Research on Practice Reform and Implementation of European Music History Course in Colleges and Universities Based on Music Feature Extraction Technology

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Abstract. The history of European music is one of the required subjects for music majors in colleges and universities, involving many cross-disciplines. As a part of the basic education curriculum of higher music discipline, the reform of European music history curriculum is imperative. As a part of the basic music education curriculum, the European music history curriculum is undergoing this transformation and will certainly find its own new development direction and space. The current music history curriculum practice reform is another important measure put forward under the background of the basic education curriculum reform. The development of the teaching practice reform of higher music education and the need of the development of the European music history curriculum itself require that the students' participation in the practice teaching should be given full attention. The application of modern educational technology is an effective solution to improve the malpractice and quality of traditional music history teaching. Based on the technology of music feature extraction, this paper analyzes the reform and implementation of European music history curriculum in Colleges and universities.

1. Introduction
With the development of Internet technology in our country, our country's higher education has begun a new development situation, gradually turning to education for all. With the gradual improvement of social material living conditions and the increasing calls from all walks of life to attach importance to the construction of spiritual civilization, the current graduates of cultural and artistic fields trained by colleges and universities are gradually unable to meet the needs of the rapid development of social culture in terms of skill allocation and talent quality education [1]. The history of European music is one of the required subjects for music majors in universities. This course can enable students to have a general understanding of the development of European music culture and its basic background [2]. As a part of the basic music education curriculum, the European music history curriculum is undergoing this transformation and will certainly find its own new development direction and space. All colleges and universities have also begun to carry out curriculum reform. General education mainly focuses on teaching basic knowledge and cultivating people's professional skills and life attitude. This is a non-utilitarian teaching method [3]. For a long time, there have been several tendencies in the basic understanding of the essence of music: metaphysical, emotional or formal [4]. Due to the limitation of the vocational education system and the capacity of class hours, history courses are often combined with music appreciation courses, which plays an irreplaceable role in cultivating music theory literacy of higher vocational students.
The European Music History Curriculum is a basic theoretical curriculum for the music disciplines in universities. The requirements of the two outlines not only make the reform of the European Music History Curriculum imperative, but also require teachers to find the key points and find breakthrough points in practice for other music. The development of theoretical courses provides support [6]. Nowadays, the rapid development of information technology and its widespread penetration and application in various types of school teaching activities have provided new orientations and ideas for the teaching reform and innovative design of vocational music history courses [7]. Adjusting the teaching curriculum for music majors is one of the important ways to improve the culture and arts propaganda industry team and develop music and art education in primary and secondary schools. The development of higher music education teaching practice reforms, as well as the needs of the development of the European music history curriculum itself, require that full attention be paid to students' participation in practical teaching links [8]. Guided by the severe employment situation, the talent training mechanisms of music majors in various universities have gradually adjusted their previous teaching model ideas. When we re-understand and reflect on China's music curriculum reform in the new century with a development perspective, we find that there are many problems in the reform [9]. In the current music teaching, the use of modern education technology has been advocated for a long time. Based on the technology of music feature extraction, this article will analyze and study the practice reform and implementation of the course of European music history in universities.

2. The Purpose of Practical Reform of European Music History Course

Change the course's tendency to pay too much attention to knowledge transmission and emphasize to give full play to students' active learning initiative. The traditional form of history teaching is mainly based on teachers' teaching, which leads to students being passive in the learning process. Due to the different teachers in different colleges and universities in our country, the teaching effect is also uneven. Therefore, there are big problems in music teaching methods in some colleges and universities. Looking at the development history of Chinese and foreign education, there is no distinction between scientific education and humanistic education in the initial stage of education. It is more an overall reflection of a colorful world. The main way that modern educational technology acts on teaching mode is through its application of teaching methods. The depth of music knowledge learning is based on the breadth. Information and multimedia technologies provide good conditions for deepening music basic knowledge while breaking through the concept of teaching time and space, expanding the scope and capacity of learning [10]. The basic elements of music and their different combinations can form some unified or personalized external features, which are the formal sources and concrete expressions of various music styles. For music majors, the analysis methods of form and style not only comprehensively summarize the theory of music technology, but also have a high concentration of understanding of the essence of music. Students usually do not know the specific content of the course during the course selection, and students will find that the content of the course is very single.

The new curriculum system not only pays attention to the music subject content, but also attaches importance to the connection with the curriculum reform of basic education, which well reflects the characteristics of teacher education specialty and aims at music teachers who can serve basic education. Music is a unique form of communication. Although the lyrics of a song can convey some specific information, the most important communication meaning for music is non-verbal. Singing ability is a synthesis, which is the synthesis of basic conditions and skills in various music aspects that vocal music students must possess. The basic features of music are extracted and complex features are analyzed on this basis. According to the basic and complex characteristics of music, the overall characteristics of the music are identified. Including the musical structure, style and emotional connotation of music. The specific structure is shown in Fig. 1.
Formal style analysis needs to be carried out in combination with music score text and sound materials. In some uncommon, ancient and abstract musical phenomena or concepts, this analysis method has the advantages of intuition, vividness and concreteness that can hardly be replaced. It is possible to play three octaves at different rhythms with a partial bow, with the stress placed on the first of every two, three, four or six tones. When the speed is increased, we should concentrate on the rhythm and control the fingers and bow well with the rhythm so that the left and right hands can be coordinated. For example, Table 1 shows the difference between music data and traditional data.

**Table 1 Difference between music data and traditional data**

| Data source     | Capacity  | Type    | Organization                  | Quality    |
|-----------------|-----------|---------|--------------------------------|------------|
| Traditional data| Compress  | Discrete| Orderly and organized          | Clear      |
| Audio data      | Very large| Successive | Disordered and unorganized    | Noisy      |

The original audio file is in time-amplitude format, and the data content is too large. In the 44000Hz sample, 45,230 numbers were included per second. This is a very large data item. Therefore, the original audio file is not conducive to research. Therefore, the audio file is converted into frequency spectrum, that is, the time domain is converted into frequency domain, and the frequency spectrum of the audio file is obtained for research. It is very important to fully understand the main characteristics of music for understanding the development and characteristics of European music. It is also effective to use scales to train the consistency of left and right hands. The flow of realizing this function is shown in Fig. 2.
In the 2/4 beat rhythm, a quarter note is defined as a complete beat. That is, each quarter note lasts for one beat, then the corresponding quarter note will last for half a beat, that is, the duration of the quarter note should be half of the quarter note. On this basis, the theme will be expanded, thus forming freely and smoothly music segments and fully developing. Since we cannot make any assumptions about information, we need a way to make the end of any signal smoothly associated with other information. Spectrum analysis is a process of converting time domain into frequency domain. Fast Fourier Transform (FFT) is one of the algorithms to perform this transformation. The frequency components of FFT analysis information are shown in fig. 3.

Any music education system accepts the fact that a multi-cultural music world exists and the value of learning and understanding it, and takes this idea as a new starting point for music education. As the narrator of classroom knowledge, teachers are relatively lack of restraint in teaching methods, methods and emphasis on the important and difficult points. They often carry out subjective teaching according to the hot spots that teachers pay close attention to, and give a brief account of the places where teachers' knowledge is relatively lacking. In the teaching of musical history, the application of modern educational technology has promoted the development of teaching methods towards diversification and
integration. The vacancy and uncertainty of music score have left room for performing artists to create a second time. Although there is no lack of opinions insisting that music performance should strictly follow the notation system of music score, most scholars and schools admit performing artists to create a second time. In terms of general knowledge, different students have different needs. When students follow the same teacher in class after selecting courses, their own knowledge is limited, and the knowledge finally learned cannot meet the personalized needs of each student.

3. The Implementation of Curriculum Reform in European Music History

3.1 Teaching methods
The traditional teaching mode is mainly lecturing, and the students are mainly passive learning. The addition of discussion teaching mode can enable students to participate in teaching better. College teachers are the concrete implementers of curriculum reform, and their educational concepts and teaching behaviors have a direct impact on the cultivation of talents. From the actual situation of teaching, the main purpose of teaching in colleges and universities is to serve the local export of talents for the development of music culture in local primary and secondary schools. It is true that their professional level cannot be compared with that of professional music colleges and universities. In the teaching of music history theory, teachers can make students complete selective, supplementary and subsidizing learning at different levels and levels in the process of collecting and listening to a large number of materials, so as to deepen the learning content. In the practice reform of European music history curriculum, another main means of implementation is to start from the assessment, so as to achieve the integrity of the whole curriculum. In the teaching of music major colleges and music departments in normal universities in China, the teaching of music history in Europe tends to take on a linear mode, which is mainly limited in the level of development and research of music itself, but has little contact with other marginal disciplines and social life.

3.2 Assessment type
Examination is a kind of test form for students' knowledge, and it is also the key to test the teaching effect and reform effect. Many teachers in colleges and universities come from professional music colleges and have not received systematic knowledge of pedagogy, psychology and modern curriculum theory [11]. All music events in the history of music will not exist in isolation. Further analysis and investigation should be made on some music phenomena with similar or similar style characteristics, so as to establish a more rational and profound understanding of the development sequence of music art from the aspects of generality and individuality, horizontal and vertical. The key to the success or failure of the practical reform of music history curriculum is firstly the change of teachers' educational ideology, and teachers' lifelong learning should be emphasized in the process of curriculum reform, which is the only way for the professional growth and development of contemporary teachers. The evolution of some anti-traditional musical styles and techniques, as well as the degree of convergence between music and various marginal disciplines, and even science and technology, are all important musical phenomena worthy of serious study. The examination of most music theory courses is usually a course paper or examination paper, while the European music history course is limited by students' understanding ability and learning depth at the undergraduate stage. During the implementation of the plan, some university teachers, influenced by the original knowledge structure and teaching habitual thinking, still carry out teaching according to the original teaching methods and means, making it one of the main obstacles to curriculum reform.

4. Summary
In order to further promote quality education, cultivate students' innovative spirit and practical ability, and shoulder the historical responsibility of cultivating the next generation, education and teaching reform is the strategic focus of education development. Starting from the music style itself, it is of great importance to guide and strengthen the understanding and understanding of music, music phenomena
and the development of the driving forces behind them. Under the macro background of colleges and universities in various regions highlighting the characteristics of local schools, the curriculum of music history should also take into account the actual needs of regional culture. Based on this situation, vigorously carrying out educational reform will have a profound impact on the reform of European music history courses and even music theory courses in colleges and universities. The history of music is the history of musicians, the history of music schools, and the history of music styles formed by music forms and means. Depending on modern educational technology, we can teach students in accordance with their aptitude, and realize individualized teaching, cooperative teaching, two-way teaching and other teaching methods that meet the characteristics of music teaching. In order to occupy the commanding point of the development of information-based teaching technology as soon as possible, the teachers in charge of the music history course in higher vocational colleges should face the future trend of the development of information-based education technology and actively introduce new teaching methods and models such as micro courses in the history course teaching.

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