Research Article

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College music teaching and ideological and political education integration mode based on deep learning

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Abstract: In order to highlight the role of music teaching in the teaching of ideological and political courses, this study puts forward research on the integration of music teaching and ideological and political teaching. This study analyzes the promotion and necessity of college music teaching to ideological and political work, constructs a fusion model of college music teaching and ideological and political work, introduces deep learning methods, and weakens the influence of errors in the data of college music teaching and ideological and political work. This study also optimized the integration mode of college music teaching and ideological and political work and realized the model research of college music teaching and ideological and political work. The experimental results show that the resource output amplitude controlled by the deep learning method has the best stability, and there is no large amplitude fluctuation during the experiment. The output amplitude and control time of the fusion resource are guaranteed and the fusion path of music teaching and ideological and political education is clearer. The maximum control time of the fusion resource of this method is 23.55 ms.

Keywords: deep learning, college music, ideological and political education, mathematical modeling

1 Introduction

For a long time, ideological and political education in colleges and universities has been in a relatively passive position. Psychological intervention and guidance are often carried out after the students’ psychological problems appear, which leads to the focus of attention on the negative emotions in students’ psychological health in colleges and universities while neglecting the importance of cultivating a positive mentality in students to form a correct three view. In the past, the teaching of ideological and political education mainly focused on prevention and treatment but did not realize the importance of building a positive attitude in students. In addition, in the past, ideological and political education paid more attention to “teaching” rather than “teaching”, which led to students’ reluctance to learn ideological and political knowledge, and even repels the ideological and political education, seriously affecting the effect of ideological and political education, makes the ideological and political education unable to obtain substantial results, and is not conducive to the further development of ideological and political education.

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Therefore, the mental health of college students has become a major problem in ideological and political work. Nearly 90% of the students have, more or less, some psychological problems. In such a context, the charm of music teaching will be highlighted. Music, as a kind of aerobics for college students’ souls, can help them get rid of their negative and depressed moods and help them become more positive. Music can also improve psychological depression. Through listening to and explaining the writing background of red classical songs, telling the story of countless revolutionary martyrs sacrificing their heads for their ideals and beliefs, we can get today’s happy life. Then we can use the unique appeal of musical works to affect the positive psychological factors of college students, establish a correct outlook on life and values, and forge firm beliefs.

Qu et al. presented a multidimensional teaching evaluation information system based on the quantitative teaching evaluation index system and intelligent analysis function [1]. The system has been tested in a university and its feasibility and effectiveness have been verified. It provided a reference scheme for other universities to construct a multidimensional evaluation system according to subject characteristics. Schlasean developed a scheme for improving sound insulation while maintaining the aesthetics of a continuous curtain wall [2]. This article discusses design considerations and customized sound insulation testing to analyze and address this issue. Nam et al. had successfully deployed the Music Genome Project, pioneering and popularizing the application of streaming music in teaching [3]. Yuan and Men researched the mixed education model based on massive open online courses (MOOCs) platform resources, university philosophy, and political curriculum [4]. First, we used the literature research method to query flyers and news, analyzed and researched consulting materials and then used substantive education and comparison methods to continuously deepen the integration and function of information technology. In this way, we will develop and construct a mixed education model of ideological and political education. He proposes an ideological and political classroom auxiliary teaching system based on data mining [5] and uses data mining technology and JDT language to develop an ideological and political classroom teaching auxiliary system, which can provide resources sharing, teaching evaluation, and other services for classroom teaching and teaching activities. Guo proposed the development of an online ideological and political teaching platform based on the versamotorola eurocard (VEM) framework [6]. Based on the VEM bus structure, combined with the browser/server and client/server framework modes, the ideological and political online teaching platform was developed. The platform can realize application loading, the functions of transmission, data collection, and network communication were adopted. The hierarchical design idea was adopted to provide users with different rights of retrieval, transmission, sharing, and teaching quality feedback.

Therefore, in order to highlight the practical role of music teaching in ideological and political education, deep learning is used as the main method to study the modeling of music teaching and ideological and political integration. The goal of the combination of music teaching and ideological and political education is not to let students acquire musical skills, but to promote college students to establish a correct outlook on life, values, and morals through the inheritance and reflection of excellent musical works, so as to cultivate high-quality talents with important responsibilities. The training objectives should focus on the impact of the psychology and emotion of college students, break through the traditional thinking-training mode, form the ideological and political education concept of music teaching, and meet the needs of music teaching integration. The introduction of deep learning methods weakened the impact of university music teaching data errors on ideological and political work through iterative calculations, constructed a fusion model of university music teaching and ideological and political work, and realized the study of university music teaching and ideological and political work models.

2 The integration of music teaching and ideological and political education in colleges and universities

2.1 The role of music teaching in promoting ideological and political education in colleges and universities

Compared with other disciplines of teaching, music teaching in ideological and political education plays a very obvious role; when we examine from the quality of teaching this macroscopic perspective, we will find
that this role is more strong. Therefore, the integration of music teaching and ideological and political teaching should be innovated and reformed from the aspects of training objectives and teaching methods. The integration path of music teaching and ideological and political education in colleges and universities is reflected in the following three aspects:

1. The teaching process of accepting music teaching and ideological and political education. In the design of teaching objectives, the basic music knowledge such as the artistic conception and connotation, aesthetic experience, and characteristics of music teaching can be closely linked with patriotism, national self-esteem, and feelings of home and country of ideological and political education. The curriculum concept of ideological and political education can be penetrated in music teaching, and the study of folk music, folk songs, stories and legends, ethnic crafts, and ethnic operas of various nationalities in the region can be incorporated into the teaching practice of ideological and political education, so as to fully give students the emotional influence of artistic ideological and political education and enrich their perceptual knowledge and moral quality.

2. Experiencing the teaching content of music teaching and ideological and political education. Teaching is not only to teach students the relevant basic knowledge and skills but also to focus on improving students’ professional quality, which is also the ultimate goal of teaching. Teaching specialty in colleges and universities should pay more attention to the promotion of moral sentiment. Combining the “emotion” of music teaching with the “reason” of ideological and political teaching, we can analyze and explain the historical background of classical music works pertinently. The appreciation of the Ship of the South Lake, the Cradle of the Party, the founding of the Communist Party of China, and the historical background of the Communist Party of China can be interspersed, which can not only arouse students’ imagination but also remember historical events and resonate with their hearts when shocked.

3. Loving the teaching form of integration of music teaching and ideological and political education. The ultimate goal of music teaching activity is to encourage students through teaching and learning to express their artistic feelings boldly with different artistic forms. Therefore, in the course of teaching practice, we can guide the students to bravely express the culture of the integration of music teaching and ideological and political education through music competition between the practice classes. This article makes students like the form of artistic ideological and political education through artistic expression and artistic feeling, establish a correct outlook on life, world outlook, and socialist core values in the process of continuously accepting these artistic ideological and political education, and improve their moral quality.

2.2 The necessity of the integration of music teaching and ideological and political education in colleges and universities

1. Help to improve the thinking mode and creativity of undergraduates in the traditional teaching model, the music course, and the ideological and political course are two independent teaching systems, and there is no connection between the two. However, through a lot of practice, it has been proved that there are countless ties between music teaching and ideological and political teaching, and there are many similarities and points of convergence. Strengthening the integration of the two courses will help to improve the teaching effect [7–11]. In addition, the ideological and political courses are mainly taught by teachers, the teaching content is mainly based on the textbook content, and teaching according to the textbook can not mobilize the enthusiasm of students. In addition, the ideological and political courses are mainly based on abstract theoretical knowledge and the teaching content is very boring, which increases the difficulty for students to understand the information and reduces the students’ interest in learning to a certain extent. Under such circumstances, if the ideological and political teachers do not realize the seriousness of the problem and continue to use the traditional teaching method, the teaching effect will be poor and the students’ comprehensive quality will not be improved [12–16]. In comparison
with ideological and political teaching, music teaching itself has good vividness and interaction. Students can participate in the classroom teaching very well. Mastering new knowledge through their own experience can enhance students’ interest and enthusiasm in learning and help to improve the classroom teaching effect. Therefore, to promote the combination of ideological and political teaching, music teaching can make up for the shortcomings of ideological and political teaching, mobilize students’ enthusiasm for learning better, let students change from passive acceptance of knowledge to active pursuit of knowledge, and strengthen students’ thinking mode and creativity, so as to improve the effect of classroom teaching.

2. Help to promote the diversification of ideological and political teaching methods of college students. Influenced by the long-term traditional teaching methods, some colleges and universities continue to use the former teaching methods. The teaching content mainly depends on the teachers’ explanations in the classroom. This teaching method was put forward in the earlier teaching environment and can meet the teaching needs at that time. However, with the gradual development of modern society, economy, and culture, it is obvious that the traditional teaching methods cannot meet the needs of modern teaching and various problems have gradually emerged. At present, the teaching model of colleges and universities has changed greatly from singleness to diversification. All kinds of new teaching modes and thinking have a great impact on the traditional teaching model. Carrying out united teaching in many subjects has become the most important part of the teaching mode reform [17–19]. Music teaching plays a significant role in the teaching system of colleges and universities, which helps to improve the effect of ideological and political teaching in colleges and universities. The integration of music teaching into ideological and political teaching can fully mobilize students’ subjective initiative, guide them to change the previous understanding of ideological and political teaching, promote them to learn ideological and political knowledge actively, improve the status quo of exchanges between teachers and students, narrow the distance between the two, and lay a foundation for better teaching quality of ideological and political teaching.

3 The integration modeling of music teaching and ideological and political education in colleges and universities

With the change in the modern social environment, there are more and more problems in the traditional ideological and political teaching mode, which hinders the deep development of ideological and political teaching and affects the healthy growth of college students. Therefore, in the process of the integration of music teaching and ideological and political education in colleges and universities, we need to clarify the influential factors in a timely manner, that is, introduce some algorithms to provide more solutions to the problems and causes of music teaching and ideological and political education in colleges and universities with its universality and specialty.

3.1 Integration model of music teaching and ideological and political education in colleges and universities

This study discretizes the continuous attributes of the integration resources of music teaching and ideological and political education in colleges and universities using the equidistant division method. The definition of the integrated resource information system for college music teaching and ideological and political education is as follows:

$$S = (U, A, V, f),$$  \hspace{1cm} (1)
1. In the formula, $U$ represents music teaching resources, $A$ represents ideological and political teaching resources, $V$ is the frequency of music teaching, and $f$ is the frequency of ideological and political teaching. Set $U$ as the research object, that is, the non-empty finite set of music teaching and ideological and political problems in colleges and universities, which is called the universe; $R$ as a hierarchical relationship based on $U$, which is called the binary ordered group, that is, approximate space:

$$S = (U, R),$$ (2)

2. Let $P$ and $S$ be equivalent relations in $U$, and the $P$ positive field of $S$ can be expressed as:

$$\text{POSP}(S) = S \cup P(S),$$ (3)

If $R$ is an equivalence relation, then there are:

$$\text{IND}(R) = \text{POSP}(S) - (P),$$ (4)

3. If it is set to represent a knowledge base $K = \{U, R\}$, there are:

$$K = \frac{|\text{IND}(R)|}{U},$$ (5)

4. The setting represents an information system $S = (U, A, V, f)$ and sets the number of elements $U$ in the universe:

$$|U| = n.$$ (6)

Set the elements in row $i$ and column $j$ to $m_{ij}$ as defined as follows:

$$m_{ij} = \{a \in A : f(x_i, a) \neq f(x_j, a), i, j = 1, 2, \ldots, n, \}$$ (7)

where $m_{ij}$ represents all attribute sets that can distinguish objects $x_i$ and $x_j$.

5. In general, each specification can replace the entire attribute condition, that is, the external environment factors in the fusion process, without changing the original dependency. Therefore, it is necessary to determine a self-normalized set or minimum attribute set with the minimum possible attributes. That is to say, the modified weights of input attribute condition and output attribute condition are calculated in reverse order $w_{ij}(P + 1)$:

$$w_{ij}(P + 1) = w_{ij}(P) + \eta_\delta D_j + \alpha(w_{ij}(P) - w_{ij}(P - 1)).$$ (8)

The integration model of music teaching and ideological and political education is shown in Figure 1. Figure 1 shows that the construction of a university music teaching model and ideological and political integration knowledge base, the discrete processing of university music teaching resources and ideological and political teaching resources, each specification can replace the entire attribute condition, that is, in the

![Figure 1: The model of music teaching and ideological and political integration in colleges and universities.](image-url)
process of resource integration, determine a self-normalized set or the smallest attribute set with the smallest possible attribute as the implicit attribute condition, and output the attribute condition according to the mapping relationship to obtain the university music teaching model and ideological and political fusion data set.

3.2 Modeling optimization of music teaching and ideological and political integration in colleges and universities based on deep learning

The network trained by the above model too is satisfied with the distribution of the training data and not suitable for the distribution of the test data, which leads to the decrease in the error rate of the network in the training set and the increase of the error rate in the test set. Only by increasing the amount of data and weakening the influence of error in the data can we learn more accurately and closer to the real features hidden in the data. But often in reality, due to the limited conditions, we may not be able to get enough data. At this time, we need to take some measures to increase the amount of training data. The generative model plays an important role in deep learning [20,21]. This model can capture two groups of data with high correlation. It does not need to obtain the target information on the class label. It can learn the relevant characteristics of the actual data, present the distribution characteristics of the sample data, and generate new data similar to the training sample, that is, increase the amount of training data. The specific process is as follows:

It is assumed that the integrated information \(i\) in the process of integrated teaching is affected by the social role, and after observing the external behavior of other integrated information in the network, in the \(n + 1\) time step, the external behavior of the integrated information jumps, and the internal views are updated. In order to avoid the instability and fuzziness of individuals in the process of following neighbors to fuse information behavior selection [22,23], the microblog hot event evolution simulation method based on user behavior attributes adopts the update rule of balancing opposition and support. In the \(n + 1\) time step, the fusion information \(i\) updates the logarithmic preference rule by the following formula:

\[
\text{Odd}_i(n + 1) = \text{Odd}_i(n) + \log \frac{1 + P(\text{impact}_{i,x}(n))}{1 + P(\text{impact}_{i,x}(n))},
\]

where, \(P(\text{impact}_{i,x}(n))\) represents the proportion of events in the social function \(x\) of a group. The expression is as follows:

\[
P(\text{impact}_{i,x}(n)) = \frac{\text{impact}_{i,x}(n)}{\text{impact}_{i,x}(n) + \text{impact}_{i,x}(n)}.
\]

The external behavior of the individual \(i\) in the \(n + 1\) time step is updated by the following formula:

\[
\sigma_i(n + 1) = \text{sgn}[\text{Odd}_i(n + 1)].
\]

Let \(P_2\) denote the probability that the unknown fusion information is infected by the neighbor spreading fusion information in a time \(t, t + \Delta t\) interval:

\[
P_2 = \lambda \Delta t \sum_{k'} P(k'|k)\sigma(k', t),
\]

where \(\lambda\) is the network propagation coefficient.

If an individual has \(k\) neighbors in the network, the probability of the individual being affected is \(p_{si}(k, t)\), and the calculation formula is as follows:

\[
p_{si}(k, t) = 1 - \left(1 - \lambda \Delta t \sum_{k'} P(k'|k)\sigma(k', t)\right)^k.
\]
When the time interval $\Delta t$ is infinitely close to zero, there exists the following formula:

$$p_{st}(k, t) = \lambda k \Delta t \sum_{k'} P(k'|k) i(k', t).$$  \hfill (14)

When the contact fusion information is not immune, there is a probability of infection. At this time, the transfer probability can be calculated by the following formula:

$$p_{cl}(k, t) = \Delta t \sum_{k'} P(k'|k) i(k', t).$$  \hfill (15)

When contact fusion information or ignorance fusion $i(k, t)$ information is affected in the network, the degree of influence on fusion information will increase, so as to strengthen the influence degree among the elements, weaken the influence of error in the data, and get closer to the real fusion result.

Figure 2 shows the modeling process of college music teaching and ideological and political integration based on deep learning.

So far, the integration of music teaching and ideological and political modeling based on deep learning was realized.

4 Experiment

4.1 Experimental process

Using the luna16 challenge jointly held by a university and ISBI 2016 (https://luna16.grand-challenge.org/home/) experimental data was provided. These experiments face serious data imbalance, which will make the training more difficult. In order to get rid of this dilemma, the following improvements were made: Firstly, the coordinates of candidate nodules were moved forward and backward one voxel along each axis. Then the image block centered on the new coordinates was resampled. Secondly, the sampled image blocks
marked as 1 (a small number) were rotated 90°, 180°, 270° degrees around the z-axis. Finally, after resampling and rotation, the number of training image blocks was counted, and the weight of each tag data in the cost function was set according to the proportion of the two samples. The size of these image blocks covered 58% and 85% of all nodules in the dataset, respectively. The image blocks were still stored in 10 subsets for 10 fold cross-validation. Long short-term memory was needed to add three kinds of valve neurons in the first layer, middle layer, and last layer of the cyclic neural network (RNN). The first layer was the input valve, which can filter the serial sequence data of the first layer and extract it. The effective ideological and political teaching and music teaching data are input into the network, and this process can be realized by the Sigmoid function. Gaussian distribution was used to initialize the training parameters. The initialized data was used as experimental samples to update the training parameters in each batch, and the batch size was set to 50. We set the learning rate to 0.3 to test the modeling effect of music teaching and ideological and political integration in colleges and universities. The system hardware is shown in Table 1.

**Table 1: Parameter setting of external memory**

<table>
<thead>
<tr>
<th>Parameter name</th>
<th>Parameter content</th>
<th>Parameter name</th>
<th>Parameter content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>150 mm * 100 mm * 120 mm</td>
<td>Maximum</td>
<td>64 TB</td>
</tr>
<tr>
<td>Size</td>
<td>2.50 kg</td>
<td>Capacity</td>
<td>90 W AC transformer</td>
</tr>
<tr>
<td>Equipment</td>
<td>RAID 0, 1, 5, 6, 10</td>
<td>Adapter</td>
<td>240 V</td>
</tr>
<tr>
<td>Weight</td>
<td>512 MB</td>
<td>Input voltage</td>
<td>BT/PT</td>
</tr>
<tr>
<td>RAID</td>
<td>1.5 GHz</td>
<td>Download</td>
<td>Wireless network adapter</td>
</tr>
<tr>
<td>Pattern</td>
<td>SATA II</td>
<td>Network settings</td>
<td>Support heat dissipation</td>
</tr>
</tbody>
</table>

In order to further verify the effect of this method on the integration of music teaching and ideological and political teaching in colleges and universities, three control methods (Reference [1] method, Reference [2] method, and this method) were used to model and analyze the effect of the integration of music teaching and ideological and political teaching in colleges and universities.

The output amplitude comparison results of fusion resources are shown in Figure 3.

![Figure 3: The output amplitude comparison results of music teaching and ideological and political integration resources in colleges and universities.](image-url)
As can be seen from Figure 3, with the increase in the number of data sampling points, when the number of data sampling points were 10 and 38, the output amplitude fluctuation of resources was not stable enough in the whole experiment process. The overall effect of the method in ref. [1] was better than that in ref. [2]. However, when the number of data sampling points was 36, there was also a large-amplitude fluctuation, and only the method in Reference [1] was used. The output amplitude stability of the resource controlled by the deep learning method was the best, and there was no large amplitude fluctuation during the experiment. It showed that the model designed in this study had a higher delay control ability.

This method generated new data similar to the training samples, that is, increasing the amount of training data, and the increase of the amount of data usually means that the control time cost is large. Therefore, this study took the control time cost as the index to study the control time cost of the integration process of music teaching and ideological and political education in colleges and universities. The experimental results are shown in Figure 4.

![Figure 4: Comparison of control time overhead under three methods.](image)

As can be seen from Figure 4, the control time cost of the proposed method was still small, and the control time cost of ref. [1] and ref. [2] were both large, with a maximum of 24.1 ms, but the method of this study only had a maximum of 23.55 ms, because this study applied the deep learning method, that is, each learning specification was applied to replace the external environment factor in the whole attribute condition of the fusion process, the original dependency relationship did not change, and the time cost of the fusion process was not excessive.

### 4.2 Discussion

Because of its flexibility and interaction, music teaching can make up for the problems in ideological and political teaching, enrich the content of ideological and political teaching, and promote the continuous improvement and perfection of the ideological and political teaching system which plays a vital role in improving the ideological quality and behavior norms of college students. Ideological and political teachers in colleges and universities should be fully aware of the inadequacy of ideological and political teaching, and actively introduce music teaching to improve ideological and political teaching, thus promoting the effect of ideological and political teaching. In order to better promote the integration of ideological and political education and music teaching, through the above integration process of the impact factors and integration model analysis, results show that colleges and universities of music teaching and ideological and political integration path include the following aspects:

1. Making use of the interactivity of music teaching to improve the quality of ideological and political education. In order to realize the combination of ideological and political teaching and music teaching, it
is necessary to improve the teaching quality of music teaching. This is because only music teaching itself had a reasonable teaching method and achieved good teaching effect, it can bring positive promotion to other subjects teaching, achieve the goal of improving students’ learning enthusiasm and classroom teaching atmosphere, and promote the deep integration between the two. In the current teaching environment, teachers should carefully analyze the teaching content when preparing for teaching and plan teaching tasks based on it to mobilize students’ learning enthusiasm. Teachers should change their teaching subject status, go deep into students’ surroundings, become assistants and guides of students’ ideological and political study, and let students pay attention to the influence of their psychological conditions on their physical and mental health, so as to urge them to form correct three views and help them to build up self-confidence and tap their potential ability. At the same time, the introduction of music teaching in ideological and political teaching must also attach importance to the interaction and experience of students in the teaching process.

2. It is very important to establish a sound ideological and political education system to ensure long-term effective implementation of ideological and political education. College students are still in the period of youth; they have not experienced social experience, and are not mature in ideas. It is very important to strengthen the ideological and political education of college students. Therefore, it is necessary to establish a sound ideological and political education to guarantee the basics for long-term effective implementation of college students’ ideological and political education. Nowadays, with the rapid development of internet technology, a large amount of network information floods students’ daily life, among which there is some wrong, false and obscene information. Music teaching can cultivate students’ sentiments and inspire their souls, and it has a good role in promoting the formation of a correct ideological concept. Therefore, it is necessary to increase the mutual penetration of ideological and political teaching and music teaching in actual teaching, help students to form correct three views, impart more positive energy knowledge with an optimistic spirit to students, let students develop the inner quality of arduous struggle and perseverance, and strengthen the guidance of students’ ideas and concepts through continuous cultural edification so that students can gradually become excellent social talents with noble moral character and firm thought.

3. Carrying out the teaching of ideological education and music integration with students as the center. Ideological and political teaching in colleges and universities must keep pace with the changes of the times and constantly try new teaching methods and thinking to improve the effect of ideological and political teaching. For example, in the environment of rapid popularization of internet technology, it is an effective and feasible teaching reform mode to introduce music teaching into ideological and political education. In the process of ideological and political teaching, teachers should not teach students in a lofty manner but try to establish close relations with students as teachers and friends. In the mutual infiltration of ideological and political teaching and music teaching, we should carry out the corresponding teaching content around students’ subjective consciousness, fully respect students’ individualized thinking and ideas, change the teacher-centered method of imparting knowledge unilaterally, encourage students to actively participate in the classroom activities of ideological and political teaching, and increase the interaction between teachers and students, and between students and students. The development of teaching activities should take into account the interests of students as well as learning methods to help them establish a positive attitude and good living habits. In addition, the introduction of music teaching in ideological and political education should change the traditional teaching methods, which can attract students’ attention, let students learn ideological and political knowledge in a wonderful music atmosphere, and continuously improve the ideological and political classroom teaching effect.

5 Conclusion

Based on the output range of fusion resources and control time expenditure, this study aimed to highlight the role of music teaching in the teaching of ideological and political courses and analyze the influence of
external factors in the process of merging music teaching and ideological and political courses. Propose an ideological and political classroom auxiliary teaching system based on data mining. The empirical results showed that the output range and control time of the fusion resources of this method were guaranteed. Putting forward a path to integrate music teaching and ideological and political courses in colleges and universities, including improving the quality of teaching, ideological and political courses, and establishing a student-centered teaching system for ideological and political courses is advised.

Conflict of interest: Authors state no conflict of interest.

References