Research on the Negative Effect and Countermeasure of Multimedia Technology Teaching Application

Xu Guangyang, Zhou Li, Zhangmei, Yang Haiyan
Zhaotong University, College of Physics and Information Engineering, Zhaotong 657000
410344843@qq.com

Abstract: With the rapid development of information age, the emergence of various new technologies constantly and widely used. In the field of education teaching, using multimedia technology is the indispensable method and approach, but through the education of modern multimedia technology applied in teaching and research. In the whole process of teaching and learning people often only pay attention to its advantages, and even exaggerating the role of it, but neglect its negative effects on the effect of teaching and learning. This article from the multimedia teaching present situation, the multimedia teaching application such as negative effects and the reasons for the in-depth study, research and analysis, put forward the scientific application of the principles and strategies of using multimedia teaching.

1. Introduction
With the development of the information age, new technologies such as cloud computing, Internet of Things, sensor networks and big data continue to break through. The development of artificial intelligence is deepening day by day, and it has been widely used in all walks of life. The breakthrough and development of these new technologies bring innovative vitality to social society and economic prosperity, and make fundamental changes in human work, learning and life. Especially in the field of education, whether from the perspective of education or not the education system, education mode, education method, education dissemination way, the learning mode, learning style and learning method of students have undergone fundamental changes, which have greatly improved the quality, efficiency and scale of education dissemination. This is mainly due to the in-depth application of multimedia technology in education and teaching. However, in the specific development and application, the application of multimedia technology teaching also shows a lot of negative effects.

2. Current Situation of Multimedia Technology Teaching and Application
In the new curriculum standard, it is also proposed that teachers should flexibly use various teaching strategies to organize and guide students to learn in practice, starting from the objectives of the course and the specific situation of students. In teaching, we should make rational use of textbooks and other relevant materials to give full play to initiative and creativity. This shows that the application of multimedia technology in the new curriculum teaching is the inevitable trend of educational modernization and the fundamental way to develop modern education. With the strong input and support of the state, multimedia technology equipment and facilities have been basically popularized in schools and educational institutions at all levels, and the use of multimedia technology in teaching activities has become the consensus of all teachers. The use of multimedia technology in student learning has been basically universal, such as using APAD, mobile phones, thin clients and various
Applications, websites for learning. According to the study of CNNIC42 data statistics (as shown in the table) and people's life, work and learning, in the field of education and communication in our country, the teaching and learning application of multimedia technology has basically benefited the whole people. It is indispensable for people to learn, communicate, work and shop through various equipment and facilities, using network client, among which education and communication account for a large proportion.

Table 1: Data analysis of the 42nd China Internet Development Statistics Report

| Date                        | December 2017 | June 2018 | growth rate(%) |
|-----------------------------|---------------|-----------|----------------|
| **Contrastive terms**       |               |           |                |
| Netizen                     | 77198         | 80166     | 3.80%          |
| Mobile Internet users       | 75265         | 78774     | 4.70%          |
| User Size of Online Education | 15518       | 17186     | 10.70%         |
| User Size of Mobile Online Education | 11890     | 14221     | 19.60%         |
| Netizen occupation structure - Students | 19608 | 19881 | 1.39% |
| Netizen educational background structure | | | |
| Primary school and below | 12506         | 13308     | 6.41%          |
| Junior middle school        | 29335         | 30223     | 4.11%          |
| High School/Technical Secondary School/Technical School | 19608 | 20122 | 9.44% |
| Junior College              | 7102          | 8017      | 30.01%         |
| Bachelor degree or above    | 8646          | 8498      | -1.72%         |

3. **Embodiment of the Negative Effect of Multimedia Technology Teaching**

Admittedly, the use of multimedia technology in teaching and learning has many advantages, such as stimulating students' interest in learning, inspiring students' imagination, transforming abstract images intuitively, realizing resource sharing, expanding information capacity, satisfying students' thirst for knowledge, making up for teachers' own shortcomings, and improving classroom teaching structure. But just dig in, for example, it is not difficult to find many negative effects in the use of multimedia technology in teaching, long-term listening and observing other teachers' use of multimedia teaching, and the situation in which students are required to use multimedia technology for learning.

3.1 **Multipurpose and abuse of multimedia technology to weaken emotional communication between teachers and students**

The Soviet Union, a famous educator of the former Soviet Union, once said, "Learning in schools is not to put knowledge from one mind into another without expression, but to make mental contact between teachers and students at all times." Classroom teaching is a process of interaction between teachers and students, emotional exchange and joint completion. In multimedia technology, words, images, animations, videos, side-by-side self-explanations, demonstration reading, background music and other sensory organs can act on vision, hearing and other sensory organs, which can really arouse students' attention, stimulate students' interest in learning, improve students' memory and improve learning efficiency. However, multimedia technology teaching has no advantages in language, gesture and
expression. In the process of using multimedia technology in teaching, excessive and abuse of multimedia technology make teachers neglect the influence of their own language, action, expression and teacher's emotional expression on students, and it is difficult to show their temperament and personality charm to infect and conquer students; secondly, students' attention is attracted by the content of multimedia broadcasting, and often will be attracted. It leads to the neglect of teachers' beautiful language, appropriate action, He xi's smile, beautiful blackboard writing and so on, thus resulting in the lack of emotional communication between teachers and students.

3.2 Multipurpose and abuse of multimedia technology limit students' imagination and emotional experience.

In the application of multimedia technology teaching, many teachers always make pictures and videos of the content depicted in the teaching information and present them directly in the teaching, which is called "image understanding". Now many liberal arts teaching is even more so, for example, in Chinese teaching, especially young teachers prefer to do so. In fact, the process of ancient and modern literature appreciation is the process of image re-creation, and the creation of artistic image is also the process of aesthetic appreciation. That is what we call the "second creation" process, "a thousand readers have a thousand Hamlet", which is the process of edifying reading. Personal sentiment is an important link to improve artistic accomplishment. No matter which subject, kungfu of learning focuses on the word "enlightenment". Where does this "enlightenment" come from? It does not come from pictures or animation. It should come from the learning information itself, from the imagination space given by the learning information, from the deeper emotional experience of the learner's consciousness space. For example, in the study of literature, it must come from the melting of ancient literature. Today's boundless charm comes from the humanistic spirit in which thousands of souls of poetry, literature and patriotism depend on words. Therefore, students need to read, recite, discuss, feel and imagine emotionally in order to get sublimation, which is the true meaning of literary learning. One of the important tasks in subject teaching is to cultivate students' thinking ability and innovative ability. The imagination provided by words is much larger than that provided by image animation. It is a great limitation to students' thinking, imagination and association only by means of intuition. Of course, it is not enough to talk about emotional communication and experience.

3.3 Multipurpose and Abuse of Multimedia Technology to Affect the Formation of Students' Good Habits

Ye Shengtao, a famous educator, once said, "It's better to have a good habit if you accumulate tens of thousands of dollars." It can be seen how important habit is, a person's good learning habits, will benefit him for life; and bad learning habits, will make a child's life is busy and inactive. Long-term use of multimedia technology in teaching and learning, the negative impact on students' learning habits can not be ignored. First of all, it is not conducive to the cultivation of students' autonomy, cooperation and inquiry learning ability. Using multimedia technology in teaching and learning, teachers often guide students to guide and think along the formatted trajectory of courseware arrangement, leaving little time and space for students to think. This oriented and modeled teaching mode deprives students of free thinking and cooperative discussion. And the right of imagination, students can only passively accept, easy to cause students gradually lose interest in learning, can not stimulate students' imagination, do not think, cannot think, lazy thinking vicious circle, seriously affecting the formation and improvement of students' autonomous learning ability. Secondly, it is not conducive to the cultivation of students' abstract thinking ability. In the process of multimedia technology teaching, students have long been stimulated by visual and visual information, depending too much on the process, graphics and image information, and the real reproduction of multimedia technology, gradually forming the inertia of thinking, which will inevitably affect the formation and development of students' abstract thinking ability, and is not conducive to the cultivation of students' ability to analyze and solve problems.
3.4 Multipurpose and Abuse of Multimedia Technology Affect the Cultivation and Improvement of Students' Ability

What direction a person can develop, the level of development, the speed of development, in addition to congenital conditions, mainly depends on the acquired educational conditions. Family environment, lifestyle, family members' occupation, cultural accomplishment, interests, hobbies and parents' educational methods and attitudes towards children have a great impact on the formation and development of students' abilities. In terms of educational conditions, school education plays a leading role in the development of students' abilities. School education has planned, organized and purposeful influence on students. Therefore, it can not only enable students to master knowledge and skills, but also promote the development of their abilities while learning and training. Developing students' abilities in education and teaching is not unconditional, absolute and spontaneous, but depends on the correct choice of teaching contents, the reasonable arrangement of teaching process and the proper use of teaching methods.

Practice is a process of interaction between human beings and objective reality, and a unique form of active movement. The quality, environment and education mentioned above are important factors in the formation of ability, but these factors can only affect the formation and development of ability in practical activities. Therefore, it can be said that practical activities are the necessary conditions for the formation and development of ability. In the process of teaching and learning, excessive and excessive use of multimedia technology, over time, will lead to students develop a "fetching doctrine" type of inertia, should have done, think, they can stop, homework can be "little ape search", experiments can be virtual simulation, sports can also be online sports..., and so on, in many graduates." It is not surprising that "high marks and low abilities" can only "talk on paper". Of course, many people do nothing in life and work without the network, computers or mobile phones and other tools. They rely heavily on the "bring" of the network. Therefore, multi-use and abuse of multimedia technology will seriously affect the cultivation and improvement of students' abilities to a certain extent.

4. Principles and Strategies for the Application of Multimedia Technology in Teaching

Multimedia as a new teaching aids has its own limitations, but it is undeniable that compared with traditional teaching, and multimedia teaching has its inevitable advantages and advanced nature. Only by using multimedia technology scientifically in subject teaching and learning, making full use of its strengths and avoiding weaknesses, organically combining with traditional teaching methods, following certain application principles and mastering corresponding skills and strategies, can multimedia technology really play an advantageous role in teaching and learning, and can multimedia technology bring into full play its best effect.

4.1 Application Principles of Multimedia Technology

4.1.1 Scientific principle. This is the first principle that must be followed. Multimedia technology teaching as a new teaching aids, its image, intuitive form of expression, naturally loved by students, can greatly stimulate students' interest in learning. But we should also know that it is only an auxiliary means of teaching, a teaching aid used by teachers, and it can not replace teachers, let alone the whole teaching activities. Once knowledge errors or teaching objectives are not clear, content is inaccurate, and expression is not standardized, the consequences are far from a teacher's fault. The harm to students is quite serious. Therefore, we should apply multimedia technology scientifically and reasonably, and use text, graphics and images reasonably in the production of multimedia teaching resources and information. All kinds of media, such as animation, video and so on, are well matched, hierarchical, clear and elegant screen design, and moderate tone matching. They can not be used for the purpose of use, and can not be roughly manufactured to form a new teaching mode of "full-room irrigation". It is necessary to design scientifically, highlight the key points of teaching, resolve the difficulties of teaching, highlight the dominant role of teachers and students, so that it can truly serve teaching and learning.
4.1.2 Educational principles. The purpose of the application of multimedia technology in teaching is to optimize educational information resources, improve the effect of education and teaching, expand the scale of education, improve learning performance, and achieve educational objectives efficiently. Therefore, when using multimedia technology in education and teaching, we must follow the corresponding teaching principles, which can be conducive not only to the display of learning resources, but also to the understanding of students, not only to teachers' teaching, but also to students' learning. It can not only mobilize students' learning enthusiasm and initiative, but also to arouse students' learning enthusiasm. It can not only simplify complex problems, but also make them understand. The abstract problems are concretized to inspire students' association, activate students' thinking, further promote students' effective learning, and support new learning modes such as cooperative learning, autonomous learning or inquiry learning.

4.1.3 Principle of practicability. Constructivism holds that all new learning is based on what to learn, how much to learn, how to learn and how to learn. This requires resource producers to design according to the new curriculum standards, the scope of teaching objectives and the depth and breadth of teaching contents, and around mobilizing students' creative thinking and learning enthusiasm. Create multimedia learning resources. By presenting the visualized content which can be easily expressed by multimedia elements such as graphics, images, videos and animations in the form of multimedia courseware, the purpose of solving the problem is achieved and the courseware has practical value. For example, when teaching Zhan Tianyou, there is not much use of multimedia. It's just for students that it's not easy to understand the principle of "human" railway route design and train uphill and downhill. I make this content into animation through multimedia. The intuitive and vivid picture, together with the teacher's explanation, made the students understand this content quickly, and sincerely admired Zhan Tianyou's intelligence.

4.1.4 Interaction principle. A good multimedia learning resource should not only have good expressive and presenting power, but also have good interaction. The operation should be simple and fast, uniform before and after, interactive menus, icons or buttons are clear, so as to avoid too many levels and disorderly layout. Only in this way can we better realize man-machine dialogue, better control the progress of "teaching" and "learning", and real-time detection of learning effects.

4.2 Multimedia Technology Use Strategy

![Diagram of Cone of Learning](National Training Laboratory of the United States)
Human learning is the mastery, accumulation and transformation of knowledge or experience. According to the theory of "learning pyramid" of the National Training Laboratory of the United States (Figure. 1), "teaching" and "learning" mainly lie in the learning mode of learners. Active learning at the bottom of the tower, the acquisition of knowledge, experience and retention rate is higher, which means that the transformation of knowledge will also be the highest. This is the case. Although the application of multimedia technology in subject teaching has many advantages that traditional teaching can not match, due to the influence of various factors, many teachers often neglect its "instrumentality" and "auxiliary" in use, which often results in learners'passive learning, which not only fails to achieve the goal of optimizing teaching, but also seriously affects the teaching effect. In the specific teaching, we must pay attention to the following points in the teaching and learning application of multimedia technology:

4.2.1 Learn to Use Multimedia Technology
As a teacher, in order to improve the quality and efficiency of teaching, we must first learn to use the tools used in our teaching skillfully and freely. Multimedia technology teaching is developed on the basis of traditional multimedia teaching, but it has its unique characteristics, and its operation has its own differences. Before using it, we must learn how to use various multimedia teaching equipment skillfully, and be familiar with its system structure and operation process. In this way, in their own teaching can effectively play its role. As learners, in order to use multimedia for learning, we must also learn to use various multimedia technology terminals and corresponding software, only in this way can we better carry out effective learning.

4.2.2 Organic integration of teaching information and multimedia technology
As a teacher, no matter how qualified and famous you are, no matter what kind of teaching mode you adopt, lesson preparation is indispensable. Therefore, when using multimedia technology in teaching, we should make full preparations. In order to achieve twice the result with half the effort and effectively improve the quality and efficiency of teaching, it is necessary to deeply study the teaching content, select appropriate teaching methods and modes, do well in teaching design, make necessary courseware and provide enough learning resources, and integrate the dissemination of teaching information with various multimedia teaching systems so as to fully reflect its value.

4.2.3 Targeting and avoiding abuse
The ultimate goal of teaching is to improve the quality of teaching, achieve better teaching effect and improve learning performance. If this principle is violated, it is meaningless to use the "big" media. Because teaching does not depend on how much media is used, it is necessary to highlight the teaching theme and solve the teaching difficulties. Therefore, it must be clear that all media are only for teaching and service, all media are only tools, play a supporting role, are subordinate, talents are the main body of teaching and learning, and the use of media can not replace all teaching and learning. When using multimedia technology in teaching, we must also understand this point, so as to have a definite aim, use it only, and avoid abusing it.

4.2.4 Inheritance of tradition, coexistence of multiple methods and rational application
The organic integration of multimedia technology and traditional teaching makes classroom teaching more intuitive and interesting. To improve the quality and efficiency of teaching, there is no doubt about its advancement and superiority, but it can not completely replace the traditional teaching methods and means. After thousands of years of development and accumulation of education, many teaching experiences, teaching methods and teaching means summarized and refined by predecessors are scientific and practical. In the process of applying multimedia technology in teaching, we should objectively consider the advantages of traditional teaching, organically combine the two, combine multiple methods and apply them reasonably, so as to achieve better teaching effect and improve learning performance.
4.2.5 Really fulfill the role, teach and educate people
Zhu Xi, an ancient philosopher, said, "In terms of succession, knowledge is the first, in terms of importance, action is the most important." It can be seen that "knowledge" and "action" are inseparable. "Learning from high school as a teacher and being a model" is always the theme of teachers. Every action of a teacher is to educate the students without words. Teachers should set an example for them in speaking, behaving, dressing and living. This is impossible for any multimedia technology. No matter how advanced the teaching system is, it is only a modern teaching method, which is used to improve the efficiency of teaching, break through the key points and solve difficult teaching problems. Title. In the application of multimedia technology in teaching, teachers should not only be media broadcasters, but also fully reflect the leading role of teachers and the main role of students in the whole teaching process. They should play a good role as real teachers. They should effectively disseminate teaching information through organic integration of teaching content and media, scientific presentation, lively lectures, teacher-student interaction and emotional influence. Teaching and educating people.

4.2.6 Adhering to the tenet of "combining the real with the virtual"

Human self-learning ability is formed and developed in learning activities, and human organizational ability is gradually formed in long-term social practice. People's various abilities can not be improved and developed without specific practical activities. Using multimedia technology to study and teach, no matter how beautiful the information is and how wonderful the process is, it is only the reproduction of objective existence, not the real reality. According to Dell's "Tower of Experience" (Figure 2) learning model theory, human learning is the accumulation of experience. Education and teaching should start from concrete experience and gradually rise to abstraction. Effective learning should be full of concrete experience. Therefore, human learning is bound to have a very strong reality. Regardless of teaching and learning, in the application of multimedia technology, we must embody the mapping relationship between virtual presentation and objective reality, and fully embody the application purpose of "combining reality with reality". In specific applications, we must insist on using objective reality when conditions are available, instead of using multimedia technology to re-present, so that students can participate directly. In the "doing experience", there are opportunities for full practice, such as various physical exercises, physical and chemical experiments, social practice and so on..

5. conclusion
The use of multimedia technology in teaching and learning is the perfect combination of modern science, technology and art. It can play an important role in teaching and learning. However, the application of multimedia technology is also a "double-edged sword", which has advantages and disadvantages. If we
use multimedia technology scientifically and reasonably in teaching and learning, we can maximize the value of Multimedia technology in teaching and learning.

In short, it is an inevitable trend of the development of education and teaching to use modern multimedia technology to spread the information of education and teaching effectively. The use of modern multimedia technology in educational and teaching dissemination will become more and more common. As educators and learners in the new era, we must keep pace with the development and application of science and technology, constantly learn new media technology and master new educational and teaching technology. Only by combining the advantages of traditional teaching scientifically and using them well can we really improve the quality and efficiency of teaching, realize the informatization and modernization of education, optimize learning, improve learning performance and maximize effective learning.

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