On the Application of Multimedia Technology in Teaching

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Abstract: China Internet Network Information Center on August 31 released the 50th "China Internet Network development statistics report" shows: As of June this year, the scale of Chinese netizens is 1.051 billion, the Internet penetration rate reached 74.4%. With the continuous improvement of network technology and network information, the application of multimedia technology in teaching has become more and more common and mature. It has changed the traditional teaching mode, promoted the development of educational information greatly, but also followed the trend of The Times closely, it is the innovative development of teaching. Multimedia teaching software and intelligent auxiliary teaching system have great complementarity in function, and the combination of the two will greatly promote the efficiency of students' learning.

1. The Emergence and Development of Multimedia Technology and its Implication

1. 1 The Emergence and Development of Multimedia Technology

Multimedia technology was born in the 1980s. In 1984, the United states Apple (Apple) company pioneered the use of computer image processing, the first time in the world to use the concept of Bitmap (Bitmap) to describe the image, so as to achieve a simple image processing, storage and transmission. Apple's computer for image processing is the company's own development and development of "Apple computer", its operating system is called Macintosh, so some people directly called "Apple" computer Macintosh computer. As shown in Table 1, in 1985, Commodore introduced the world's first multimedia computer system, which was named Amiga. In the same year, computer hardware technology had a big breakthrough, in order to solve the problem of large capacity storage, laser read-only memory CD-ROM came out, for multimedia data storage and processing provided an ideal condition, and to the development of computer multimedia technology played a decisive role in promoting. In this period, CDDA(CompactDiskDigitalAudio) technology has been mature, so that computers have the ability to process and play high quality digital audio. This adds another form of media to the list of computer applications, namely music processing.

In March 1986, PHILIPS (PHILIPS) of the Netherlands and SONY(SONY) of Japan jointly developed the CD-I(Compact Disc Interactive) system standard, which normalized and standardized the storage of multimedia information. The CD-I standard allows 650MB of digital information to be stored on a 5-in. diameter disc.

In March 1987, RCA developed DVI(Digital Video Interactive) technology standard, which normalized and standardized the Interactive Video technology, enabling computers to store still images and moving images in DVI standard with CD-ROM, and to store various information modes such as sound. With the advent of DVI standard, computer processing multimedia information has a unified technical standard. In the same year, the United States Apple(Apple) company developed HyperCard(super card), the card installed in the Applecomputer, so that the computer has a fast, stable ability to process multimedia information.

Table 1: The development course of multimedia technology

Year	Signature product	The key aspects of multimedia technology are implemented
1985	The first truly multimedia system, the Amiga	Complete audio-visual processing capability
1986	The interactive compact optical disc system cd-i stores multiple media information in a digitized form on a 650MBcd-rom, enabling users to interactively read the contents of the cd-rom.	Storage Transmission
1987	Interactive digital video system -DVIDVI is a computer-based system that uses optical disks to store and retrieve images, sounds and other information.	Video audio compression
1989	The popular DVI product incorporates the chip into the IBMPS/2computer-0	
1990	MPC(MultimediaPersonalComputer) Levell issued computer makers and software vendors around the world have a common follow standard, also really drive the popularity of the CD publications.	Multimedia computer
1991	FREE BSD	Unix-like operating system
1993	MPC Levelll II has introduced software that enables people to play and appreciate VCDS and paintings on their computers.	Computer play VCD

In November 1990, the Multimedia PC Marketing Association (Multimedia PC Marketing Council) was founded by Microsoft of the United States and a group of computer technology companies including PHILIPS of the Netherlands. The main task of the association is to standardize the management of computer multimedia technology and formulate corresponding standards. The association developed the "MPC standard" for multimedia computers. [1]

In 1991, the Multimedia Personal Computer Marketing Association proposed the MPC1 standard. Since then, the global computer industry to comply with the provisions of the standard, promoted the standardization and production of MPC sales, multimedia personal computer has become a new popular trend.

In May 1993, the Multimedia Personal Computer Marketing Association announced the MPC2 standard. The standard according to the rapid development of hardware and software to do a greater adjustment and modification, especially the sound, image, video and animation playback, PhotoCD to do new regulations. Since then, the Multimedia PC Marketing Association has evolved into the Multimedia PC Working Group (Mul. timedia PC WorkingGroup).

In June 1995, the Working Group on Multimedia Personal Computers published the MPC3 standard. The standard is suitable for the development of multi-medium personal computers.

Since the development of multimedia technalogy, his audio technology, video technology, data compression technology and network transmission technology has been issued.

1. 2 Definition of Multimedia Technology

Multimedia technology refers to the comprehensive processing and management of text, data, graphics, images, animation, sound and other media information through the computer, so that users can interact with the computer through a variety of senses for real-time information technology, also known as computer multimedia technology.

2. The Advantages and Disadvantages of Multimedia Technology in Teaching Application

2.1 Advantages of Multimedia Technology in Teaching Application

Multimedia teaching can stimulate students' interest in learning and improve their enthusiasm. Traditional teaching activities are basically "teacher-centered", with students in a passive position. Teachers speak, students listen, teachers how to arrange, students how to do, so that students learning always in a passive position. In traditional teaching, although the contact between teachers and students, students and students is direct, but the contact between them is a kind of "one-way" activity, due to the time, place, face or other conditions, affect the interaction between them. But then overcomes this defect, multimedia teaching of multimedia teaching in a variety of forms, can use PPT teaching, can adopt the way of video lectures, as a result, not only active classroom atmosphere, the students attention will be greatly improved, new and interesting teaching classroom, make the students get rid of the boring way of listening to lectures, before this kind of teaching can greatly inspire the students Interest in learning.

Multimedia teaching is easy to use and operate. This is an important reason why users are happy to use multimedia teaching system. Compared with the traditional keyboard input operation, multimedia teaching system to mouse, touch screen, sound selection input, supplemented by keyboard input, and intuitive operation hints, which makes people unfamiliar with the computer can also easily operate.

Multimedia teaching can change abstract into concrete. Students are in the growing stage, their comprehension ability and spatial thinking ability are very limited, and there are a lot of concepts, principles, reaction process in teaching are very abstract, it is difficult for students to understand, the traditional explanation method is not ideal. But the use of multimedia courseware, some abstract concept knowledge through some interesting videos and dynamic evolution of the picture, to show students, so that the abstract concept knowledge is specific, students understand the process is simplified.

Multimedia teaching can improve the effic iency of classroom teaching, Traditional teaching requires drawing pictures on the blackboard and writing large letters on the blackboard amount of text, this virtually waste a lot of time, make originally a class time is very short, and the application of multimedia saves this part of the time, have more time to explain and discuss, not only to expand the capacity of teaching, enrich the essence of teaching materials, and by applying the theory of

abstract, visualization, embodiment of the content of the space, it is hard to imagine, enhances the student to remember Memory and understanding ability, improve the efficiency of classroom teaching.

Multimedia teaching can optimize classroom teaching comprehensively. The advantage of multimedia is that it is easy to operate, and the use of multimedia courseware can adjust the progress, speed and broadcasting means of teaching. The CONTENT OF teaching has been strengthened, and the dilution has been timely dilution, shortening the distance of information transmission, and effectively regulating the teaching process.

Multimedia teaching can expand students' knowledge, to a certain extent, increase students' knowledge reserve, wide-ranging, multimedia teaching and various teaching methods, teachers can use multimedia information to spread a lot of knowledge, so that the students on the basis of the master textbook knowledge, expanding horizons, contact more knowledge, improve their various aspects ability, to adapt to the fierce competition In the society.

2.2 Disadvantages of Multimedia Technology in Teaching Application

May distract students. Multimedia teaching has various forms and rich contents. Some teachers will play videos related to the knowledge taught to students in class. When watching videos, it is difficult for teachers to control students' attention, so some students will wander and lose their attention. [2]

The courseware may not be of high standard. Use of multimedia teaching, the most important thing is to use the courseware teaching, so the influence of the level of courseware for classroom teaching quality is very big, but some very experienced teachers are likely to make courseware level is very low, low level of courseware, lead to some level of the teacher will be shackled by the courseware, this class quality will decline, students'learning quality Volume is also directly implicated.

There may be a situation where the cart is put before the horse. Multimedia teaching for students, video, animation, pictures, is very attractive one way to class, the original idea of the multimedia teaching is to make use of these advantages, improve the students' enthusiasm in class, drive the class atmosphere, make students interest in learning, but in the process of actual operation, there have been some problems, some students only focus on courseware on the fun of it. They only play with videos or pictures that are attractive to them, but ignore the content of the class, and ignore the originalintention of this way of teaching. [2]

Both teachers and students rely too much on multimedia. Often use the multimedia teaching, some teachers causes dependent psychology, appear even lazy psychology, because some teachers did not do the courseware by heart, just simple list of the knowledge on the courseware, for some issues which need to think about, some teachers because of the trouble, can selectively ignore, what's more, directly download courseware on the Internet. For students, they generally passively accept the content of the teacher, and the teacher does not prepare the lesson carefully, which directly affects their students. In this case, both teachers and students do not think deeply about the knowledge.

Multimedia teaching in university is a very common way of a class, with mobile phone in class are also common in the university, so also can appear a situation is that students don't like to take notes, many college students are the pictures of the PPT content with mobile phones, review after class is not in, seemingly put knowledge" "down, actually still have no idea in your mind. Multimedia technology should be used to assist teaching, rather than for the sake of use, multimedia technology can not replace "teacher writing on the board" and "students take notes" the process of taking notes is to deepen the impression of knowledge and consolidate understanding of the process,

which can not be ignored. Appropriate blackboard writing by teachers also plays a great role in improving the quality of the class, which can make students understand the key points of the lesson and facilitate students to take notes.

Lack of interaction between teachers and students. Use of multimedia teaching can make the part of teachers rely too much on the courseware, sometimes students will watch video, a lesson in this period, the teacher only speak their own, or only see their own students, the teachers ignore students'questions, nor to the student independent thinking of the time, this will make the interaction between teachers and students greatly reduced.

3. Conclusions

Use multimedia wisely and don't rely on it too much. Since the advent of multimedia teaching, many universities have begun to use the multimedia teaching, multimedia is originally in the teaching of an auxiliary tool, but many teachers relies too much on multimedia, the multimedia teaching as the main means of teaching, is the process of teachers'teaching and students'learning, a leader of the activity is a teacher, rather than the multimedia, hope the teacher Can understand their own role in teaching and responsibilities

In combination with modern technology, we should give full play to our own subjective initiative, balance the use of multimedia, use it reasonably and assist it appropriately, instead of relying on it too much.

To improve the level of making courseware and enhance the ability of teachers to use multimedia technology. With the continuous development of information technology in our country, multimedia teaching is more and more common, a lot of teachers have begun to use multimedia teaching, but some teachers because of laziness, the technology level is not high reason, the level of courseware making is very low, a lot of teachers just list some basic knowledge. In view of this situation, educational institutions should give teachers some special training, to improve the teaching level of teachers using multimedia, but also to improve the level of making courseware. Multimedia teaching not only requires teachers to have high technical quality, but also a solid foundation of computer skills. [3]

Teachers should prepare their lessons well. Lesson preparation is a basic part of teaching. In the course of lesson preparation, teachers should carefully organize the teaching content according to the characteristics of the teaching materials and the specific conditions of the teaching objects. Study the teaching materials carefully, refer to the literature extensively, grasp the basic concepts, basic theories, basic skills and the basic requirements of each chapter, determine the key points and difficult points of teaching, arrange the teaching content scientifically and reasonably. Constantly update and enrich the teaching content, pay attention to the combination of social reality, reflect the new scientific and technological achievements of the development of the discipline, and reflect their own relevant research results and academic views. These are all things teachers should do before class, but after the emergence of multimedia, some teachers appear to make courseware at will to teach, the situation is not enough[4]. In this case, teachers should correct their mistakes in time, prepare lessons fully before class, think deeply about knowledge, and have enough understanding of students.

Don't abandon traditional teaching. Multimedia is only an auxiliary tool of traditional teaching. No matterhow common it is to choose multimedia teaching, we should not forget the traditional teaching methods passed down from ancient times to the present. Chinese excellent traditional culture has a long history, extensive and profound, is the spiritual lifeblood of the Chinese nation, and the reason why this lifeblood is still carried forward is closely related to traditional teaching. Teachers should write on the blackboard properly in teaching. Blackboard writing is the processing

and refining of teaching content, the comprehensive embodiment of teachers'teaching ability, and it also has a subtle influence on the quality of students'fonts. So. Under no circumstances should we completely abandon traditional teaching[5].

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