Research on the Application of Computer Multimedia in Calligraphy Education

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Abstract. Calligraphy is the combination of practical value and artistic value, which is the display of traditional Chinese culture. Therefore, our country must strengthen the teaching of calligraphy education, which will better carry forward the inheritance of calligraphy culture. The 21st century is the Internet era, which leads to the application of Computer multimedia technology (hereinafter referred to as CMT) in all walks of life, especially in the education industry. Through CMT, students can fully understand the background, economy, politics and culture of the formation of calligraphy, which can improve students' aesthetic realm. By creating a good spiritual realm, students will better show their strength and spiritual realm through calligraphy. Through CMT, students can practice calligraphy on many platforms, which can improve students' appreciation ability of calligraphy. First of all, this paper analyzes the importance of the application of CMT in calligraphy education. Then, this paper analyzes the application forms of CMT. Finally, some suggestions are put forward.

Keywords: Computer Multimedia Technology, Calligraphy Education, Application

1. Introduction

With the rapid development of information technology, CMT has a great impact on Calligraphy Education in Colleges, which has caused the conflict with the application of traditional Chinese calligraphy [1]. At present, we are in an era of diversified knowledge explosion, which leads to less opportunities for people to apply calligraphy. Therefore, people's resistance to calligraphy education is growing, which also makes colleges must reform the traditional calligraphy education teaching mode [2]. Chinese calligraphy has a strong atmosphere of historical and cultural precipitation, which has witnessed the historical changes of our country. Colleges are the export places of quality education talents in our country, which needs to transport talents with cultural confidence to the society. Therefore, colleges must strengthen calligraphy education, which will better cultivate a comprehensive quality talents with cultural confidence and cultural heritage [3-5]. Through CMT, colleges can reform the traditional calligraphy education mode. Through calligraphy education, colleges can improve students'
excessive dependence on electronic products, which can also improve students' cultural heritage. Calligraphy practice is a matter that needs long-term adherence, which can exercise students' perseverance. Therefore, colleges must strengthen calligraphy education based on CMT [6].

2. The necessity of the application of CMT in Calligraphy Education

Through calligraphy education, students can recognize the excellent culture of the Chinese nation, which can also improve their art appreciation ability. Therefore, in the era of multimedia, colleges must strengthen calligraphy education, which is of great significance, as shown in Figure 1.

![Figure 1. The necessity of the application of CMT in calligraphy education](image)

2.1. Improve the initiative of learning calligraphy

Through CMT, colleges can improve students' initiative in learning calligraphy. From a person's handwriting, we can figure out what kind of character he is. Calligraphy is the best way to cultivate one's habits. Through modern science and technology, colleges can improve students' consciousness of learning ability [7]. Calligraphy is a way to temper character, which can improve self-cultivation. Through calligraphy training, students can strengthen the artistic way of inner temperament. Interest is the best teacher, which is a good teacher to cultivate children's good development. Internet technology is multifunctional, which has a certain attraction for children to learn calligraphy. Through the network media, colleges can maximize the use of resources, which can provide a variety of learning materials and pictures of teaching scene. At the same time, network resources also broaden students' horizons and appreciation quality [8].

2.2. Improve the timeliness of learning

Through the CMT, colleges can improve the timeliness of students' learning, which will help students break through the difficulties of learning. Through CMT, students can maximize the use of limited resources, which can focus on breaking through the difficulties in learning calligraphy. Through the CMT, students can transform the teacher's classroom teaching content, which can realize the sublimation of internal cultivation behavior [9]. At the same time, teachers need to master CMT, which can enrich the network technology brain. Therefore, teachers not only need a high level of professional calligraphy, which also requires skilled CMT. Through CMT, we can enhance the effectiveness of students' learning, which will maximize the use of time efficiency. Calligraphy learning is a kind of deep cultivation, which
needs to have their own style and perception. Through CMT, students can learn more about the origin and production of calligraphy. By browsing the website, students can identify different types of calligraphy culture, which can be more familiar with the political, economic and cultural status of the period of calligraphy [10].

2.3. Enhance emotional communication

Through CMT, colleges can enhance students' emotional communication, which will enrich students' emotional experience. Calligraphy is a highly communicative art. What kind of thoughts an author reveals in his heart will show his true feelings in his works. Art is a real thing, which requires us to enrich our works and enrich our spiritual world with our inner feelings. However, the teaching of modern calligraphy art has already exceeded the purpose of teaching itself, which requires more sublimation of true feelings [11]. The traditional calligraphy teaching only stays in the most basic teaching methods such as Xuan paper, pen and ink. Through CMT, students can feel the works in front of them, which will enrich and expand the students' inner feelings. Through CMT, colleges can enhance students' EQ, which will enhance the emotional awareness of calligraphy. Through CMT, teachers can organize calligraphy resources into comic books and documentaries, which can let students feel the initial emotional power of calligraphy [12].

2.4. Provide correct and excellent writing standard format

Through CMT, colleges can provide correct and excellent writing standard format. The regularity of writing Chinese calligraphy is an essential basic ability, which requires not only correct writing posture, but also standard and neat writing font. Correct sitting posture is directly related to students' health, which is also related to students' writing ability. Learning calligraphy is to have a deep mood. A good and accurate sitting posture can make students calm down, which can help students completely indulge in the atmosphere of practice. Through calligraphy practice, students can improve their psychological quality, which will become a calm and peaceful inner personality. Good learning is based on the correct and standardized posture and behavior, which requires students to constantly correct their bad writing posture. However, students' autonomous learning ability is not strong, which requires more supervision and guidance from teachers [13].

3. Application forms of CMT

Multimedia is the basic carrier of information, which needs to complete the coding, transmission and storage of information through cognition. Through CMT, colleges can form a variety of calligraphy education forms, as shown in Figure 2.
3.1. *Micro lecture demonstration leads to the construction of new knowledge*

Although calligraphy knowledge and calligraphy skills are the same knowledge system, their knowledge attributes are different because of their different origins. Therefore, the way of practice is not the same. Calligraphy knowledge belongs to declarative knowledge, which can solve students' basic cognitive problems of calligraphy. Calligraphy skills belong to procedural knowledge, which can solve the problem of students' writing skills generation. Through the form of micro lesson, we can unify declarative knowledge and procedural knowledge in micro lesson module. Through the one-to-one way, calligraphers can coach learners, which can lay a foundation for students to understand the cultural connotation of calligraphy and calligraphy skills training.

3.2. *Audio visual combination promotes skill generation*

Through multimedia technology, we can optimize the combination of various media for the basic carrier of learning. In CMT, we can complete it by audio-visual combination of video, audio and animation. Video can push 70% of the information to learners. Audio is responsible for more than 20% of the information transmission task. Animation can complete the task that ordinary video can't replace, which can present the people and scenery of imagination. Based on the cognitive function of media, video, audio and animation can act on the representation information system of human brain, characterized by the replication, simulation, playback and storage of experience, which can be suitable for the transmission of procedural knowledge. Therefore, CMT emphasizes the pertinence of information expression. Through the diversity of multimedia combination, students can show different types of audio-visual combination modules in different practice modules, which can support the generation of calligraphy training skills.

3.3. *Motivating practice to promote method transfer*

Both declarative calligraphy knowledge and calligraphy skills need to be strengthened by practice. However, if the practice can’t design a good method, it will not only consolidate the acquired new knowledge, but also weaken the original knowledge structure, which will produce psychological blocking effect. At the same time, practice also has the task of promoting method generation. Through
calligraphy practice, writing behavior will be transformed from imitation to muscle memory, which will become a personalized behavior. Universal writing method can be transformed into individual experience. Therefore, calligraphy knowledge and skills will realize the real transfer. Poor practice design will lead to negative transfer, which will make students lose interest in learning calligraphy. Therefore, teachers should use more incentive mechanism, which can be based on the target task to reward. At the same time, CMT provides a variety of ways to achieve the goal of the task, which enables students to repeat training skills in practice.

4. The teaching method of school calligraphy education in the multimedia era

4.1. Learning calligraphy skills by means of Multimedia

In the study of calligraphy, skill practice plays an important role in the expression of the author's inner spirit. Therefore, calligraphy teaching should pay attention to the study of calligraphy skills. With the help of camera and projection technology, teachers can show the changes of posture and wrist in the process of calligraphy from different angles. Through the skills of high definition and high speed, students can better understand the essentials and skills of calligraphy writing. Calligraphy art takes painting and structure as its form of expression, which can pursue the expression of emotion in art. Calligraphy teaching should cultivate students' ability to appreciate calligraphy. Through the application of multimedia technology in calligraphy teaching, colleges can increase the chance and ability of calligraphy appreciation, which will promote students to improve their calligraphy skills, calligraphy appreciation and aesthetic ability. Through the introduction of multimedia technology, the traditional calligraphy classroom will become vivid and three-dimensional. Multimedia projection technology can dynamically present the writing process of calligraphy, which needs teachers' oral explanation and students' practice. Through multimedia technology to learn calligraphy skills, students can improve the efficiency of calligraphy teaching, which will improve students' interest in learning and appreciating calligraphy.

4.2. Strengthening calligraphy teaching with the help of network database resources

The application of network database provides students with a large number of subjects. In teaching, teachers can introduce different types of Calligraphers' works and the writing videos of the winners of various competitions. Through network remote technology and interactive education, we can make calligraphy teaching an open teaching form. Therefore, all the information related to calligraphy teaching has become teaching resources, and information technology has become the carrier of calligraphy teaching. For example, in structure teaching, teachers can first demonstrate the stroke order and motion path of Chinese characters with multimedia animation. Then, demonstrate the changes of strokes with a brush on rice paper, and demonstrate the whole writing process of Chinese characters with a brush, which can make the whole teaching process more clear and intuitive. The application of CMT in calligraphy teaching can provide a lot of auxiliary information for the classroom, which can effectively improve the efficiency and quality of classroom teaching.

5. Conclusion

Through CMT, colleges can make full use of modern teaching methods in teaching activities, which will enrich the diversified ways of calligraphy teaching. At the same time, through multimedia technology,
we can create a good calligraphy learning environment, which will improve students' invasive teaching. By strengthening calligraphy education, colleges can shape students' confidence in Chinese traditional culture, which can also improve students' artistic aesthetic ability. Therefore, colleges must strengthen calligraphy education based on CMT.

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