ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

Design and Research on Teaching System of Computer Specialty in Higher Vocational Colleges Based on Big Data Analysis

Gong Jianxue

Shandong Vocational College of Industry, Shandong, 256414, China

ABSTRACT. *With the rapid development of social economy, science and technology has also been improved, the Internet has now been fully popularized, and people have officially entered the era of big data. With the development of information globalization, the development of education globalization is also gradually popularized. The computer major in higher vocational colleges has become the focus of education reform. Only by ensuring that the educational content keeps pace with the times, can we cultivate more computer people who meet the modern needs. According to the relevant content, this paper studies the meaning of big data and the necessity of teaching reform of computer major in contemporary higher vocational colleges, and also expounds the corresponding reform strategies of computer professional teaching in Higher Vocational Colleges under the background of this era.*

KEYWORDS: *Big data, Higher vocational education, Computer professional education, Teaching reform*

1. Introduction

The rapid development of science and information technology has promoted the whole society to change again. In today's era, all walks of life have been impacted by the Internet, and have carried out innovation and Reform under the new situation. In the process of reform, computer technology occupies a very important position, while the reform also puts forward new requirements for computer related talents. In today's era, how to cultivate new computer talents in line with the characteristics of the times has become a problem faced by higher vocational colleges. At the same time, it is also a challenge and opportunity for the education industry. Colleges and universities should combine the development characteristics of the era of big data, reform the teaching staff and education mode, so as to formulate a new talent training plan and create more excellent talents for the society.

ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

2. The Influence of Big Data Era on Computer Specialty in Higher Vocational Colleges

2.1 Enrich Computer Aided Teaching Resources

In the era of big data development, the network resources are rich, people can find all kinds of information through the network. In the learning process of computer major in higher vocational colleges, teachers can not only harvest knowledge through teachers' explanation in class, but also freely obtain learning materials through the Internet in their spare time. In order to meet the needs of students, the corresponding auxiliary teaching materials are also increasing. This form has advantages and disadvantages for students. Students can develop their knowledge through the Internet. At the same time, due to the confusion of the Internet, they can not control themselves well, so they will be misled by the temptation of bad information.

2.2 More Computer Learners

All walks of life have been impacted by big data under the background of today's era, and the former traditional operation mode is no longer applicable. In order to adapt to the development of the times, all walks of life have integrated big data and computer use in the process of development and innovation. As a result, a large number of computer talents are needed in today's society, and computer major has become a popular major, so choose to learn computer There are also more students in the major. In addition, the popularity of computers has also realized the collection of various information, and enterprises and universities can also realize real-time contact, which also promotes the continuous growth of the number of computer learners.

3. Problems of Computer Major in Higher Vocational Colleges

3.1 Backward Teaching Methods

Although our country has already started the education reform, but at present some colleges and universities use the traditional teaching method, the students can only learn and master the textbook knowledge by rote, which leads to the teachers pay more attention to the theoretical knowledge and despise the practical operation in the teaching process. In the long run, although students have strong theoretical knowledge, but they do not have the practical operation ability, and ultimately can not become the computer talents that the society needs. Thus, the school must innovate the teaching methods, so as to further meet the learning needs of students, so that students can become excellent computer talents with rich practical experience and progress with the times.

ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

3.2 The Teaching Content is Not in Line with the Development of the Times

In the teaching process, the knowledge bridge that can directly connect with students is the teaching material. Only by innovating the contents of teaching materials and keeping them up with the times, can the function of teaching materials to transmit knowledge be brought into play. At present, most colleges and universities still use the traditional computer teaching materials, and the teachers teach the students knowledge step by step through the teaching materials. They do not realize that the contents of the teaching materials have been unable to keep pace with the development of the times, which eventually leads to the students' inability to adapt to the development of the times and master the new computer knowledge requirements. 2.3 weak teachers

Although China's current higher vocational college computer professional teacher team is very sufficient, most of the teachers have very rich teaching experience, in the past also greatly promoted the development of Computer Science in Higher Vocational Colleges in China, but now with the continuous development of the times, the traditional teachers still maintain the old teaching ideas, leading them to keep up with the pace of development of the times, once known Computer related knowledge has long been eliminated by the times, which eventually leads to the weakness of computer professional teachers in higher vocational colleges. Therefore, the school should, according to the actual situation, while also requiring students to have good habits, further create a benign professional competition environment for the school, urge teachers to carry out self knowledge innovation, so as to avoid the decline of computer science.

4. The Design Strategy of Higher Vocational Computer Education System in the New Era

4.1 Curriculum Reform

Most of the teachers in higher vocational colleges only pay attention to teaching some theoretical knowledge for students in the classroom, and do not care about the actual operation ability of students. Therefore, in the teaching content, teachers should set up more practical content, fully highlight the characteristics of the computer itself, so that the teaching content of the course is targeted, so as to further meet the needs of modern society for computer talents. First of all, the school should take the cultivation of students' all-round development as its training goal, so that students can master software technology skillfully on the basis of excellent computer knowledge, and can also improve the development and design ability and humanistic quality. In today's era background, only the comprehensive development of computer major students can become the all-round and application-oriented talents needed by modern society.

ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

4.2 Innovative Teaching Methods

In the process of computer professional education in higher vocational colleges, relevant teachers should reasonably use teaching methods in the teaching process, and at the same time cater to the development background of the era of big data, break the limitations of traditional teaching methods, and further improve the quality of teaching. When the new teaching mode of flipped classroom is introduced and used, it is loved by most students. The content of the class is to let students learn the knowledge in advance, and then use the network platform for online communication and interaction. This kind of teaching requires students to show what they can't through the platform. Teachers can observe the feedback of students and answer questions and doubts for students in class. It is to improve the teaching efficiency and present better teaching effect. In addition, teachers can also make use of some open online course platforms, so that students can learn more knowledge on the platform. At the same time, it is also possible to send some courseware videos on it, so that students can follow the video and answer the relevant questions in the video. They can not only supervise the students' learning, but also further improve their autonomous learning ability.

4.3 Strengthen Hardware Facilities

With the advent of the era of big data, school leaders should pay attention to the teaching innovation content of computer courses. At the same time, according to the actual situation of the introduction of hardware equipment, to further ensure that students can have enough hardware facilities to carry out the corresponding learning content. First of all, the school must do a good job in the capital management of their own school, so as to give the computer professional enough money guarantee. In addition, the construction of laboratory base also needs to strengthen cooperation between schools and enterprises to enhance the scientific nature of the laboratory. So that the practice process can be better in line with the society, so as to improve the students' practical ability as a whole.

4.4 Strengthening the Talents

In order to cultivate the professionalism of teachers, the school can regularly invite some highly specialized computer talents to give lectures on campus, so that teachers can actively realize the training of their own professional knowledge through lectures, so as to further improve the professional level of teachers. Besides father and son, the school also needs to set up regular assessment system for teachers, so that teachers can constantly urge themselves to improve their skills through assessment. If some teachers show unsatisfactory results, the school should actively supervise and educate them. Teachers can always keep the habit of self-learning, better adapt to the development needs of the times, and help the society to cultivate excellent talents.

ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

4.5 Reform Teaching Evaluation System

In terms of student assessment, we should actively reform the teaching evaluation system. In the past, teaching evaluation only focused on students' knowledge assessment content, usually only through the final examination paper score to feedback the whole semester students' efforts. As a matter of fact, the evaluation method of “one designated area” has always been a method to show students' academic achievements in China's educational circles for a long time. The most outstanding, this kind of assessment method is the high school entrance examination and the college entrance examination. With the advent of the era of big data, teaching evaluation also needs to be reformed. In the teaching process of higher vocational colleges, we have participated in many evaluation elements. The students' scores no longer rely on theoretical assessment, but more importantly, their attendance and performance. In addition, the school pays more attention to the cultivation of students' innovative ability. For example, most colleges and universities have started to hold various entrepreneurship competitions, and some students who have obtained achievements are given financial and material rewards. In addition, in the teaching program, the innovation course has become an important subject of compulsory credits. If you can't complete the credit, then students can't graduate. A variety of teaching evaluation system reform, so that schools and teachers to the evaluation of students have more reference elements, so that students can better explore their own advantages, while allowing students to find the important value of their own development.

5. Conclusion

With the rapid development of the information age, people have entered the era of big data. The era of big data and the widespread Internet have brought great changes to people's lives. In today's era, the computer industry is also facing unprecedented huge reform, which puts forward higher requirements for its talent demand. In the teaching process of computer major in higher vocational colleges, the traditional teaching staff has been unable to meet the needs of modern society. Therefore, the school should actively reform the teaching content, so as to cultivate more talents in line with the needs of modern society in the future, and further promote the better development of computer science.

References

[1] Wei Meng, Deng Guibing (2020). Research on the teaching reform of individualized talents training of computer specialty in Higher Vocational Colleges Based on big data [J]. Science and education guide (last xunjian), no.7, pp.56-57.

[2] Xu Lizhi (2020). Exploration on teaching reform of practical training course of computer network specialty in Higher Vocational Colleges under the background of big data [J]. Science and technology economy guide, vol.28,

ISSN 2522-6398 Vol. 3, Issue 14: 01-06, DOI: 10.25236/FER.2020.031401

no.7, pp.139-140.
[3] Jiang Yufang (2019). Discussion on computer major teaching in Higher Vocational Colleges under the background of big data [J]. Guangxi Education, no.35, pp.178-179 + 192.
[4] Xiao quanchu (2019). Analysis on teaching reform of Higher Vocational Computer Specialty Based on big data [J]. Network security technology and application, no.9, pp.85-86.
[5] Wang Zhiyuan (2019). Research on teaching reform of computer major in Higher Vocational Colleges under the background of big data [J]. Chinese Journal of multimedia and network teaching (zhongxunjian), no.9, pp.60-61.