



Research on the Ideological and Political Education Model in Digital Music Teaching in Colleges and Universities with Designing Embedded Systems Under the Background of the Internet

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Abstract. In order to improve the comprehensive quality of college students, this paper analyzes the ideological and political models in college music teaching under the background of the Internet, summarizes the frame encapsulation structure of the communication system according to the actual communication system, and proposes two frame encapsulation structures. This paper analyzes the frame structure of the external synchronization with the same frame synchronization information and the composite mode of channel coding and scrambling, and the input and output of the modules in the frame constitute a constraint relationship. Moreover, this paper makes a preliminary introduction to the common frame synchronization, channel coding and scrambling code in the structure, and simulates and verifies the scrambling code identification algorithm. It can be seen from the experimental research that the system proposed in this paper can effectively promote the fusion effect of music and ideology and politics, and can help improve the comprehensive quality of students.

Keywords: Internet; music teaching; ideological and political education; teaching mode

DOI: <https://doi.org/10.14733/cadaps.2024.S8.243-258>

1 INTRODUCTION

Ideological and political work plays an important role in the cultivation of talents in colleges and universities. Colleges and universities should always adhere to the teaching principle of building morality and cultivating people, and guide college students to establish a correct value orientation. College campuses are the main places for ideological and political work. Under the new curriculum reform standards for education and teaching, the state and education departments have paid more and more attention to ideological and political courses in colleges and universities. Moreover,

improving the overall awareness of the development of ideological and political education work in colleges and universities is an effective guarantee for perfecting and implementing ideological and political education work, and has a role in promoting the healthy growth of students' physical and mental health [5]. Ideological and political education courses are based on the characteristic development of applied private undergraduate colleges. Music aesthetic education and ideological and political theory courses need to be paralleled, so that they can be integrated and developed. At the same time, taking the establishment of morality and educating people as the main task of education and teaching is the overall requirement of curriculum construction in colleges and universities including ideological and political theory, and is an in-depth analysis of the content of professional curriculum in colleges and universities. In addition, it is necessary to integrate ideological and political education resources into it, and it is of great significance to improve the efficiency of ideological and political work [15].

Colleges and universities should pay attention to ideological education, improve students' ideological and moral quality, cultivate students to establish correct value orientation, integrate ideological work with mental health education, so as to realize students' all-round development. The traditional mode of ideological and political education is difficult to meet the needs of modern teaching, and the teaching objectives of ideological and political education are also difficult to achieve. Therefore, college teachers should constantly optimize and innovate the traditional teaching methods of ideological and political education [12]. By investigating the daily life of contemporary college students, college students usually take listening to music, watching movies or TV series as a way of leisure. Teachers can take this as a starting point to carry out ideological and political education. Because music works have the advantages of short time and deep connotation, they can be effectively integrated with the ideological and political classroom. The integration and development of music aesthetic education and ideological and political education in colleges and universities, or the integration of ideological and political education content into music curriculum teaching, can effectively improve the quality of ideological and political education teaching, improve students' discipline quality and appreciation ability, thus promoting students' all-round development [13].

Curriculum is a teaching process and teaching arrangement based on teaching plan. For the construction of colleges and universities, curriculum is an important carrier to ensure professional teaching. The concept of music aesthetic education and ideological and political education based on the characteristic development of application-oriented private undergraduate colleges, integrated into the teaching reform, can deepen students' understanding of ideological and political education, so as to achieve the teaching purpose of knowledge teaching and value guidance, and provide favorable conditions for the construction of colleges and universities to implement the fundamental task of "building morality and educating people" [7]. From the perspective of quality education, we should make a deep analysis of the professional content, clarify the meaning of the moral education content in the professional courses of colleges and universities, and achieve a high degree of integration of the ideological and political concepts of the curriculum and the teaching of professional courses. Adhere to the basic belief of moral education, constantly improve the sense of responsibility and mission of college teachers, and clarify the importance of ideological and political construction of the curriculum. Constructing the ideological and political guarantee system of curriculum is the primary guarantee to realize the integration of professional courses into teaching reform in colleges and universities. Top level design should be emphasized in the integration of ideological and political concepts into teaching reform in the implementation of professional courses in colleges and universities [3]. The traditional methods of ideological and political education are relatively simple, and students are often in a passive state of accepting knowledge in classroom teaching. The students' dominant position in education and teaching is not guaranteed, and the ideological and political education classroom is mostly to impart theoretical knowledge, the content is boring, and students' interest in learning is low, which makes it difficult to effectively carry out ideological and

political education. Because music itself has strong artistic and flexible characteristics, it can improve students' interest in learning. The integration of ideological and political education into music class can make students feel the moral factors contained in music works and realize the importance of ideological and political education [8]. Music appreciation requires students to experience with heart, not just to explore the superficial image of music. The charm of music lies not only in the relationship between lyrics and melody, but also in students' ability to understand and appreciate the emotion that music itself wants to express. Based on the integrated development of music aesthetic education and ideological and political education in application-oriented private undergraduate colleges, teachers should understand students' learning motivation before launching ideological and political teaching courses. In music learning, students can learn and understand life through listening to modern or classical music tracks, so as to establish correct value orientation [6].

Based on the integrated development of music aesthetic education and ideological and political education in the characteristic development of application-oriented private undergraduate colleges, teachers should deeply understand that the ideological and political construction of the curriculum is the key to the implementation of the fundamental task of establishing morality and cultivating people. Scientific development of ideological and political education is conducive to the healthy growth of college students. However, the contemporary college students living in the modern affluent social environment lack the understanding of ideological and political education, and their learning motivation is relatively low. They integrate music with ideological and political education, transform the students' stereotyped cognition by virtue of the music aesthetic education function, improve their learning interest, and clarify their learning motivation. Through listening to and appreciating the music melody, students can deeply explore the meaning of life, so as to promote students' all-round development [2].

As an art discipline, music is full of artistic characteristics and aesthetic interest. On the basis of the integration of music aesthetic education and ideological and political education, which are characteristic of the development of application-oriented private undergraduate colleges, when conducting music classroom teaching, students can deeply appreciate and understand music through art learning, which can effectively improve students' aesthetic ability and innovative thinking, and achieve students' all-round development [10]. When college students have learning pressure or emotional problems, music can play a role in regulating students' psychological emotions. Music can effectively relieve students' mood. When students are in low mood or restless, light and comfortable songs can enhance students' interest, transform students' negative emotions, and ensure their healthy physical and mental growth. Music education plays an important role in the mental health of college students. Students adjust their emotional state by themselves, promote their all-round development, and cultivate high-quality compound talents for the construction of modern socialist economy [14]

Teachers should analyze from the perspective of students, clarify the teaching content and focus, take pop music as the main entry point, improve students' music cognitive ability and appreciation ability through the international music classroom teaching mode, so as to achieve the integration of music aesthetic education and ideological and political education with the characteristic development of application-oriented private undergraduate colleges [16].

At present, on the basis of the development of economic globalization and the integration of Chinese and western cultures, western thoughts and cultures have formed a serious cultural impact on the construction and development of Chinese universities. Although the integration model of music aesthetic education and ideological and political education developed with the characteristics of application-oriented private undergraduate colleges has made certain achievements. But at the same time of rapid development, there are also many problems and hidden dangers. In terms of attitude towards Chinese and western music culture, we should inherit and carry forward our excellent classical music culture, respect foreign cultural differences, make Chinese and western

cultures more natural, give full play to the practical role of art, and thus promote the all-round development of students [4]

The integration of ideological and political elements into the "music teaching method" curriculum requires teachers to have both music knowledge and ideological and political awareness, abandon the curriculum value orientation centered on the teaching of music professional knowledge, establish and implement the concept of cultivating people by virtue, improve the ability of music teaching design, expand the content of the "music teaching method" curriculum, and innovate teaching methods [1].

The course of "Music Teaching Method" mainly includes music culture theory, music skills and techniques, art practice, etc. After graduation, students majoring in musicology in normal universities are mainly engaged in music teaching in primary and secondary schools. Therefore, we should make use of the professional advantages of music discipline to conduct moral education for students, and guide students to practice socialist core values into the overall goal of the curriculum [11].

As a basic course of musicology, "music teaching method" is a highly practical course that integrates theory and practice. It has extensive connections with the basic disciplines of music and its related disciplines, and can reflect the comprehensive characteristics of the professional knowledge system. Teachers should adhere to the collaborative teaching method of combining explicit education with implicit education, and combining indoctrination with infiltration, comprehensively use teaching methods, case teaching, group discussion, probation and observation, actively explore multiple teaching methods such as flipped classroom and mixed teaching, integrate ideological and political elements into teaching, and improve students' professional ability and comprehensive quality [9].

This paper analyzes the ideological and political model of music teaching in colleges and universities under the background of the Internet, and improves the comprehensive quality of contemporary students by combining music with ideology and politics.

2 MUSIC TEACHING SIGNAL PROCESSING

2.1 Channel Coding

In many occasions of wireless communication, the most important requirement is the reliability of the transmitted data. In the process of digital signal transmission, affected by the transmission environment, the symbol waveform of the transmitted signal is distorted, and the receiving end may have mis-judgment due to the influence of interference. There are two types of transmission symbol distortions. In recent years, due to the rapid development of digital communication, the research on channel coding has been promoted. Channel coding transforms the information sequence through certain rules, generates some redundant information in the symbol sequence, and makes some connection between the original information symbols, so as to locate and correct transmission errors. The receiving end uses these regular symbol constraints and redundant information to check and correct information symbols.

Error control techniques can be divided into the following categories:

- 1) Error detection and retransmission: The receiving end judges whether there is an error in the transmission according to the error control symbols in the transmission sequence, but cannot locate the error information. At this time, the receiving end method reports the transmission error to the transmitting end through the feedback channel, and the transmitting end retransmits

the information until the receiving end receives correctly or the number of retransmissions reaches the upper limit.

- 2) Forward Error Correction (FEC): The receiving end locates and corrects errors according to the error control symbols in the transmitted sequence.
- 3) Feedback verification: The transmission symbol does not add redundant information, the receiving end directly sends back the received symbol information, and the transmitting end compares the feedback symbol with the transmission symbol, and chooses whether to retransmit according to whether the transmission is wrong or not.
- 4) Error detection and deletion: After receiving the symbol, the receiving end detects whether there is a transmission error, and directly deletes the symbol with transmission error. No feedback channel requires the transmitting end to retransmit.

The parity supervisory code is the simplest block code, which uses the algebraic relationship of the information bits to generate supervisory bits. If it is assumed that the information length is k and

the information code is a_0, a_1, \dots, a_{k-1} , the code rate is $(k-1)/k$, the generated code is $a_0, a_1, \dots, a_{k-1}, a_k$, and the supervisory bit is $a_k = a_0 \oplus a_1 \oplus \dots \oplus a_{k-1}$.

We assume that there is a linear block code (n, k) , n represents the length of the code group, k represents the length of the information symbol, and $r=n-k$ represents the length of the supervisory symbol in the code group. The Hamming distance between the non-zero code group and the all-zero code group is called the minimum code distance. The error correction capability of the code depends on the minimum code distance. If the minimum code distance is assumed to be d_0 , the minimum code distance required to detect e errors is:

$$d_0 \geq e + 1 \quad (1)$$

The relationship between the corrected m errors and the code spacing is:

$$d_0 \geq 2m + 1 \quad (2)$$

The relationship between the codeword C of the linear block code and the information code M can be uniquely determined by the generator matrix or the generator polynomial, and the codeword C is orthogonal to the check matrix H , and the relationship can be expressed as:

$$C = MG \quad (3)$$

It can be seen from the structural relationship of the codewords that each row of the generator matrix G also belongs to the codewords in the codeword space, and satisfies linear independence with each other.

$$CH^T = 0 \quad (4)$$

The codeword vector C and the generator polynomial $g(x)$ are expressed as follows:

$$c(x) = c_{n-1}x^{n-1} + c_{n-2}x^{n-2} + \dots + c_1x + c_0 \quad (5)$$

$$g(x) = x^{n-k} + g_{n-k-1}x^{n-k-1} + \dots + g_1x + g_0 \quad (6)$$

For cyclic codes, since their codewords can be obtained from each other by cyclic shift, it is assumed that there is a codeword:

$$C = (a_0 \ a_1 \ \dots \ a_{n-1}) \quad (7)$$

Its corresponding polynomial is expressed as:

$$C(x) = a_{n-1}x + a_{n-2}x^2 + \dots + a_1x + a_0 \quad (8)$$

Then its generating matrix can be expressed as:

$$G(x) = \begin{bmatrix} C(x) \\ xC(x) \\ \vdots \\ x^{k-1}C(x) \end{bmatrix} \quad (9)$$

Turbo codes are realized by the effective combination of several short codes. The subcodes can be cascaded in parallel or in series through the interleaver. Turbo long codes are close to the limit of Shannon's theory.

LDPC is a linear block code with the properties of low-density parity-check code, which is characterized by very convenient decoding, long code length, arbitrary construction of code rate, and sparseness of the probability that the check matrix contains 1.

2.2 Introduction of Scrambling

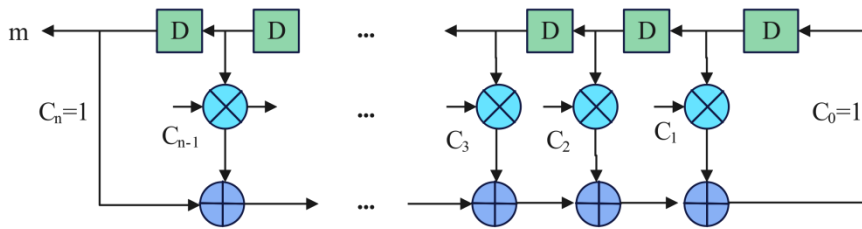
The m sequence is generated by the linear feedback shift register, and its corresponding period is the sequence with the longest period under this structure. Its structure is shown in Figure 1(a), the generator polynomial is $f(x) = 1 + c_1x + c_2x^2 + \dots + c_nx^n$.

Theorem 1 Shift-add and sampling properties of m-sequences.

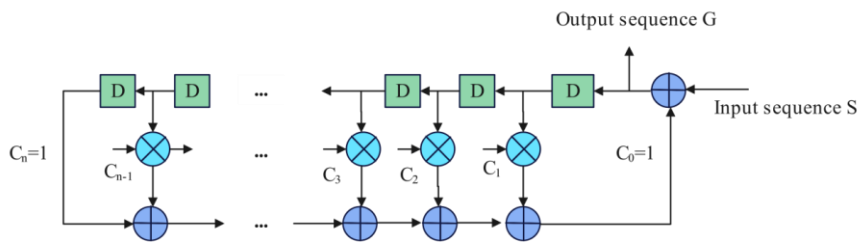
The generator polynomial is $f(x) = 1 + c_1x + c_2x^2 + \dots + c_nx^n, n \geq 1, c_n \neq 0$, a is a non-zero m sequence in $G(f)$, and $s_1 > s_2 > 0$. When $s_1 - s_2 \neq 0 \pmod{2^n - 1}$, the left shift transformation $L^{s_1}(a) + L^{s_2}(a)$ is also the m sequence in $G(f)$, where $L^t(a)$ refers to the sequence obtained by shifting a left by t .

Theorem 2: $a = (a_0, a_1, a_2, \dots)$ is a periodic sequence on $GF(2)$, S is an integer, an $a^{(S)} = (a_0, a_S, a_{2S}, \dots), a^{(S)}$ is still a periodic sequence, which is called S sampling of a .

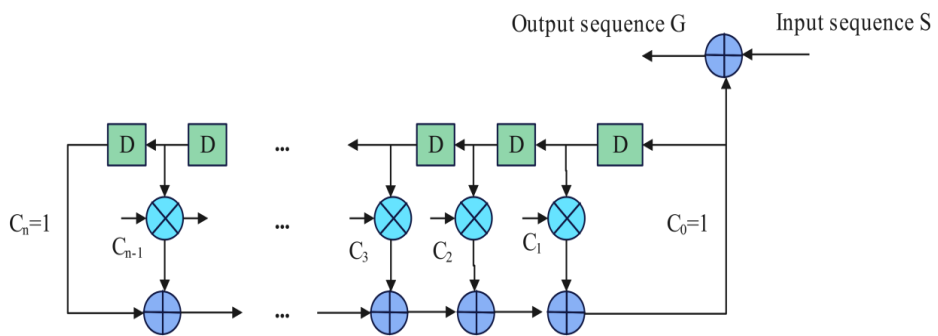
According to whether the scrambling code sequence is independent of the pseudo-random sequence used for scrambling, it can be divided into self-synchronizing scrambling code and synchronous scrambling code. Its structure is shown in Fig. 1(b) and Fig. 1(c) respectively. The sequence is $S(x)$, and the output obtained by the scrambler is $G(x)$.



(a) Schematic Diagram of m-Sequence Generation



(b) Self-Synchronizing Scrambler



(c) Synchronous scrambler

Figure 1: Block Diagram of the Jammer.

The output of the self-synchronizing scrambler is:

$$G(x) = S(x) + \sum_{i=1}^n c_i x^i G(x) \quad (10)$$

If it is assumed that the polynomial corresponding to the register is $P(x)$, the output sequence of the synchronous scrambler is:

$$G(x) = S(x) + P(x) \quad (11)$$

If it is assumed that the series of LFSR is L , the generator polynomial is $P(X)$, and the initial states e are:

$$P(X) = C_0 + C_1 X + C_2 X^2 + \dots + C_L X^L \quad (12)$$

$$e_0 = (e_0, e_1, e_2, \dots, e_L) \quad (13)$$

The transformation matrix is defined as:

$$F = \begin{pmatrix} 0 & 1 & 0 & \dots & 0 & 0 \\ 0 & 0 & 1 & \dots & 0 & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots & \vdots \\ 0 & 0 & 0 & \dots & 0 & 1 \\ 1 & C_{L-1} & C_{L-2} & \dots & C_1 & C_0 \end{pmatrix} \quad (14)$$

Then, the output of LFSR at any time $t+i, (i=0, 1, 2, \dots)$ is:

$$e_{t+i} = F^i e_t \quad (15)$$

If the input sequence S and the output sequence are assumed to be G respectively:

$$S = (s_0, s_1, s_2, \dots) \quad (16)$$

$$G = (g_0, g_1, g_2, \dots) \quad (17)$$

Then the output sequence at any time $t+i$ can be expressed as:

$$g_{t+i} = e_{t+i} \oplus s_{t+i} \quad (18)$$

In this section, we will simulate scrambling code identification algorithms such as Walsh-Hadamard analysis method, analysis based on m-sequence statistical characteristics, BM algorithm, conquer attack algorithm and fast correlation attack method based on error correction code, so as to analyze

that the performance of scrambling code identification algorithm is affected by the 0 and 1 imbalance of the input sequence.

1. Walsh-Hadamard analysis

If the output of the scrambler is assumed to be $e = (e_0, e_1, e_2, \dots)$, then when the input information sequence is 0, there is:

$$e_k = \sum_{i=1}^L C_i e_{k-i} \quad (19)$$

Among them, $k \geq L$. We assume that there is a sequence $e_0, e_1, e_2, \dots, e_{2L-1}$ of 2L length, and the following equation is obtained:

$$\begin{bmatrix} e_L \\ e_{L+1} \\ \vdots \\ e_{2L-1} \end{bmatrix} = \begin{bmatrix} e_{L-1} & e_{L-2} & \cdots & e_0 \\ e_L & e_{L-1} & \cdots & e_1 \\ \vdots & \vdots & \vdots & \vdots \\ e_{2L-2} & e_{2L-3} & \cdots & e_{L-1} \end{bmatrix} \begin{bmatrix} C_1 \\ C_2 \\ \vdots \\ C_L \end{bmatrix} \quad (20)$$

By transforming, we get:

$$\begin{bmatrix} e_L & e_{L-1} & \cdots & e_0 \\ e_{L+1} & e_L & \cdots & e_1 \\ \vdots & \vdots & \vdots & \vdots \\ e_{2L-1} & e_{2L-2} & \cdots & e_{L-1} \end{bmatrix} \begin{bmatrix} I \\ C_1 \\ \vdots \\ C_L \end{bmatrix} = 0 \quad (21)$$

$$\begin{bmatrix} e_0 & e_1 & \cdots & e_L \\ e_1 & e_2 & \cdots & e_{L+1} \\ \vdots & \vdots & \vdots & \vdots \\ e_{L-1} & e_L & \cdots & e_{2L-1} \end{bmatrix} \begin{bmatrix} C_L \\ C_{L-1} \\ \vdots \\ I \end{bmatrix} = 0 \quad (22)$$

When the input information sequence is 1, there is:

$$e_k = \text{mod} \left(\left(\sum_{i=1}^L C_i e_{k-i} + 1 \right), 2 \right) \quad (23)$$

The Hadamard method is used to solve the linear equations of formula (22), and the scrambling polynomial coefficient I, C_1, C_2, \dots, C_L is obtained. This method cannot solve the initial state of the register.

Since m-sequences have strong autocorrelation and good cross-correlation, the conquest attack algorithm takes advantage of this property. The algorithm traverses the LFSR generator polynomial series and the initial state of the register. For each generator polynomial under the series n , an initial state is randomly selected to generate an m sequence with period $2^n - 1$. The algorithm correlates each of the $2^n - 1$ positions in the sequence with the output of the synchro. The algorithm sets a threshold to check whether there is a correlation greater than the threshold. If there is, the generator polynomial is estimated correctly. At this time, the position corresponding to the maximum correlation is the initial state of the register. Otherwise, continue to traverse the generator polynomial.

Simulation: The LFSR generator polynomial is $P(x) = x^7 + x + 1$, the initial state is "1111111", and the information sequence contains 1 rates of 0.1 and 0.2, respectively. The recognition result is shown in Figure 2.

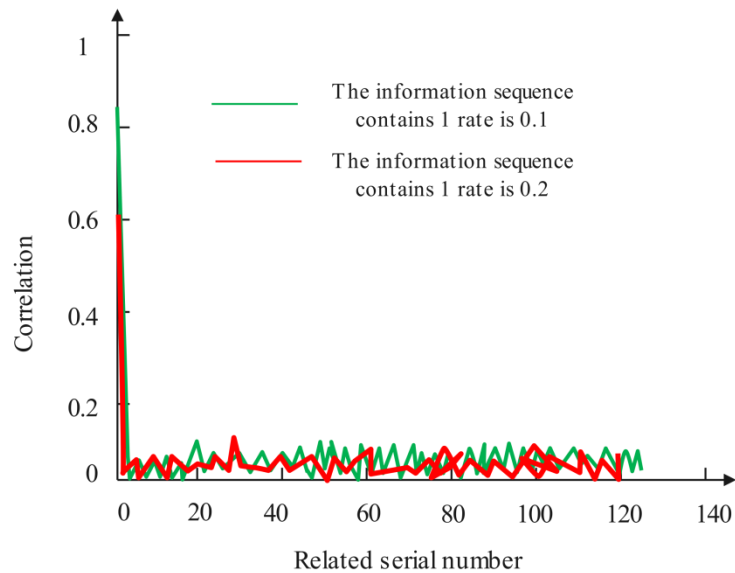


Figure 2: Scrambling Code Correlation Distribution Identified by Attack Algorithm.

For a scrambled sequence with a generator polynomial $f(x) = 1 + c_1x + c_2x^2 + \dots + c_nx^n$ and a period $t = 2^n - 1$, if the output of the scrambler is assumed to be $G = (g_1, g_2, \dots, g_t)$ and $n < N \leq t$, the linear relationship of consecutive N bits of the output sequence is expressed as:

$$\begin{cases} c_n g_1 + c_{n-1} g_2 + \cdots + c_1 g_n + g_{n+1} = 0 \\ c_n g_2 + c_{n-1} g_3 + \cdots + c_1 g_n + g_{n+2} = 0 \\ \vdots \\ c_n g_{N-n} + c_{n-1} g_{N-n+1} + \cdots + c_1 g_{N-1} + g_N = 0 \end{cases} \quad (24)$$

$$\begin{bmatrix} g_1 & g_2 & \cdots & g_{n+1} \\ g_2 & g_3 & \cdots & g_{n+2} \\ \vdots & \vdots & \ddots & \vdots \\ g_{N-n-1} & g_{N-n+1} & \cdots & g_N \end{bmatrix} \begin{bmatrix} c_n \\ c_{n-1} \\ \vdots \\ 1 \end{bmatrix} = 0 \quad (25)$$

Then, there is:

$$\mathbf{G}(c_n \ c_{n-1} \ \cdots \ c_1 \ 1 \ \cdots \ 0)^T = 0 \quad (26)$$

The algorithm performs $N-1$ cyclic shifts on the output sequence \mathbf{G} respectively, and the corresponding codes obtained each time are $\mathbf{G}'_j = x^j \mathbf{G}$, $1 \leq j \leq N-1$. If it is assumed that a new codeword space is composed of \mathbf{G} and \mathbf{G}'_j , it can be known from the properties of cyclic codewords that the codewords in space \mathcal{O}' are cyclic codes, and the resulting linear block code (N, n) corresponds to the check matrix $\mathbf{H}_{LFSR} \in (N-n, N)$ as:

$$\mathbf{H}_{LFSR} = \begin{bmatrix} c_n & c_{n-1} & \cdots & c_1 & 1 & 0 & \cdots & 0 \\ 0 & c_n & c_{n-1} & \cdots & c_1 & 1 & \cdots & 0 \\ \cdots & \cdots & \cdots & & & \cdots & & \\ 0 & 0 & \cdots & c_n & c_{n-1} & \cdots & c_1 & 1 \end{bmatrix} \quad (27)$$

The corresponding generator matrix $\mathbf{G}_{LFSR} \in (n, N)$ can be expressed as:

$$\mathbf{G}_{LFSR} = \begin{bmatrix} h_{1,1} & h_{1,2} & \cdots & h_{1,N} \\ h_{2,1} & h_{2,2} & \cdots & h_{2,N} \\ \vdots & \vdots & \ddots & \vdots \\ h_{n,1} & h_{n,2} & \cdots & h_{n,N} \end{bmatrix} \quad (28)$$

Among them, $\mathbf{h}_i = (h_{i,1}, h_{i,2}, \cdots, h_{i,N})$ is the first N bits output by the LFSR when the i -th register is "1" and the rest are "0".

There are related attacks based on linear block codes, such as those based on LDPC, which use a memoryless decoding algorithm, but have strict requirements on the number of register taps. On this basis, a related attack algorithm based on convolutional code and Turbo code with memory decoding algorithm is proposed.

3 THE TEACHING MODE OF MUSIC COMBINED WITH IDEOLOGY AND POLITICS

According to the functional requirements analysis and performance analysis results in the previous chapter, this paper completes the overall architecture model of the system. Through the communication with students, teachers and administrators, the design of this system is improved according to different suggestions and the collection and arrangement of data information. This greatly improves the accuracy and consistency of the system, and clarifies the development direction of the system. In order to test the effectiveness of the ideological and political education model combined with music, this paper constructs an evaluation system as shown in Figure 3.

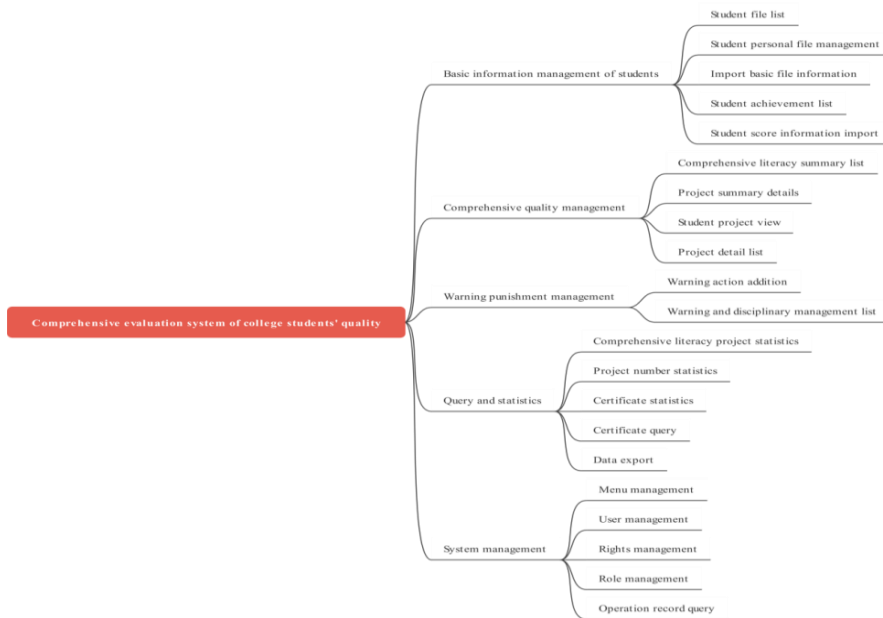


Figure 3: System Function Block Diagram.

In order to connect the system server and workstations, the network topology of the system is designed. The network topology is like a physical layout used to transmit various data information between media. Figure 4 shows the network topology.

Through the analysis of the network information collection system, we believe that the network information collection system based on information literacy capability is an information collection system that integrates the functions of information collection, personnel exchange, knowledge exchange, and information literacy education. According to the functional requirements analysis and the relationship of each functional module, we design the information acquisition system architecture as shown in Figure 5.

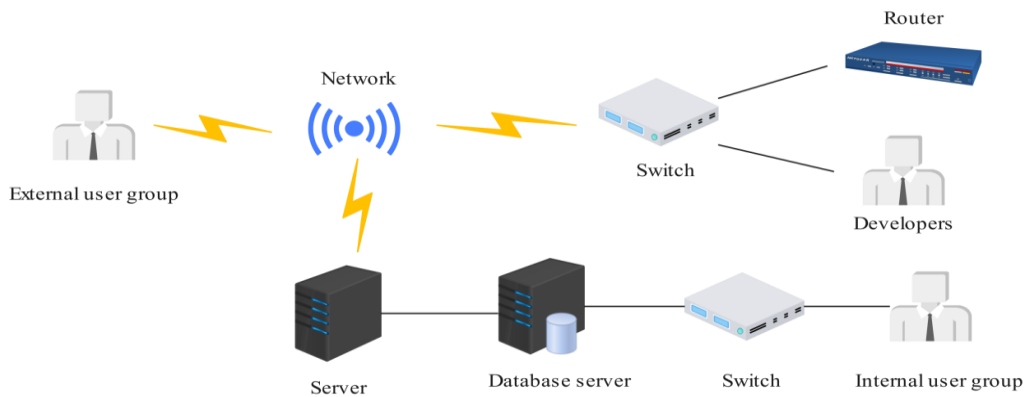


Figure 4: Topological Diagram of the System.

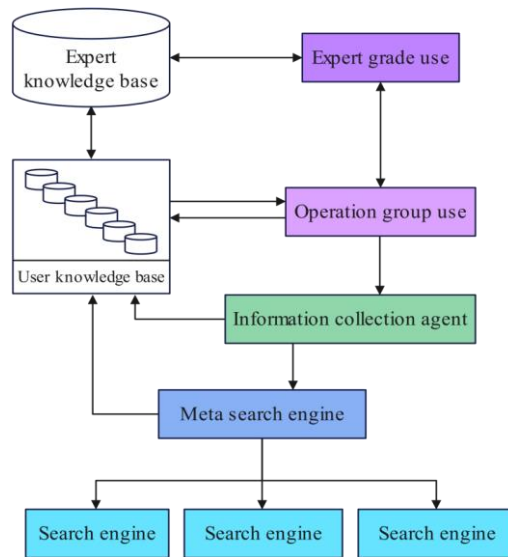


Figure 5: Framework of Network Information Collection and Collaboration System Based on Expert Information Literacy.

According to the system requirements, the system functions are defined according to the roles as shown in Figure 6.

After the system of this paper is constructed, the effect of the system of this paper is verified. This paper mainly verifies the fusion effect of this system on music and ideological and political teaching, and at the same time verifies the improvement effect of students' comprehensive literacy, and obtains the experimental results shown in Figure 7.

It can be seen from the above research that the system proposed in this paper can effectively promote the fusion effect of music and ideology and politics, and can help improve the comprehensive quality of students.

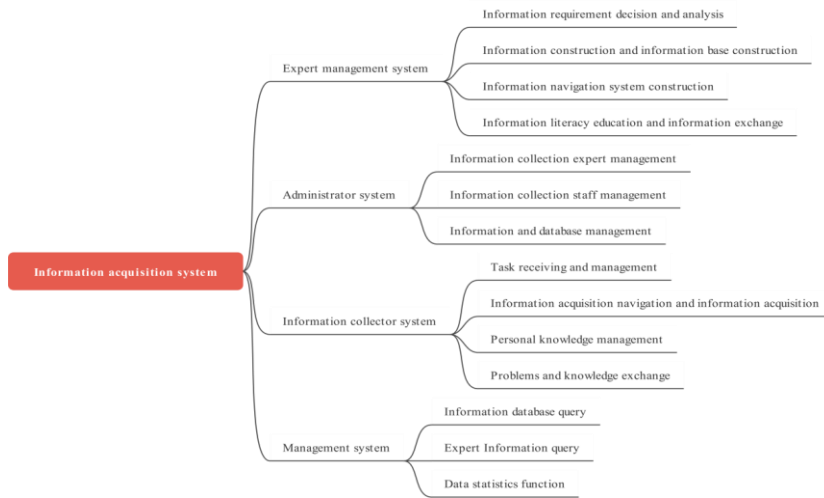


Figure 6: System Functions Defined by Roles.

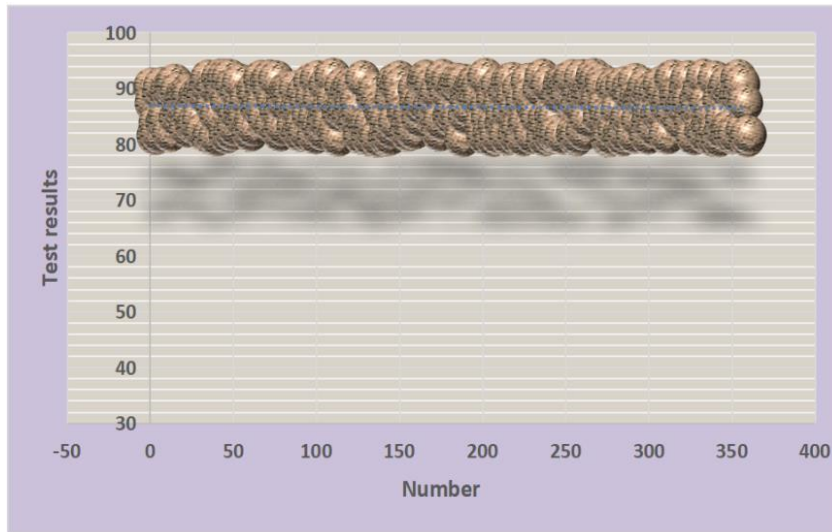


Figure 7: Experimental Results of the System.

4 CONCLUSION

Colleges and universities, as the main places to cultivate professional talents for socialist economic construction, should follow the teaching principle of morality and cultivating people, and regard it as the fundamental teaching goal of colleges and universities. Ideological and political education plays an important role in colleges and universities in implementing the task of establishing morality and educating people. By promoting the integration of curriculum ideological and political and teaching reform, it is possible to truly cultivate morality, and music aesthetic education has opened up a new path for colleges and universities to promote the development of ideological and political education.

In addition, through the effective integration of music aesthetic education and ideological and political education, which is the characteristic development of application-oriented private undergraduate colleges, we can promote the sustainable development of colleges and universities, and provide favorable conditions for the construction of colleges and universities to implement the fundamental task of "establishing morality and educating people". This paper analyzes the ideological and political model of music teaching in colleges and universities under the background of the Internet, and improves the comprehensive quality of contemporary students by combining music with ideology and politics. It can be seen from the experimental research that the system proposed in this paper can effectively promote the fusion effect of music and ideology and politics, and can help improve the comprehensive quality of students.

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