

Innovation and path of teacher literacy in basic education in the era of artificial intelligence

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Abstract: In the era of artificial intelligence, the rapid development of information technology has transformed the way of education and teaching, and put forward higher requirements for the teachers' quality. The teachers' quality performance in education and teaching is their competitiveness based on artificial intelligence, so teachers need to update the quality structure in time. From the perspective of basic education teachers, based on the background of the era of artificial intelligence, this paper discusses three dimensions that need to be improved in teacher quality, including education quality, information digital literacy and information intelligence usage quality. It also proposes paths for improving basic teachers' quality to promote the development of teachers.

Key words: artificial intelligence; teacher literacy; information technology

1 Introduction

With the increasing participation of advanced artificial intelligence in education, teachers, as the leading role of educational activities and the key variable for high-quality development of technology-enabled education, must update their literacy structure to adapt to education. As a leader of education and teaching, some of the functions of teachers will be weakened due to the existence of artificial intelligence. However, as the main personnel for emotional communication with students, the humanistic nature is still a competitive part of teachers. Even so, teachers should also adapt to the era of artificial intelligence in advance and improve their AI literacy to promote their development.

To integrate artificial intelligence into education and promote the digital transformation of education, teachers in the new era need to update their literacy structure in the following aspects: the improvement of teachers' humanistic literacy under informatization, the cultivation of teachers' information and digital literacy, and using information intelligence literacy in teaching.

2 Improve the quality of teachers' education under the informatization

The era of artificial intelligence represented by ChatGPT provides us with an opportunity to transcend rote learning, reflect on the meaning of learning and existence in the era of artificial intelligence, and cultivate our students to become more creative and thoughtful people. The new requirements for education in the era of artificial intelligence point precisely to the requirements for cultivating students' literacy-based era [1]. The improvement of students' literacy cannot be separated from the literacy of teachers.

In the era of artificial intelligence, the educational function of teachers still reflects the advantages, which are embodied in their human nature. Teachers are living lives that have been tempered by social practice, with social growth

marks, complex emotions and profound thoughts. The human nature of teachers has object consciousness, which can guide the objects of communication consciously and planned; the human nature of teachers has self consciousness, which can comprehensively integrate instrumental rationality and value rationality. It is these characteristics that make teachers irreplaceable in educational work. Therefore, teachers need to pay more attention to students, give more care to students' life growth and development value, stimulate students to think about the meaning of life in the era of artificial intelligence, and obtain their own development.

3 Develop teachers' digital information literacy

Teachers need to update research on professional ethics of teachers in the digital era of education, so as to better support teachers in making appropriate educational and teaching decisions [2]. However, according to a study by the United Nations Educational, Scientific and Cultural Organization (UNESCO), at present, teachers have not been able to realize the advantages and potential of the innovative education model of information technology [3]. This paper holds that to grasp the ethics of the application of ChatGPT in education, teachers should first grasp the essence of education at the level of consciousness, and have a clear cognition and understanding of technology. Therefore, teachers need to establish self-learning awareness and improve digital information literacy in the era of artificial intelligence.

Digital literacy is the ability to understand and use digital technologies and networked devices in a communicative, collaborative way, and to safely and appropriately apply them for employment, decent work, and entrepreneurship. Open educational resources are copyrighted learning, teaching, and research materials in the public domain in any format or medium that are freely available, exploited, adapted, and shared by others under an open license. As a teacher, we can actively use open resources, online resources, campus resources, etc. to engage in self-learning and improve information literacy.

4 Apply information intelligence literacy in teaching

UNESCO highlights the critical place of digital information literacy in the 21st century and provides a set of guiding principles and key competencies. Therefore, teachers must continuously improve the ability of digital information technology integrated teaching, and gradually learn and master the integrated application of artificial intelligence including ChatGPT in teaching through the application of basic skills such as PPT, MOOCs, online teaching [4].

The information and data literacy of teachers means that in the teaching process, teachers use positive data attitude and keen data awareness to improve the optimization of teaching mode, improve students' learning performance and learning effect with the help of digital technology. Teachers should take the initiative to integrate the improvement of their own data literacy into the overall process of digital teaching practice, keep trying and exploring, accumulate self-confidence in practice, and accelerate the change of their attitude towards data [5]. Only when teachers actively participate in the improvement of information and data literacy can they effectively transform literacy into teaching applications and promote the new direction of teacher-student interaction in the era of artificial intelligence.

5 Conclusion

In a word, teachers must face up to the advantages of artificial intelligence and deeply reflect on the changes of educational concepts behind the application of artificial intelligence in the promotion of digital education strategy. In the context of the era of artificial intelligence, no matter how deep the penetration of artificial intelligence into education is, teachers should face up to and maintain their own dominant position and role. Therefore, teachers should stand on the shoulders of artificial intelligence, embrace artificial intelligence with an open mind to improve and innovate their literacy in education, adhere to the development of their own information literacy, actively practice information intelligence literacy in teaching and promote their own overall development.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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