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Abstract. The influence of music on human qualities is extremely far-reaching, and music is both a means and an end in terms of human development. In order to have a good piano lesson, it is crucial to mobilize students' positive emotions in piano lessons according to the psychological characteristics of contemporary students and in the context of their actual situation. How to make the most of music lessons, to create maximum value with the limited time available in class, and to have a more profound and lasting positive impact on the students' subsequent development and growth. Computerized audio technology offers a new way of thinking and approach. Based on this, this paper explores the application of computerized audio technology in piano education.

Keywords: Computer Audio Technology, Piano Teaching in Colleges and Universities, Necessity, Application Advantage

1. Introduction

There are countless examples in the past and present that prove that music education plays an important role in human development, and there is no shortage of interesting stories of scientists creating inventions that benefit from music. It is not feasible for us to carry out quality education without music education, plus a considerable number of students come from remote rural areas and have not received formal music education since childhood, some of them do not even know the basic music theory, let alone talk about profound orchestral music. Some students do not even know who the composer of the National Anthem of the People's Republic of China is, and a serious lack of music education is detrimental to students' growth and success. Providing music education is an imperative task. The great scientist Albert Einstein was a violin lover, China's famous scientist Qian Xuesen was also a music lover, and former Vice Premier Li Lanqing was an expert in European music history, these examples show that a person's success is inseparable from music education. The role of music education in improving students' music literacy, in cultivating sentiment to improve scientific literacy, and in cultivating good will quality is irreplaceable, and promoting quality education opens up a wide world for the development of music education, while computer audio technology provides very favorable conditions for the further development of music education career [1,2].
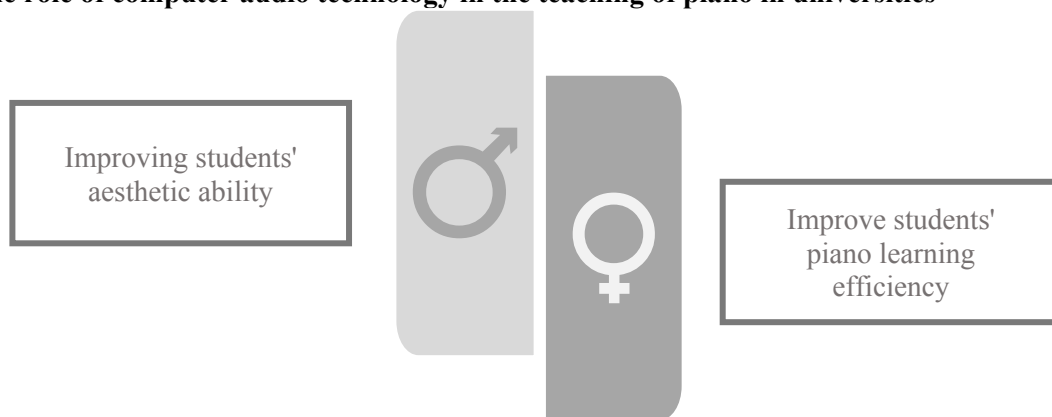
2. The necessity of computer audio technology in college piano teaching

In the traditional mode of piano teaching in colleges and universities, teachers often teach students through uniform theoretical lectures or individual lessons, which has certain limitations in practicing piano teaching objectives. For example, the disconnection between theory and practice in uniform theory lectures is prominent, especially for some conceptual knowledge, which teachers cannot combine with practical operation, and textbooks and teachers' experience become the main channels for students to obtain piano theory. One-on-one lessons can help students acquire skills in a timely manner, but the high cost of teaching is contrary to the professional development of piano teaching in colleges and universities, and students' piano training tasks can hardly be carried out smoothly in one-on-one, thus affecting the overall teaching progress and the training effect of individual students. To address this, in order to balance the relationship between uniformized teaching and individual lessons, universities should combine the current advantages of multimedia teaching to design more comprehensive and effective training programs for students [3].

3. The role of computer audio technology in the teaching of piano in universities

Figure 1. Role

3.1. Improve the aesthetic ability of students

The use of computer audio technology in college piano teaching not only provides students with an auditory pleasure, but also stimulates their visuals, thus enhancing their interest and creating a corresponding teaching context for them, eventually creating an interactive learning atmosphere and satisfying their thirst for knowledge. In the piano teaching activities in colleges and universities, students need to express different thoughts and emotions to experience the beauty of piano learning and to cultivate their emotions. Therefore, it is necessary to improve students' aesthetic ability and form a unique appreciation of music through various effective ways in piano teaching. The application of computer audio technology in college piano teaching can not only break the space and geographical restrictions in the traditional teaching mode, but also fully demonstrate the knowledge related to piano teaching and enhance the efficiency of piano teaching. Piano teaching through computer audio technology can image the emotions and thoughts of the performance repertoire to students effectively, which is conducive to improving the efficiency of students' piano learning and the expression and sublimation of their emotions [4].

3.2. Improve students' piano learning efficiency

The use of computer audio technology in piano teaching in higher education can fully demonstrate the main position of students, so that students can actively participate in learning, and improve students' learning enthusiasm and learning efficiency. Teachers can also use computer audio technology to set certain situations, create a harmonious learning atmosphere for students, expand students' learning thinking, promote the development of students' association ability, accelerate students' understanding of piano knowledge, improve students' piano learning effect, and achieve emotional empathy and

communication with piano players. The use of computer audio technology in college piano teaching not only enhances the effect of teachers' teaching, but also improves students' learning efficiency to a certain extent.

4. The development prospect of computer audio technology in college piano teaching

With the continuous development of network information technology, the use of computer audio technology in college piano teaching has become an inevitable development trend, which can combine information technology with piano teaching and promote the cultivation of college steel talents, in line with the development direction of education. The use of computer audio technology in piano teaching has great advantages, it can promote the image and vividness of the teaching, the teacher can design scientific and reasonable teaching materials according to the teaching content, combined with the actual characteristics of students, using some rich video and pictures to stimulate the interest of students. Students can choose the mode of piano teaching according to their own characteristics, which realizes diversified teaching methods, and finally promotes students to learn theoretical knowledge and also improve the piano practice skills, etc., to cultivate students' comprehensive quality [5].

The use of computer audio technology in college piano teaching can not only respect the differences that exist among students, but also take full care of each and every student. In the new period teachers should seize the opportunity of development and lead students to feel the open musical horizon with the help of advanced technology, provide students with rich learning resources and a wide display platform, and promote the piano teaching in colleges and universities to be full of vitality and vigor.

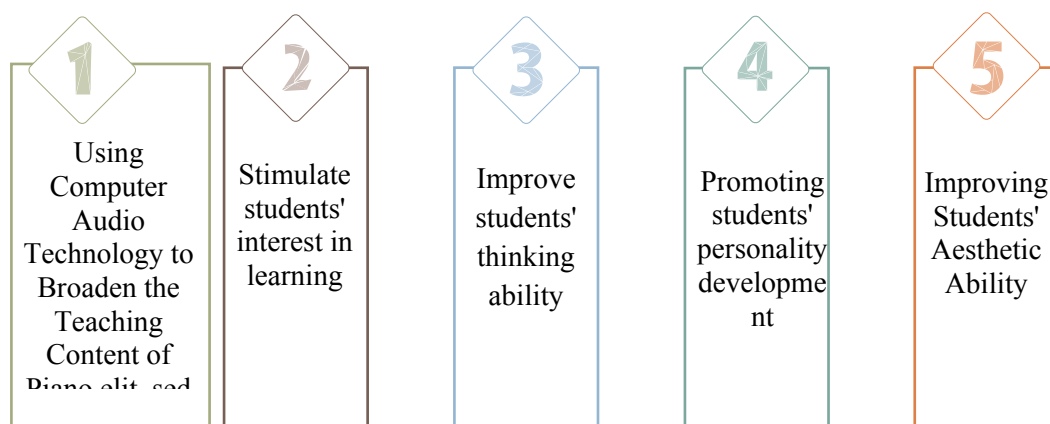**5. The application path of computer audio technology in college piano teaching**

Figure 2. Application channels

5.1. Using computer audio technology to broaden the content of piano teaching

A landmark feature of the information age is the emergence of massive information. In traditional college piano classroom teaching, teachers' professional experience and theoretical content in textbooks almost become the main content for students to obtain piano training guidance. With the application of computer audio technology, teachers can use the online course platform to collect and organize rich piano teaching resources for students, for example, collecting information materials on piano literature, collecting information on musicians' works and analyzing different stages of musical styles, collecting versions of various piano pieces, etc. Such teaching contents are not only more innovative and comprehensive in form, but also provide students with further deepening of theoretical learning. Resources [6].

5.2. Using computer audio technology to stimulate students' interest in learning

The mechanics and rigidity of piano training make it difficult for some students to persevere and lose interest in learning. In the application of computer audio technology, teachers should give full play to the advantages of its graphic, vivid and intuitive resources to provide students with diversified teaching situations and stimulate their interest in learning, so that piano training gradually breaks away from a single mode and becomes an important element in the development of students' artistic literacy. For example, using the diversity of multimedia resources to create dynamic teaching situations for students, or using the presentation of film and television materials, or using game-like keyboard exercises to make students gradually reverse their stereotypical impressions of piano learning and increase their motivation to learn [7].

5.3. Using computer audio technology to improve students' thinking skills

In the application of computer audio technology, students transform not only the way of learning, but also the way of thinking. Therefore, in college piano teaching, teachers should make full use of computer audio technology to guide students' thinking transformation and improve their ability to think independently and investigate problems. In the training, teachers can use computer audio technology to reflect the melody, orchestration, strength and other characteristics of the piano more intuitively, and guide students to broaden their thinking space, grasp the logic of music and improve their level of appreciation, performance and even creation of music according to the diversified musical expression.

5.4. Using computer audio technology to promote students' personality development

Music is a special artistic language that can use perceptual information to stimulate the listener's imagination. The piano's interpretation of music is a second creation of the musical work, which contains not only the author's emotion, but also the dialogue between the performer and the author, and only in this way can the individuality of the piece be highlighted and the vitality of the musical work be shown in a uniform performance. In college piano teaching, teachers should use computer audio technology to provide a broader space for students' personalized training, so that students can comprehensively mobilize their sensory organs in the environment, stimulate their desire to know more about music, and generate the will to express music individually.

5.5. Using computer audio technology to enhance students' aesthetic ability

As a musical instrument, the piano uses the work as a basis to bring out the aesthetic value contained in the music. In college piano teaching, teachers' application of computer audio technology not only shows the soft artistic characteristics of the piano, but also depicts vivid picture situations. The combination of abstract music and concrete images stimulates the audiovisual senses, allowing students to experience beautiful music and at the same time to experience the context of beauty, which gradually leads to the desire to pursue beauty and improve their aesthetic level [8].

6. The effect of computer audio technology in piano teaching

6.1. Stimulating students' interest in learning

Interest is the best teacher, and so is piano teaching. Stimulating students' interest in learning piano is a problem that teachers need to solve. In teaching teachers stimulate students' interest through the introduction of teaching contents, such as using computer audio technology to play beautiful piano songs, create piano classroom atmosphere, draw out students' feelings towards piano, make students take the initiative to learn piano and devote themselves to the teaching contents of piano lessons.

6.2. Improve students' imagination and thinking ability

Piano learning requires the creation of imagination in order to understand the connotation of the piano and better master the teaching materials. The current piano textbook lacks musical aural expression, and the single form of musical expression reduces students' enthusiasm and interest in learning. However, the application of computer audio technology has changed the above situation. Teachers use computer

audio technology to match images, audio and video information in teaching contents, and the colorful information makes students' senses impacted, such as piano music combined with image information, so that the melody, orchestration strength and other characteristics of music are fully expressed, showing rich connotations and characteristics, triggering students' phenomena and thinking, making students creative learning, enriching the imagination and thinking ability, improving students' appreciation of piano music, and improving learning efficiency by learning with pleasure [9].

6.3. Solving teaching difficulties
Whether the teacher's teaching level is reflected and whether the teaching goal is achieved is the difficulty of teaching content. The application of computer audio technology combines images, text, sound and video, which enriches the interpretation of the teaching content. Teachers point out and explain in the teaching, so that students can better understand the teaching content and thus the teaching difficulties can be solved [10].

6.4. Enrich teaching content
Teachers teaching preparation, to collect information materials related to the teaching content, can use computer audio technology will collect the piano works creation background, writer information, style, etc. to display, and give explanations to make students more in-depth understanding of the course content, so as to understand the connotation of the piano repertoire, to develop their own piano emotions, improve the musical literacy and artistic base, and thus improve the teaching effect.

6.5. Improve aesthetic ability
In piano teaching, the application of computer audio technology, through the image of the emotion and connotation of the music expressed in front of the students, so that students receive visual and auditory impact, in the world of music, feel the beauty of music, improve the perception of beauty and aesthetic ability.

7. Misconceptions of computer audio technology in piano teaching
The widespread use of computer audio technology in piano teaching teachers are prone to misconceptions in teaching, which will undoubtedly reduce the quality and effectiveness of teaching, therefore, teachers need to try to avoid the existence of misconceptions.

7.1. Misconception 1: Serendipity
Teachers are limited by the fixed teaching ideology, they can't use computer skillfully or they despise the influence of lesson preparation, etc. In piano teaching, teachers still use the traditional teaching method of a book, a piano and a blackboard only when the public lesson or observation lesson is carried out [11,12].

7.2. Misconception 2: Abuse
The application of computer audio technology in teaching is a new model, some teachers rely too much on computer audio technology, over-pursuing multimedia teaching methods in teaching, ignoring the meaning of music and the value of imagination, interweaving too much information, thus causing the situation of putting the cart before the horse, distracting students' attention from the focus of knowledge, not highlighting the focus of teaching but producing the opposite effect.

7.3. Misconception three: substitutability
Computer audio technology has a lot of advantages in teaching, but its function is to assist teaching, the teacher is the leading teacher, the teacher should combine the actual situation in piano teaching reasonable use of computer audio technology, so that computer audio technology to play the maximum role.

8. Conclusion

It is up to the teacher to choose the right key to open the door to music. The mobilization and cultivation of emotion is the best choice in teaching. Music teaching should be close to students, and music teachers should enjoy the joy, anger and sorrow together with students. The comprehensive influence of music education on people's intelligence development and temperament is not to be underestimated. It can cultivate a positive spirit and a pure and elegant style, which can purify people's mind and enhance their personality. And audio technology is a very good choice. In practice, you should always keep the teaching concept in line with the teaching practice and the development of the times, and consciously and systematically apply computer audio technology to the piano course to reflect the advantages of computer audio technology in comparison with traditional teaching methods, give full play to the value of multimedia education and improve the quality of piano teaching in schools.

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