A Study on the Application of Computer Multimedia in Chinese Teaching of Higher Vocational Colleges

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Abstract. Nowadays, Chinese education system is gradually mature, many colleges are using computer and multimedia technology and integrated them into the teaching process which gradually become a new teaching method. In the case of computer combined with multimedia technology, the international teaching system can simplify the classroom teaching process which can only be realized by many devices and technologies in the past. It forms a new interactive classroom teaching system. Through the systematic generalization of computer multimedia technology, this paper makes a study of the integrated application of computer and multimedia technology in the process of Chinese teaching in higher vocational colleges and analyzes its advantages and disadvantages. However, it provides some suggestions for the integrated application of computer and multimedia technology in Chinese teaching of higher vocational colleges, hoping that multimedia technology can make an important role in Chinese teaching.

Keywords: Computer multimedia, Chinese teaching, Higher vocational colleges

1. Introduction
With the rapid development of computer multimedia technology, it has been widely concerned by its advantages[1]. As an auxiliary teaching method in the field of education, multimedia technology can enhance students’ learning interest in Chinese classes and greatly improve the quality of education by combining voice, image, video and text[2]. Its rich expressive force, flexible interactive ability and huge storage make people fully recognize the importance of multimedia technology in the future development of Chinese education[3]. However, multimedia technology is also a double-edged sword. If we fail to use multimedia teaching systems well in the classroom, students' Chinese learning ability, language sense training and emotional communication with teachers will also be greatly affected. Therefore, we should learn to use computer multimedia technology reasonably in Chinese teaching so that it can truly serve Chinese teaching.
2. Systematic generalization of computer multimedia technology

2.1. Computer multimedia technology
Multimedia technology is actually a kind of media that can realize human-computer interactive information exchange and dissemination[4]. It includes: text, image, graphics, animation, audio and video. Each media has different forms of expression.

2.2. Main characteristics of computer multimedia technology
① Informational diversity
   It is mainly the diversity of informational media.
② Interactivity
   Users can get useful information by interacting with computer informational media
③ Intelligence
   The equipment is easy to operate and it is convenient and humanized
④ Integration
   The equipment can combine sound, image, video and text to give the user an intuitive visual effect.

2.3. The processing technology of computer multimedia
Video communication technology
   It includes communication video digital technology and video coding technology[5]. One is used to display and process video signals. Another is used to record and play.

Audio communication technology
   It mainly includes four sides: audio digitization, speech processing, speech synthesis and speech recognition. The development of audio technology is mainly suitable to provide a good human-computer interaction system for some people who don’t understand the computer, so that there is a natural way of interacting.

Digital signal technology
   It includes image, video and audio signal compression and utilization[6]. The purpose is to ensure that the computer can output high-quality videos and audio.

④ Virtual and real technology
   The combination of computer multimedia technology can produce a kind of virtual world which makes people feel as if they are in it. It’s better to carry out the interaction of human-computer information.

Multimedia teaching system needs the operation of multimedia equipment, Multimedia operation structure drives the operation of multimedia equipment. As shown in Fig 1.
3. Advantages of the integrated application of computer and multimedia technology in Chinese teaching of higher vocational colleges

3.1. Multimedia teaching method can effectively enhance students' interest in learning and promote them efficient learning.

Multimedia is a combination of pictures and texts and interesting videos and audio, it can make the students feel refreshing and can effectively enhance their interest in Chinese classes. For the content of Chinese books, some abstract knowledge is difficult for the students to understand. It can only be understood by repeated lectures and forced memory, which is time-consuming, laborious and very boring. But after using multimedia teaching, we can make abstract things concrete, so that classmates are easy to comprehend the abstract knowledge and their efficient learning can save much time. In the past, students used to take a perceptual view of Chinese. But now we can rationalize Chinese literature in a rational view through multimedia teaching. They are different sides in Chinese learning. Like this, students can have a deeper understanding of Chinese.

3.2. Multimedia is intuitive and students are able to integrate into the Chinese classes

Chinese classes are always taught by blackboard writing, it’s so boring that students are unable to concentrate themselves and have no motivation to learn Chinese. The classroom loses its vitality. But, though multimedia technology, Chinese articles can be turned into visual videos, at the same time, those dull blackboard writing and characters become more vivid under the processing of the computer. Therefore, students' perception will be greatly strengthened, and it is easier for them to accept knowledge. Someone has done experiments in Higher Vocational Colleges to investigate whether students like multimedia Chinese teaching. The result is shown in Fig2.
It can be seen from this statistical data that students in higher vocational colleges are quite satisfied with multimedia Chinese teaching. However, multimedia teaching also has many advantages.

4. Disadvantages of the integrated application of computer and multimedia technology in Chinese teaching in higher vocational colleges

4.1. It’s not beneficial to the communication between teachers and students
What Chinese classrooms stress is that teachers can help students understand knowledge. Compared with science, Chinese tends to be emotional and perceptual. In the traditional Chinese teaching methods, students can not only learn knowledge, but also cultivate the emotion between teachers and students. Although multimedia technology is convenient, it may lack the affective communication between teachers and classmates, which may be not beneficial to the normal communication between teachers and classmates.

4.2. It may cause students' lack of language sense
In addition to learning related literature knowledge, Chinese classroom is also very important for the cultivation of students' language sense. Although the traditional Chinese teaching is boring, it can make students exercise their sense of language better and lay an important foundation for learning other literature knowledge in the future. Each student has his own different perception of literature. Although multimedia teaching can make Chinese classroom vivid, it may also destroy the students' individual perception of literature, resulting in the students' ideological dependence on this convenient multimedia teaching and their subjective literary thinking can be destroyed. When they see the literary works again, they don't have their own subjective judgment and learning ability, which leads to the lack of language sense. So as to confirm the disadvantages of multimedia teaching, the experiment was carried out again of higher vocational colleges. Its task is to investigate the frequency of communication between students and teachers after using multimedia teaching, the result is shown in Fig3.
Figure 3. Frequency of communication between students and teachers

It can be seen from this statistical data that multimedia teaching is really not beneficial to the communication between teachers and students. So, What can we do to solve this problem?

5. Problems in the application of computer multimedia in Chinese teaching of higher vocational colleges

5.1. Multimedia technology can be combined with previous Chinese teaching methods
Although the previous Chinese teaching method is rigid and boring, it can strengthen the communication between teachers and students. In some key and difficult knowledge, teachers and students can carry out in-depth exchanges and reinforce the relationship between teachers and classmates. If we blindly use multimedia teaching and abandon the traditional way of teaching, there will be many shortcomings of multimedia teaching. Therefore, we can combine multimedia technology with traditional Chinese teaching methods, which will not cause students to study Chinese boring, and will not cause the lack of communication between students and teachers. It not only enjoys the convenience brought by multimedia technology, but also makes use of the advantages of traditional Chinese teaching. In this way, students will be more interested in Chinese class and literature.

5.2. Multimedia technology is best used to explain key and difficult knowledge
We know that in the traditional Chinese teaching method, the key and difficult knowledge need to be explained repeatedly, which is a waste of time. On the other hand, if we use multimedia technology to explain the simple knowledge in Chinese teaching, it will also be a waste of time and energy. Because in the process of preparing lessons, teachers need to prepare courseware by themselves. However, it is unrealistic for them to use multimedia to prepare all the knowledge. Therefore, in Chinese teaching, simple knowledge can be used in traditional teaching. When encountering key and difficult knowledge, we can use multimedia technology to explain, which will save us much time.
5.3. **Encourage teachers to learn and make their own multimedia courseware**

The application of multimedia technology in the realm of Chinese teaching is naturally very good. But, what is said here is only for most teachers. There are also some teachers who don’t understand multimedia technology or how to operate it, which also limit the diversity of Chinese class teaching. Therefore, it is suggested that teachers should be encouraged to learn and use multimedia courseware. It is better to make suitable multimedia courseware for their own teaching style. Hoping they can truly integrate multimedia technology into Chinese teaching.

6. **Conclusion**

Through the study on the application of computer multimedia in the Chinese teaching of higher vocational colleges, we understand the advantages and disadvantages of the application of computer and multimedia technology in the Chinese teaching, and also describe some problems that teachers should keep watch on the application process. Generally speaking, multimedia technology does more good than harm in Chinese teaching. I believe that multimedia technology will take a vital function in the future development of education.

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