Innovative Development of Higher Education Models under the Background of Artificial Intelligence

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Abstract: With the continuous development of artificial intelligence, it has brought huge dividends to higher education. But it also poses challenges to higher education. This requires educators to constantly update their educational concepts, guide learners to establish a lifelong learning awareness, constantly regulate the educational environment, and ultimately promote the innovative development of education.

Keywords: Artificial intelligence; Universities; Educational model; Innovation-driven development

Artificial intelligence, as one of the most cutting-edge technologies of the 21st century, is profoundly changing the way humans live and work. With the rapid development of machine learning, deep learning and other technologies, artificial intelligence has not only made breakthroughs at the technical level, but also sparked extensive thinking and discussions in various fields such as philosophy, ethics, and society. As the main battlefield for cultivating high-end talents, universities shoulder important functions such as talent cultivation, scientific research, and social services, and are also important gathering places for new things. Artificial intelligence is having a profound impact on the mode of higher education. On the basis of the gradual development and popularization of artificial intelligence, we must constantly explore the laws and characteristics of its development, innovate educational models, and meet the challenges of the times.

I. Artificial intelligence brings era dividends to higher education

1. Artificial intelligence empowers educational entities to enhance their capabilities

With the continuous development of artificial intelligence, it has an important impact on the improvement of the main capacity of higher education, mainly reflected in the following aspects: firstly, in terms of educational philosophy. With the continuous application of artificial intelligence, personalized education has a wider practical space in higher education practice. Artificial intelligence provides a large number of personalized teaching resources for the main body of higher education, and university teachers can further adopt different methods and approaches to carry out teaching activities according to the different educational objects. At the same time, teachers can analyze students' learning behavior and grades based on intelligent algorithms, and further provide customized tutoring plans. A new type of teacher-student relationship is gradually taking shape. The popularization and application of artificial intelligence have to some extent broken the traditional indoctrination classroom model, and have also led to the development and changes of teacher-student relationships. Teachers need to further think about building a new type of teacher-student relationship in the teaching process, in order to enhance the attractiveness of the classroom. In the era of AI, artificial intelligence will make people rethink the essence of education. Education is not only about the transmission of knowledge, but also about the shaping of personality and the cultivation of critical thinking. Secondly, in terms of educational ability. With the continuous application of artificial intelligence, communication opportunities between teachers will become more abundant, which is conducive to teachers learning from each other's strengths and weaknesses, and further improving the overall level of teacher teaching. With the continuous application of artificial intelligence, teachers will have better conditions to understand the needs of educational objects, and then carry out teaching activities more targetedly to improve teaching quality. Finally, in terms of educational collaboration. With the continuous development of artificial intelligence, the awareness of multi subject participation and collaboration is constantly increasing. Human machine collaboration can fully leverage the dual advantages of human intelligence and machine intelligence to achieve efficient interaction and collaboration between various teaching subjects and intelligent learning systems in the field of education. With the help of artificial intelligence, universities, enterprises, and society can achieve more effective and accurate collaboration, and exert greater energy in collaborative education, thereby enriching the main body of talent cultivation in universities and enhancing the effectiveness of talent cultivation in universities.

2. Artificial intelligence empowers the subjectivity of educational objects

With the continuous development of artificial intelligence, the subjectivity of the educational object, namely college students, in learning has been further opened up and realized. On the one hand, the continuous deepening and development of artificial intelligence will further enhance the learning initiative of college students. Artificial intelligence technology will bring more humanized human-computer interaction, enhance college students' interest in learning, and stimulate their learning motivation. Artificial intelligence can provide personalized content support according to college students' needs, effectively improving their sense of achievement and satisfaction in learning. Artificial intelligence tools can provide resources for college students' learning in various forms, and the combination of multiple resources such as text, video, and graphics can further deepen the learning experience of college students. Artificial intelligence, with its powerful data and computing power, can better solve the confusion and difficulties of college students in the learning process, and even help them further plan their study plans, systematically improving their learning outcomes from shallow to deep. On the other hand, the continuous development of artificial intelligence can further enhance the learning efficiency of college students. The continuous development

of artificial intelligence technology can further screen learning resources, focus on the pain points and difficulties in the learning process of college students, enable them to search for learning resources more effectively around learning problems, match their learning requirements, and avoid wasting time in a large amount of messy information. College students can further utilize artificial intelligence technology for data analysis, use auxiliary learning tools to organize and apply a large amount of learning materials in a shorter period of time, and obtain more practical knowledge in a wider range. Artificial intelligence can also provide college students with more perspectives and ways to solve problems based on their thinking patterns, helping them further explore and innovate, thereby enhancing their learning outcomes.

II. The challenges brought by artificial intelligence to higher education

1. The development of artificial intelligence poses a challenge to the main body of higher education

With the development of artificial intelligence, while providing convenience for university educators, it also poses challenges to their abilities. Firstly, the development of artificial intelligence poses a challenge to the adaptability of university educators. With the development of artificial intelligence tools, the speed of updating and iterating educational tools continues to increase, requiring educators to constantly learn, adapt to the updates and replacements of teaching tools, and timely update their teaching methods and tools. At the same time, due to the imbalance of educational resources, especially in the mastery and application of artificial intelligence educational resources, there are significant gaps between different regions, which will further exacerbate the imbalance of education and create more unpredictable technological barriers for educators in the process of communication and exchange. Secondly, the development of artificial intelligence will change the relationship between educators and learners, requiring educators to constantly adapt to the changing roles. In the era of artificial intelligence, the continuous improvement of students' personalized needs objectively increases their expectations of teachers and also affects the construction of teacher-student relationships. At the same time, when teachers use artificial intelligence machines to undertake teaching tasks, it also causes a shift in their functions and work focus, which will affect the image of teachers in the minds of students. Finally, while the development of artificial intelligence provides educators with massive resources, it also requires educators to have higher discernment abilities. With the widespread application of artificial intelligence, a large amount of information generated by artificial intelligence needs to be screened for accuracy by educators during the application process. At the same time, there are still issues related to the protection of intellectual property rights in the process of searching for information in artificial intelligence. It is even more necessary for educational institutions to provide control from various aspects such as policies and systems, and promote the standardized use of artificial intelligence.

2. The Impact of the Development of Artificial Intelligence on the Object of Higher Education

While artificial intelligence promotes college students' autonomy in learning and stimulates their initiative, there are also certain risks that pose challenges to their learning and growth. Firstly, the timeliness of artificial intelligence has to some extent led to college students' excessive dependence on machines, thereby reducing their enthusiasm for learning and thinking ability. College students who use artificial intelligence machines for a long time are easily attracted by their quick response ability, which leads to a direct transition from the thinking stage and excessive dependence on artificial intelligence machines, resulting in a decline in thinking ability. At the same time, excessive reliance on artificial intelligence recommendations by college students can easily lead to problems such as "information cocoons" and "small circle consensus", thereby reducing their communication with society, lowering their social attributes, and hindering their comprehensive development. Secondly, the popularization of artificial intelligence and the excessive dependence of college students on it will to some extent reduce their critical ability. In addition, if college students excessively concentrate their channels of obtaining information on a certain artificial intelligence machine, it will lead to a singularity of individual information exposure, thereby affecting their cognitive process. Finally, the development of artificial intelligence will give rise to new regulatory issues. In terms of academic standards, there are certain academic irregularities in the search process of artificial intelligence, especially the issue of property ownership generated by AI still has a lot of room for discussion. In terms of ethical standards, there are also areas that urgently need to be regulated regarding the handling of others' private information by artificial intelligence machines during the search process. At present, the regulations and rules in this area are not yet mature, which poses great challenges to the evaluation of college students after the application of AI.

III. The Path of Innovation in Higher Education under the Background of Artificial Intelligence

1. Educators need to update their educational philosophy

In the face of the rapid development of artificial intelligence, it is necessary to continuously promote the innovative development of higher education, which requires educational subjects to adapt to the development of the times, constantly update educational concepts, and improve their own educational level. Firstly, establish the concept of symbiosis. The concept of symbiosis requires educators to strive for harmonious coexistence within and between educational elements. Secondly, we need to establish a precise concept. With the continuous development of artificial intelligence and the support of a large amount of information data, precision education will gradually become a reality from a concept. Finally, we need to establish a collaborative concept. Faced with the development of artificial intelligence, educators should pay attention to coordinating various educational resources and work together to promote educational development. Educators should be adept at utilizing artificial intelligence resources to achieve human-machine collaborative development; We should be adept at utilizing artificial intelligence to coordinate the participation of different entities in education, truly achieving the goal of "educating everyone, educating throughout the entire process, and educating in all aspects".

2. Guide college students to establish a sense of self-directed learning

Faced with the development of artificial intelligence, college students should gradually establish a sense of self-directed learning, fully utilize the auxiliary role of artificial intelligence, and reflect their own leadership in the learning process. On the one hand, it is necessary to guide college students to have a correct understanding of the essential attributes of artificial intelligence. The high efficiency of artificial intelligence can easily lead to excessive dependence among college students, which is not conducive to the improvement of their innovation and thinking abilities. Therefore, it is necessary to guide college students to recognize the auxiliary role of artificial intelligence and stimulate their subjectivity in the learning process. On the one hand, it is necessary to fully leverage the role of the classroom as the main channel, explore relevant issues of artificial intelligence with college students, and guide them to have a correct view of artificial intelligence technology. They should not only see its advantages but also analyze its risks. On the other hand, in daily learning, work, and life, it is necessary to remind college students to grasp their subjectivity, guide them to cultivate their own humanistic literacy, and maintain their independence in personality. On the other hand, it is necessary to cultivate the initiative of college students in learning. Learning is an important skill for college students, and universities should cultivate their desire and ability to actively seek knowledge, rather than passively receiving it. From the perspective of college students themselves, driven by active learning, it is easier to form a lifelong learning state in the future. This requires college students to actively grasp the learning process, understand the essence of learning, and cultivate interest in learning.

IV. Conclusion

In summary, with the continuous development of artificial intelligence, it has brought great convenience and obvious challenges to talent cultivation in universities. Both the educational subject, educational object, and educational environment are influenced by artificial intelligence technology. In this context, it is necessary to constantly update educational concepts, guide college students to establish correct awareness, standardize rules and regulations, and better promote talent cultivation in the new situation.

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