Research on the Innovation Ways of Computer-assisted Teaching and Student Management Talent Training Model

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Abstract. In the 21st century, human society will enter the information age. What will educational science in the information age look like? We cannot give a definite conclusion because there are too many uncertain factors. However, one thing is certain. That is, the laws of education in the information age can only be discovered in education and teaching activities that use computers and networks as technological platforms. Mastering educational information technology is the basic condition for exploring the laws of education and teaching in the information society. It can be seen that high schools must carry out computer teaching and improve the quality of computer teaching to the greatest extent. The author of this article has a humble opinion on computer-assisted school education and teaching and student management personnel training.

Keywords: Computer Assistance, Teaching, Student Management

1. Introduction

In order to adapt to the new situation of my country’s higher education development, deepen teaching reforms, improve teaching quality, and meet the needs of the country and society for talent training in the new era, colleges and universities should make full use of modern information technology, adopt computer-based classroom teaching models, and improve A single teaching model based on teacher lectures. From this point of view, setting up courses in the way of computer-assisted teaching can stimulate students' learning autonomy and interest. And use this technology to manage and cultivate students [1].

2. The composition of computer-assisted school education management system

2.1. People’s Status and Function in Computer-Assisted School Education Management System
The computer-assisted school education management system is first of all a man-machine system. In addition to having a set of relatively advanced computer hardware equipment and loading excellent operation and management software, the most important thing is to have a group of ambitious and advanced computer knowledge and technology. And know how to assist school education management talents. A school generates a lot of valuable information every day. Administrators should not only pay attention to the school’s internal information, but also cannot ignore the school’s external information. Computer administrators should actively collect, carefully screen, and then classify and collect them by year, month and each information category [2]. I usually read more newspapers and magazines, browse the information on the Internet, and discover the value of current materials with a clue, classified storage, and prepare materials for education, teaching, and leadership decision-making management. Competent computer administrators can also cooperate with the teacher to make CAI software to enrich the teaching content, stimulate students' interest in learning, and improve the quality of classroom teaching.

2.2. Hardware and software facilities in computer-assisted school education management system

The speed of computer hardware and software development is amazing. In the early 1990s, it would be very impressive for a college in my country to have a computer room with 486 as the mainframe and 386 as the main internal computer. Nowadays, even elementary school computer textbooks require computers to be able to load Windows systems and run Word, Excel, etc. As shown in Table 1, the student scores produced by a teacher using Excel are simple and easy to understand. This change means that the 386 and 486 were eliminated. Now the standard configuration of the computer room has been more advanced. The computer knowledge and skills taught in schools in the past are often based on some software of the Dos version, such as wps, Foxbase, Basic language, etc., but now at least it is based on the office on Windows System, multimedia software, web page production, etc. In the past, the use of computer management in schools was limited to text, charts, etc., but now computers can also store images, sounds, animations, movies, and more. In addition, the external equipment of the computer has also been developed by leaps and bounds. An ordinary inkjet machine can produce pictures and photos with vivid colors; a scanner can quickly store valuable information into the computer.; Digital cameras and digital cameras can incorporate dynamic images into computer systems. At present, basically all schools use telephone lines or dedicated lines to access the Internet, directly sharing resources, exchanging information, and e-mails with other computers [3].

| Name      | Chinese | Math | Chemistry | Total  | Average |
|-----------|---------|------|-----------|--------|---------|
| DengXiao  | 0       | 64   | 0         | 64     | 21      |
| WuGang    | 0       | 75   | 75        | 150    | 50      |
| LiMing    | 56      | 86   | 75        | 217    | 72      |
| WangEr    | 56      | 85   | 24        | 165    | 55      |
| ChenHong  | 60      | 68   | 75        | 203    | 68      |
| ChengLong | 62      | 77   | 36        | 175    | 58      |
| ZhaoMin   | 65      | 85   | 58        | 208    | 69      |

Table 1. Test score

With the rapid development of computer hardware, computer software has also been developed rapidly. Windows98 developed by Microsoft has a comprehensive graphical interface, simplified operating procedures, easy to learn and easy to use, making Internet access simple and easy; handling
daily chores and data for us. Forms, sending and receiving emails, and making web pages provide a very good platform. The principal office system specially developed for school education management is a good assistant to school management, making administrative management and educational management handy. The extensive development and application of CAI software has opened up another vast world for computer-assisted teaching [4].

2.3. Networking of Computer Aided Education Management System

In order to meet the requirements of the information age, developed countries are adopting a series of measures to accelerate the development of networked education and cultivate first-class talents for the 21st century. As early as 1996, the US Congress decided to implement a series of preferential treatments for the use of the Internet in primary and secondary schools and libraries. From 1998 to 2002, British Prime Minister Blair planned that all schools in the United Kingdom would have Internet access devices and trained classrooms to use the Internet so that schools could easily obtain materials and teaching materials from the Internet. My country joined the Internet in April 1994 by the Chinese Academy of Sciences. In 1995, the Ministry of Posts and Telecommunications officially opened CHINANETO, the main Internet network in mainland China. Starting in 1995, the China Education and Research Network (CERNET) demonstration project was officially established. Shanghai, Jiangsu and other places have successively built a batch of "demonstration campus networks" for teaching, scientific research, management and distance teaching, providing a network operating environment for teachers and students [5]. The campus network covers the school’s classroom teaching, teacher preparation, student self-study, office management and other places, timely, accurate and reliable collection, processing, storage, and transmission of school education and teaching information, and resource sharing within the campus. The campus network adopts Internet technology and can be connected with the information port project at all levels, China Education and Research Network and the Internet, so that the resources of each campus network can be shared online [6].

3. The main aspects of computer-assisted school education management

3.1. Auxiliary education administration

The general function of computer-assisted education administration is to help educational administration personnel collect and summarize various relevant information, and sort, classify and process, and store it in a specific memory for inquiries by the school and the higher-level leadership departments, and for the education administration department Analysis and decision-making services. Its functions are usually divided into: A· student information management; B· faculty data management; c. School file management; school financial management.

3.2. Auxiliary teaching function

The computer-assisted teaching function includes the computer's own function of educating people. It is necessary to have a sense of position to develop students' ideological and moral character in the first place. By setting up moral education courses, students can be taught about the world outlook, outlook on life, and values to standardize the direction of student behavior. Technical schools have no pressure to enter a higher education and develop quality, that is, focus on the cultivation and improvement of student quality. For example, ideological, moral and cultural quality, professional quality, must be
achieved through curriculum settings, focusing on training goals, and promoting the coordinated development of students' knowledge, ability and quality. And provide students with two preparations for employment and further studies [7].

Although the quality of students in technical schools is uneven and it is difficult to run a school, if we focus on each link, arrange reasonable arrangements, have a complete teaching model, strengthen quality education, highlight skill training, and establish a quality work model that adapts to market development, Technical schools will embark on the path of characteristic development. Under the guidance of science and technology as the primary productive force, students must look at problems from the perspective of development and develop the habit of lifelong learning in order to adapt to the needs of society. I believe that a high-level, high-skilled, high-quality, and high-quality industrial army will be enriched in all fields of society in the near future. The majority of technical educators should work hard to explore courageously in practice, and make our due contribution to the further development of technical school teaching reform.

3.3. **Office Automation**

Office automation is to use computers to process office affairs, and to connect machines such as telephone, telex, and computers organically. The main purpose of office automation is to free administrative office staff from heavy transactional work, so as to give full play to the creativity of office staff and improve office efficiency and quality. School office automation is mainly used for word processing, data storage and retrieval speed to synthesize and analyze information, and make judgments and decisions. Moreover, when the various computers of an office are connected through a local network, it can be very convenient and rapid Communicate with each other, transfer files, and share resources [8].

4. **Student management system**

The development of computers has played a positive role in the teaching of teachers, and at the same time the management of students has become easier. A series of student management systems can be developed with computer assistance to make the data more intuitive. For example, a college teacher develops a student management system. Its main functions are shown in Figure 1. The system can enter various student information and make student management easier. You can see the status of the corresponding students in the system software, which is conducive to teaching students in accordance with their aptitude [9].
Figure 1. Student management system

Entry of scores: the teacher or administrator enters the scores, this functional module needs to use the information of the previous students, the information of the courses, etc.

Score query: After logging in, students can query the scores of the courses they have studied. During the query process, students can query all the scores; you can also query the scores of a semester; you can also query a certain course number or course. In this module, after students log in to the system, the system will give warning reminders to students who have failed two courses or more according to their learning status, and encourage students to study carefully.

Summarizing function: Department administrators and the Academic Affairs Office classify and summarize the results, compare the results of each department and college, and provide a data basis for formulating future teaching management plans.

5. Adhere to the principle of improving the internalization and execution of rules and regulations

If the rules and regulations are not implemented, then the rules and regulations will become a dead letter. Rules and regulations can become an effective system only when they are recognized by both the managed and the managed. Otherwise, there will be defects in the implementation, resulting in management failure. “The executive power of primary and secondary schools is the ability and power to achieve the school’s established strategic goals, complete the education and teaching work, standardize educational and teaching behavior and school-running behavior, improve the quality of education and teaching, and implement various regulations and disciplines. The transformation of planning and school decision-making has become the key to the development and growth of the school, the professional growth of teachers, and the release of students’ ideals. "Improving the enforcement of the rules and regulations of primary and secondary schools requires each school to find out the attribution according to its own characteristics, and formulate methods and measures suitable for the school. Establish a long-term mechanism [10].

6. Conclusion

In a word, computer-assisted teaching is an important means to effectively improve the teaching level of teachers and manage students. Schools can use computer systems to effectively strengthen the
management of all aspects of the school. Streamline work and improve work efficiency and quality. Teachers can use computer-assisted teaching systems to provide students with more effective and reasonable teaching activities, greatly improving teaching quality and teaching efficiency, while using the teaching management system to strengthen the management of students, making the original complex and tedious work changes it has to be simplified. Efficient, so that teaching can be carried out better and faster. Therefore, in the new development situation, both schools and teachers should pay attention to computer-assisted teaching and teaching management systems.

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