

Research on Higher Vocational Computer Education Based on Big Data Era

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Abstract: With the rapid development of computer technology in our country, computer and network technology have become an important part of people's daily life. In order to train computer talents in line with the development of society, higher vocational colleges must carry out personnel training program reform in time according to the needs of the development of the times, and keep pace with the times in teaching mode, teaching content and educational objectives. In the era of big data, effective information processing technology must be adopted to ensure the authenticity and reliability of information. Making full use of big data in teaching is the key to improve the level of computer education and the employment rate of students. This paper introduces the basic concept of big data, expounds the influence of big data on the teaching of computer major, analyzes the current situation of computer major education in higher vocational education, puts forward the existing problems, and finally puts forward suggestions on the reform of computer major education in Higher Vocational Education in the era of big data.

1. Introduction

In order to improve the training quality of computer application-oriented talents in higher vocational colleges, the era background of big data must be clearly defined, and the talent training scheme must be premised on big data. In order to train computer talents in line with social development, higher vocational colleges must carry out personnel training program reform in time according to the needs of the development of the times, and keep pace with the times in teaching mode, teaching content and educational objectives [1]. Only by learning to tap potential value from big data can more useful computer professionals be transported for the development of big data. At a time when computer talents are becoming more and more popular, as a higher education institution that supplies high-quality talents for the social industry, it is also necessary to keep pace with the development of the times to constantly adjust the educational content and form [2]. People's daily work and living habits will undergo earth-shaking changes due to the emergence of big data. Under such a big environment, the education mode of computer major in higher vocational colleges will inevitably be affected by it [3]. In the face of the growing information technology market, all the computer majors in higher vocational schools need to do is to transfer skilled talents to the computer field. According to feedback from the market, the opening of the computer major has improved the overall level of the domestic information technology field and improved information Advances in the technology market play an important role [4].

With the continuous development of computer technology, the daily work and life of human society have become more and more widely used for computers, and social development and economic construction have increasingly demanded computer and related professionals [5]. In the era of big data, effective information processing technology is needed to ensure the authenticity and reliability of information. In order to ensure the maximum realization of the goals of computer courses in higher vocational colleges and to give full play to the value of their existence, front-line teachers in each vocational college need to have a good grasp of the cutting-edge knowledge in the computer field in order to better integrate into the teaching of computer major Medium [6]. In the context of the big data era, people's work and lifestyle have been greatly affected, and computer majors have also undergone great changes. Making full use of big data in teaching is the key to the continuous improvement of computer education and student employment in higher vocational colleges [7]. This requires the professionals of computer majors in higher vocational colleges to

constantly think and explore, find an education method that suits the characteristics of the times and the needs of students, and keep pace with the times to improve and improve the teaching methods of education [8]. This paper combines the teaching of computer major in higher vocational education with the content of big data, and then builds a set of practical professional teaching system.

2. The Influence of Big Data on Higher Vocational Computer Education

With the in-depth application of computer technology in various fields in our country, higher vocational colleges have begun to pay more attention to computer professional courses, and have also actively adopted some teaching contents and skills in combination with their own educational status. In the era of big data, the circulation of commodities has been replaced by virtual data on the Internet, and production and labor have gradually become information-based services. Information service products are distributed in computer networks around the world [9]. In the era of big data, with the popularization of the Internet and the leap-forward progress of network technology, students' access to information and knowledge is no longer limited to teachers' words and deeds. Internet autonomous learning is gradually becoming the main source of knowledge. When learners choose their own reference materials and learning contents, they will inevitably encounter selection obstacles, which not only wastes a lot of energy and time, but also reduces the pertinence of computer major learning. These products can be traded without leaving the original owner, can be copied in large quantities without increasing costs, and the accumulation of knowledge can increase the value of products. The original way of increasing the value of products through manual exchange has gradually faded out of people's view [10]. Higher vocational colleges should give full consideration to the timeliness of educational information resources when carrying out computer professional education. They should use various technical conditions and means to obtain real-time teaching resources in line with the direction of science and technology, instead of adopting outdated educational textbooks or information in a conservative way.

At present, higher vocational colleges regard the teaching of computer major courses as a kind of applied ability training, and only pay attention to practice and assessment, but have not yet taught the all-round development of students. Computer major teaching is only a kind of teaching task, and students cannot experience the interest of computer application from boring operation. In the era of big data, the training concept and training methods of computer professionals in higher vocational colleges need to be adjusted accordingly. In the era of big data, computer Internet technology is fully integrated into people's daily life. The amount of data collected has reached an unprecedented level and has spread to different fields such as natural science, social science and humanities. It not only promotes the development of various fields, but also has different degrees of impact on people's work and lifestyle. With the continuous updating of computer technology, educational concepts must be updated accordingly in order to seek development in development [11]. Higher vocational colleges should embody the guiding concept of education and guide students to have innovative spirit with the change of the general environment. Therefore, computer teachers need to have a higher awareness of service innovation. They need to constantly improve themselves and constantly update the computer teaching mode and content in order to better cultivate comprehensive talents of computer specialty. During the transition from the computer age to the big data age, computer equipment and terminal equipment all need to solve data processing, storage, transmission and other difficult problems in structural and semi-structural aspects, which requires relatively high professional talents' professional accomplishment, technological innovation, basic theory and other capabilities.

3. Computer Teaching Strategies and Methods

3.1 Teaching Strategies of Combining Theory with Practice

Under the background that the application scope of high and new technologies is continuously expanding, mankind has gradually entered the information age, so computer professionals have

become the key to the construction and development of each industry. In computer teaching in higher vocational colleges, professional courses have high requirements on students' practical operation ability. While integrating theory with practice, teachers need to conduct full investigation and research. On the premise of understanding students' overall learning situation and ability accomplishment, teachers should cooperate with practice through theory. In the era of big data, the teaching of computer major courses in higher vocational colleges should fully integrate big data, take big data as a teaching case, increase the teaching content of big data, excavate the potential value of big data in teaching, and turn it into teaching motivation [12]. Improving the quality of computer teachers is also the key to computer education in the era of big data. Only teachers with high quality can meet the development requirements of the times. With the deepening of students' learning practice, students should design and develop independently according to the theme, and teachers are responsible for guidance, dialing, and solving doubts. In the era of big data, the teaching ideas of computer majors should be reformed relatively thoroughly, so as to realize the flipped classroom teaching concept supplemented by course teaching and network learning.

In order to lay a solid foundation for computer teaching, we can better utilize the advantages of computers and master key skills and methods in the era of big data. At the same time, it is necessary to carry out systematic learning of computer knowledge and big data content in order to make better use of computers to serve the society [13]. Computer professional education teachers must improve their professional teaching level. In the actual teaching process, we must strengthen the research on big data and improve the relevant insights on big data. Teachers need to use case teaching, group inquiry learning and other diversified teaching methods to extract theoretical knowledge difficulties and focuses from case explanations to strengthen students' memory and understanding of theoretical foundation. For teachers of computer majors in higher vocational colleges, their role is more of a guide. In teaching practice, the teaching content should be adjusted in accordance with the actual situation, and big data should be fully considered and analyzed to achieve the teaching method optimization.

3.2 Passive to Active Teaching Method

Under the background of big data, computer teachers in higher vocational colleges must use diversified teaching methods to encourage students to find, explore and solve problems independently, thus improving students' practical level and professional quality. In actual teaching, teachers should give full play to the advantages of experimental courses, reasonably determine the subjects of inquiry and the contents of courses, guide and inspire students to make independent inquiry while clarifying the practical process and key technologies. The continuous development of computer hardware and the optimization of algorithms have greatly improved the speed of computers. At present, the main research direction should be on big data processing capability. The core of software development should also be adjusted to realize the transformation from programming to data [14]. After students have been able to master the basic theoretical knowledge, educators must also actively comply with the development requirements of the era of big data and increase the training of vocational skills on the existing basis. The training of computer professionals in higher vocational colleges must make full use of the advantages of big data to better assist computer teaching. As a vocational computer professional teacher, you must have solid computer basic knowledge and have received a large amount of professional training to ensure that the professional quality has reached a high level and can impart professional skills and experience to students.

Building a big data network teaching platform is the first step, building a network teaching platform with big data as the core and cloud computing technology as the support. Through this platform, teachers can collect and mine more high-quality teaching resources and materials, and students can download and watch learning materials according to their needs. After a lot of teaching practice, it has been proved that the data processing method has changed significantly in the era of big data [15]. However, most of the students in the computer major of higher vocational education will take employment as the development direction, so they are not able to well accept the

professional knowledge about big data. Under the background of big data era, higher vocational computer teachers must constantly update their own knowledge content and improve their professional quality to meet the development trend of the times [16]. Schools should also strengthen the construction of talent team, provide regular training for teachers, and promote the continuous improvement of teachers' professional level. School administrators can track teachers dynamically by analyzing data related to teachers' behaviors, which is more objective, scientific and comprehensive.

4. Conclusion

In the era of big data, various industries must be organically combined with the development track of the times so as to achieve development. In the era of big data, effective information processing technology must be adopted to ensure the authenticity and reliability of information. Teachers in higher vocational colleges should actively explore new modes of education and teaching, focus on educational theory research, strive to improve their professional ability, and grasp new opportunities for professional development given by the times. In the era of big data, the teaching thought of computer major should be thoroughly reformed to realize the reversed classroom teaching concept, which is supplemented by curriculum teaching and dominated by network learning. Effectively combining the big data technology content with the teaching of computer specialty in higher vocational education can not only enrich the teaching content of computer course, help students better understand the relevant knowledge, improve the computer learning efficiency of students, but also do a good job in the docking work between schools and employers with the help of big data. In the era of big data, the demand for innovative talents is constantly expanding. Therefore, in the training of computer professionals in higher vocational colleges, we must give full consideration to the employment needs of enterprises. Teachers of computer education must improve their professional teaching level, strengthen the research on big data and improve their opinions on big data in the actual teaching process.

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