which makes the teaching content highly targeted.

First, the construction of knowledge base. Based on the characteristics of the combination of multimedia database and artificial intelligence technology, which contains a large number of teaching content, it is convenient for teachers to make effective choices when making decisions. The information in the knowledge base can also be shared with resources. Teachers should reduce the design of programs and scripts in time.

Second, the expert section. Expert section has the function of problem generation and solution, or it can effectively evaluate students' behavior after learning, and solve related problems with the help of fixed algorithm. For example, heuristic strategy is mainly to solve the problem, which can quickly find the correct answer, but can not guarantee the consistency of the results, so it is generally applied to the knowledge points without fixed algorithm. In addition, the learning system can also make effective analysis according to the real situation of students, give reasonable opinions for some mistakes, and improve and perfect them in time.

Third, students. The student section focuses on the completion of two tasks. One is to accurately identify the students' mistakes, recognize the students' mistakes caused by their lack of skills, or give a reasonable explanation for the students' wrong behavior. Within the scope of the subject, it will effectively judge students according to the scope of professional knowledge generation, and recognize the correct behavior of the current students, thus improving their computer application ability.

Fourth, education module. Based on the visible interaction of CAI, it can be embodied in the form of teaching branches, and the teaching strategies and contents

are separated from each other. The system can choose the corresponding strategies according to the needs of teaching at any time. It can be seen that the effective application of artificial intelligence in computer teaching can predict students' relevant behaviors in advance, and make comprehensive analysis in combination with predetermined strategies, so as to adjust teaching methods according to students' performance at different stages, thus stimulating students' interest in exploring unknown things.

(2) Innovative teaching form

Artificial intelligence is a comprehensive subject. Compared with the traditional teaching mode, it is easier to mobilize students' desire to explore and actively tap their potential, which is also an effective way to innovate teaching forms. Therefore, university teachers should adapt to the current development needs, take the syllabus as the main line, apply various intelligent teaching forms, and guide students to find the interests and hobbies of development. At the same time, teachers should recognize the advantages and disadvantages of artificial intelligence, apply it flexibly and autonomously to the teaching of computer course, create a good teaching environment, improve students' understanding ability, and explain the relationship between subject and artificial intelligence with the help of practical cases, so as to deepen students' impression. Moreover, in the process of learning, the ways for students to acquire theoretical knowledge are increasing, through this, we can exercise students' abilities of the thinking and solving problems from multiple directions, so that students can better adapt to the workplace life in the future.

In order to cultivate computer talents who meet the requirements of the times and enterprises, we should deeply analyze artificial intelligence and realize the effective docking of computer and artificial intelligence, which can not only save teaching costs, but also promote the development of artificial intelligence. For example, image recognition and actual interaction play a very important role in the field of computer education. Artificial intelligence frees teachers from the tedious work of marking papers, while speech recognition is convenient for teachers to evaluate oral English and answer students' questions online. In addition, the effective application of personalized learning, intelligent feedback and other functions has also been widely used in computer professional teaching. The intelligent teaching software developed by enterprises provides students with differentiated learning and personalized challenges. Teachers, on the other hand, optimize the teaching process in the form of inquiry, lead students into the fields of image and speech recognition, and help computer majors to establish AI concepts and realize the effective integration of knowledge and real life.

(3) Building a high-level computer teacher team

Colleges and universities should affirm the effective application of artificial intelligence in computer teaching and create multiple artificial intelligence teaching systems. At the same time, we should also carry out teachers' technical training to recognize the development trend of artificial intelligence in the future. Teachers' teaching work is not only a simple knowledge imparting, but also should guide students to actively analyze and explore the connection between computer major and artificial intelligence, find commonalities, and promote the development of college students' innovative thinking.

On the one hand, from the perspective of school management, it is necessary to recognize the integration of artificial intelligence and education, establish a brand-new research and development structure, adjust the personnel training program in colleges and universities, improve the discipline construction mode, and embody the focus of artificial intelligence in the construction of teaching staff. Or it is to adopt the form of flexible application to support teachers and enterprise majors to study together, focusing on voice processing, human-computer interaction and other aspects. Or it is to develop appropriate training programs to improve teachers' information literacy, according to the actual situation of teachers at all ages. Under the precise influence of artificial intelligence, in order to reflect the personal value of teachers, we should also reflect the humanistic concept and business culture of the school, so as to realize the role of humanistic education. On the other hand, the improvement of teachers' quality. From the perspective of economics, the existence of artificial intelligence has reduced the workload of teachers. In the field of education, teaching thinking should be updated with the development of artificial intelligence, and computer teaching should be carried out with innovative thinking. In computer teaching, with the help of robot assistant, tablet computer and other information equipment, the effective integration of entity teaching and virtual space can be realized to guide students to carry out effective communication and discussion.

3. Conclusion

Integrating artificial intelligence into computer teaching in colleges and universities is an innovation of teaching content and form, which requires teachers to pay more attention to it, build a perfect auxiliary system, create more vivid course content, and promote the improvement of students' personal professional quality. However, it should be noted that teachers should pay attention to the application

frequency of artificial intelligence, control it within a reasonable range, and avoid letting artificial intelligence completely replace teachers.

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