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Infiltration Music Aesthetic Education in Piano Teaching in Colleges

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Abstract: Music aesthetic education is an important part of quality education in our country. This important role of aesthetic education has received increasing attention from experts and scholars. As an important part of music lessons, music aesthetic education runs through all stages of students' music development. This paper studies the infiltration analysis of music aesthetic education in university piano teaching, and combines the status quo of university music education teaching to explore and propose solutions to the existing problems reflected in the questionnaire. This paper conducts a survey of music education piano majors in 6 colleges and universities, and conducts an anonymous questionnaire survey of college students, and distributes 50 questionnaires to music education piano majors in each college. Experiments show that in piano teaching, 65% of teachers are one-to-one teaching, 20% are group teaching, and 15% are organic combination of these two methods. Therefore, in the context of college music courses, not only should pay attention to the learning of theoretical knowledge and performance skills, but also not neglect the improvement of music literacy and aesthetic ability, and the ability to meet the requirements of quality education and teaching.

1. Introduction

With the continuous advancement of my country's education, music education in higher vocational colleges has also developed rapidly. The fast-paced life and the drastic increase in employment pressure have caused great changes in the spiritual and cultural needs of the masses. Higher vocational students also have more needs for spiritual culture, which makes the teaching development of higher vocational colleges Music education has become an important way to gain spiritual appetite. The research on the methods and strategies of permeating moral education factors in the music teaching of higher vocational colleges based on my own music teaching practice will help the effect of music moral education in higher vocational colleges.

The construction of foreign music education systems is very complete, but it emphatically reflects the needs of music education in the local area. It is obvious that beautiful music is a good agent for a healthy soul and a good character. Shuo C believes that compulsory means cannot reshape a person's morality and soul, but can be improved and reshaped through beautiful artistic

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methods [1]. Wenzel C H proposed that music education can not only enrich the spiritual world of students, but also make their hearts full of strength, and they can build their own good character in a healthy and fulfilling environment [2]. Minsky A put forward musical works full of vitality and emotional musical performances, which are the stars who motivate them to explore noble sentiments [3].

The advanced foreign music education thoughts are gradually introduced into our country, which has a positive impact on our country's college music teaching and further promotes the development of music education in higher vocational colleges. Aliyeva S proposed that carrying out aesthetic education can promote students' aesthetic level to a certain extent, so that they can better perceive music [4]. Cherkasov V proposes to re-establish the perceptual status of people, greatly broaden the understanding of music, and fully realize the laws of music aesthetics [5]. Lake R proposed that piano teaching in colleges and universities is an effective way to cultivate students' aesthetic ability, which can quickly improve students' perception of beauty [6].

This article combines the teaching space and teaching practice of piano teaching itself, analyzes the specific problems of the penetration of music aesthetic education in the piano teaching of higher vocational colleges, and analyzes the realization methods of music aesthetic education in the piano teaching of higher vocational colleges with specific teaching examples. And approach. This paper studies the countermeasures for the infiltration of music aesthetic education in college piano teaching. After discussing the hysteresis and singularity of the music aesthetic teaching methods and models in our country and the shortcomings of comprehensive talent training in our country, the corresponding scientific strategies are formulated.

2. Infiltration Music Aesthetic Education in Piano Teaching in Colleges

2.1. Current Situation and Necessity of Music Aesthetic Education in Piano Teaching in Colleges

(1) Current Situation of Music Aesthetic Education in Piano Teaching in Colleges

With the development of society, contemporary music education has also undergone tremendous changes. In particular, the development of modern multimedia technology has injected more vitality into school music education [7-8]. Although music education takes music content as the carrier, its connotative functions such as aesthetic education and moral education are also very critical. However, judging from the current situation of college music education, school music education pays more attention to the aesthetics of music itself, while ignoring the educational nature of music education. The beauty of music, as a composite of ideal purpose and music aesthetic education, truly embodies the music aesthetic education in music education [9-10].

(2) The Necessity of Music Aesthetic Education in College Piano Teaching

With the vigorous development of education in higher vocational colleges and the widespread demand for higher vocational talents in society, the cultivation of talent quality and ability in higher vocational colleges has also become a very critical issue [11-12]. Influencing students' professional values, through multiple channels and methods to continuously infiltrate and deepen, so that once students enter the society, they can play their own advantages and integrate into social development as soon as possible [13-14].

2.2. UCB Algorithm Based on Penetration Analysis

Here we set the number of times the item j is selected as $T_j(n)$ after selecting n times, then after selecting n times [15-16], the difference between the sum of the selected numbers and the

theoretical best result:

$$\rho = n\mu^* - \sum_{j=1}^{K} E(T_j(n))\mu_j \tag{1}$$

$$E(T_j(n)) \le \left(\frac{1}{D(\rho_j \| \rho^*) + o(l)} \right) \ln n \tag{2}$$

Among them, when $n \to \infty$, there is $o(l) \to 0$, and:

$$D(\rho_j \| \rho^*) = \int \rho_j \ln \frac{\rho_j}{\rho^*} \tag{3}$$

The difference between the number of choices of the optimal solution and the number of choices of other non-optimal solutions should be very large, and the optimal solution should be selected the most times [17-18]. Therefore, for any better strategy, the sub-optimal solution should be:

$$E(T_j(n)) \le (\ln n) / D(\rho_j \| \rho^*) \tag{4}$$

$$\rho = \max E[\sum_{t=1}^{n} X_{i,t}] - E[\sum_{i=1}^{K} \sum_{j=1}^{T_j(n)} X_{i,t}] \tag{5}$$

It can be clearly found that the inability to select the optimal solution steadily each time is the reason for the gap between this strategy and the optimal solution [19-20]. At present, there is no strategy that can limit the gap between the selection result and the optimal solution not to be higher than $o(\ln N)$. Then this strategy can be regarded as a better strategy. It is a better strategy method to reach a balance between the use of existing experience and the exploration of unknown nodes . However, the specific details are different, and the results obtained are also different. The formula is as follows:

$$\overline{X}_{i,s} = \frac{1}{S} \sum_{j=1}^{s} X_{j,r}^2, \overline{X}_i = \overline{X}_{i,T_i(n)} \tag{6}$$

$$\overline{X}_i = \sqrt{2 \log n / T_i(n)} \tag{7}$$

The operation of this algorithm is divided into many stages. In each stage, a i is selected to be executed $\rho(r_i + 1) - \rho(r_i)$ times, r_i is the number of stages that i runs, and the final result of the algorithm is after the last stage stops , the formula 9 gets the maximum value i.

3. Design of Penetrating Experiment of Music Aesthetic Education

3.1. Test Subject

In order to avoid the differences in the comprehensive teaching level, curriculum setting and students' own quality among various colleges, we have selected 6 colleges and universities here to conduct a survey of the music education piano students of these 6 colleges. A sample survey method was adopted to conduct an anonymous questionnaire survey on college students. 50 questionnaires were issued to students majoring in music education and piano in each university, totaling 300 copies, all of which were collected. The questionnaire understands the students' views on piano teaching in their school from four aspects: the students' own music quality, whether the music quality has been greatly improved, the daily practice methods of the students and the teaching

methods adopted by the teachers.

3.2. Experimental Method

(1) Interview Method

In the process of research, experts with rich experience in music aesthetics and teachers with rich experience in music aesthetic education in piano teaching in various colleges and universities conducted visits and telephone interviews to further understand the actual situation of music aesthetic education and influence the development of current music aesthetic education the main factor. Consult relevant experts in music aesthetics, fully exchange opinions on relevant issues of music aesthetic education, and put forward scientific and reasonable suggestions for research.

(2) Questionnaire survey

This study uses the methods commonly used in social survey research to test the questionnaire, and make supplements and modifications based on the results of the test, and then issue the questionnaire. From the design ideas of the questionnaire to the final determination and review of the questionnaire, it was all carried out and completed under the guidance of relevant experts and scholars. The research tool used in the questionnaire survey method is the questionnaire.

3.3. Statistical Data Processing Method

SPSS23.0 software was used for data processing, and the count data was expressed in percentage (%), k is the number of data in this experiment, σ^2 is the variance of all survey results, and P<0.05 indicates that the difference is statistically significant. The formula for calculating reliability is shown in Equation 8.

$$a = \frac{k}{k-1}(1-\frac{\sum \sigma_i^{\ 2}}{\sigma^2}) \tag{8}$$

4. Infiltration Experiments in Music Aesthetic Education

4.1. Evaluation Index System Based on Index Reliability Testing

Reliability refers to the stability and reliability of the questionnaire. This article adopts the α coefficient method created by L.J. Cronbach. The α coefficient can be obtained by Reliability Analysis in SPSS software. It is generally believed that the α coefficient above 0.8 indicates that the effect of the index setting is very good, and above 0.7 is also acceptable. The results are shown in Table 1.

Table 1. Data Sheet of evaluation index system for index reliability testing

	Very Clear	Clear	General	Not Clear	Chaotic	Alpha
Music quality	0.327	0.408	0.144	0.087	0.034	0.921
Has the music quality improved	0.301	0.311	0.153	0.149	0.086	0.726
practice piano	0.296	0.294	0.169	0.132	0.109	0.849
Teachers adopt teaching methods	0.232	0.279	0.243	0.132	0.114	0.735

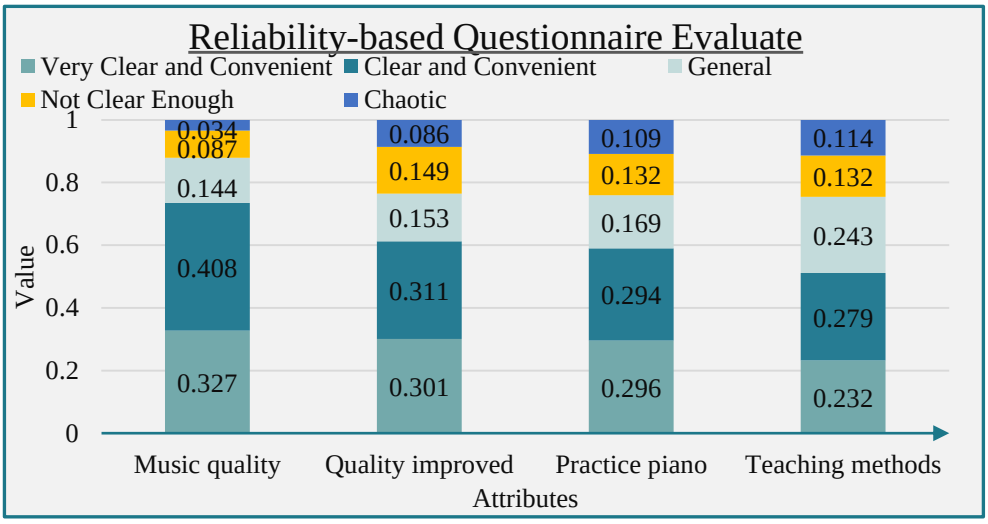

Figure 1. Reliability-based questionnaire evaluation result graph

It can be seen from Figure 1 whether the students' own music quality, whether the music quality has been greatly improved, the methods of daily practice of the students and the teaching methods adopted by the teachers, the impact of the data obtained from the four indicators on this experiment it is acceptable (α>0.7). It can be seen that the scores obtained in the questionnaire survey are credible to a certain extent, and the results obtained this time can be further studied.

4.2.Survey Results

(1) Based on the analysis of students' music quality

From Figure 2, we can see that 12.03% of students think that their music quality is very poor, 35.82% of students think that their music quality is poor, and 22.35% of students think their music quality is average, 16.62% of students think their music quality is good, and 13.18% of students think their music quality is very good. There is a certain relationship between students' music quality and music aesthetics. We should strengthen the infiltration of music aesthetic education so that students have a profound insight into the practice of music aesthetics.

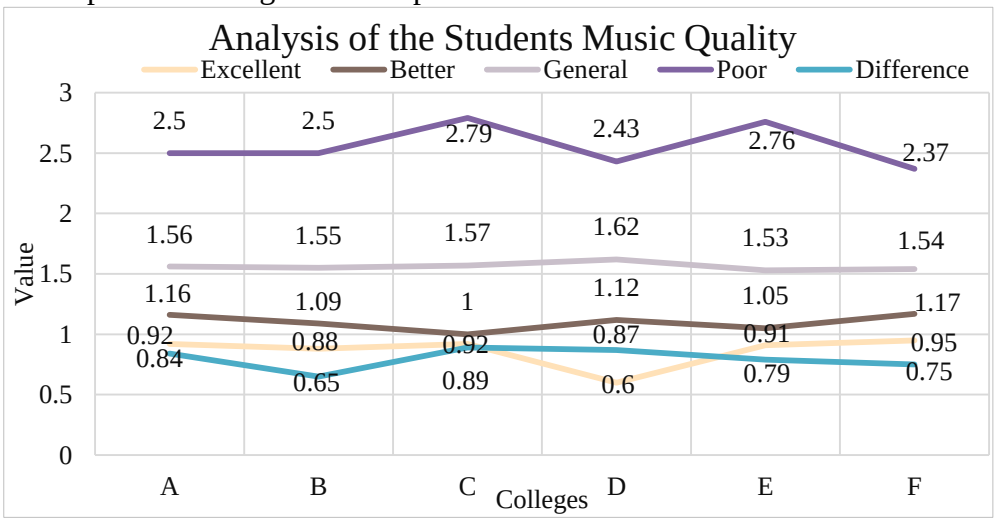

Figure 2. Analysis of the students music quality

(2) Analyze based on whether the music quality has greatly improved

From Figure 3, we can see that 21% of the students in school have improved their musical quality after enrolling in piano aesthetics, 64% have not changed, only 5% have greatly improved, and 10 % of students are regressing. The improvement of students' music quality has a certain relationship with the improvement of music aesthetics.

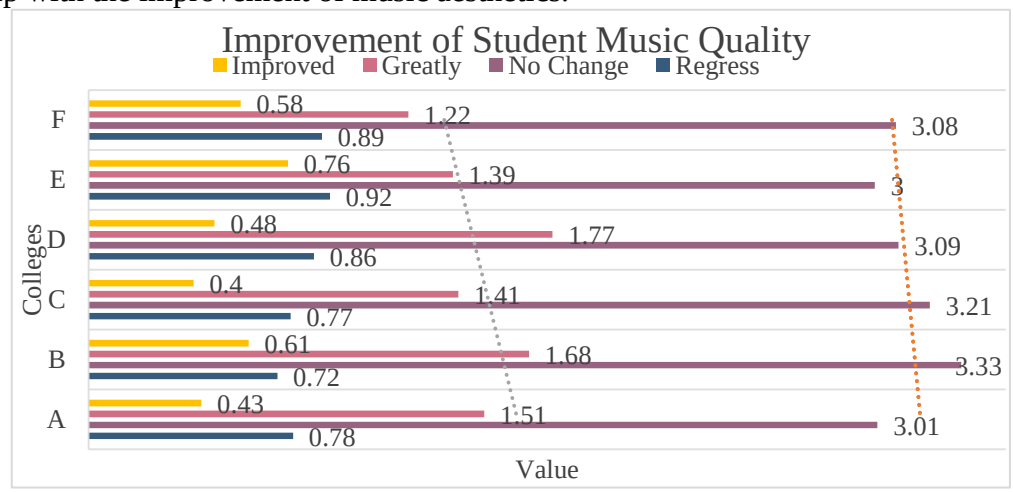

Figure 3. Analysis of the improvement of students music quality

(3) Analysis based on students daily practice methods

Here we judge the degree of music aesthetics according to whether the teacher often discusses the daily practice methods with you during the piano teaching process. The results are shown in Table 2.

Table 2. Data sheet of students daily practice methods

Colleges	Never	Rarely	Occasionally	Frequently
A	0.43	0.65	1.73	2.68
B	0.51	0.76	1.77	2.78
C	0.75	0.72	1.77	2.80
D	0.65	0.90	1.56	2.10
E	0.40	0.87	1.80	2.53
F	0.43	0.77	1.48	2.37

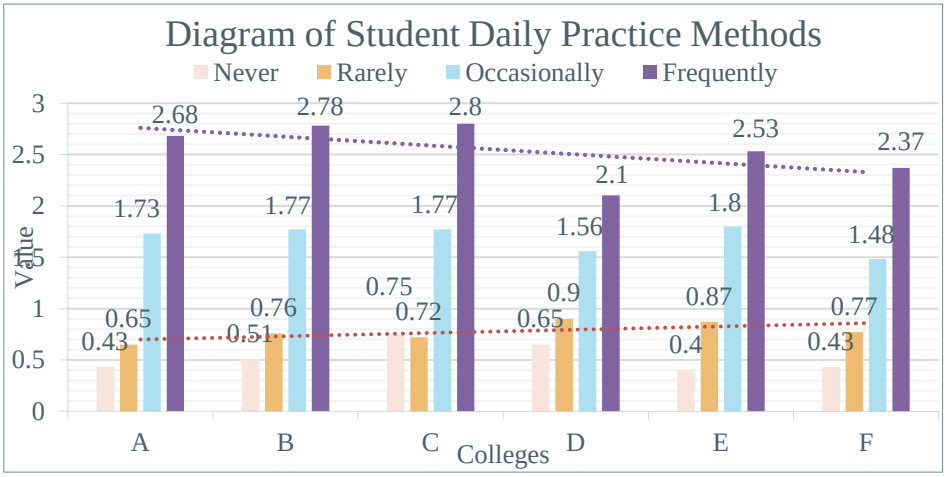

Figure 4. Analysis diagram of students daily practice methods

From Figure 4, we can see that 8% of students have never discussed piano practice methods with their teachers in their piano aesthetic learning, 12% of students rarely discuss learning with their teachers, and 27% of students occasionally discuss with their teachers. The teacher conducts learning discussions, and 53% of the students often discuss piano practice methods with the teacher. The teaching content of music courses in colleges and universities is very rich. Teaching workers can choose various excellent music resources as the teaching content to meet the music learning needs of students.

(4) Analysis based on what teaching method the teacher uses

Here we judge the degree of music aesthetics according to what teaching methods teachers often use in the teaching of piano professional skills. The results are shown in Table 3.

Table 3. Teachers use teaching method data table

Colleges	One to One Tutoring	Basic Group Class Teaching	Combine the Two Methods
A	2.42	1.30	2.40
B	2.31	1.90	1.26
C	1.36	2.05	1.32
D	1.94	1.43	1.39
E	1.27	2.23	0.90
F	2.18	1.56	1.45

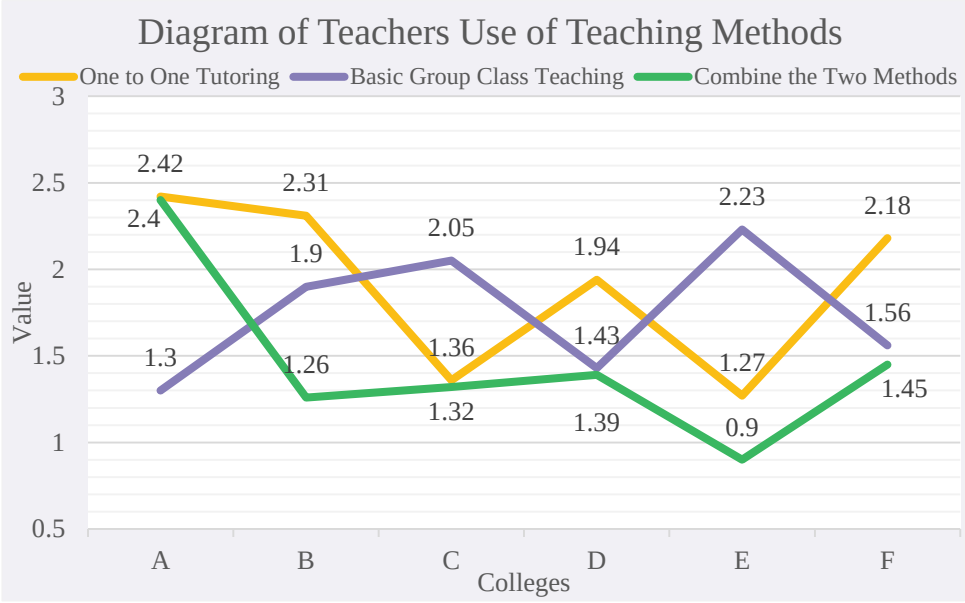

Figure 5. Analysis diagram of teachers use of teaching methods

From Figure 5, we can see that in piano teaching, 65% of the teaching methods used by teachers are one-to-one teaching, 20% are group group teaching, and 15% are the organic combination of these two methods. The teaching content of music courses in colleges and universities is very rich. Teaching workers can choose various excellent music resources as the teaching content to meet the music learning needs of students.

5. Conclusion

Judging from the current music teaching situation, although the atmosphere in the classroom is very active, the music forms are also diverse, and the music education of students has been

expanded, but it is obvious that the penetration of music aesthetic education is insufficient. Because the artistic attributes of music education are very obvious, lively music forms often neglect the realization of other attributes in the development of education, and are especially controlled by the state of the surface of the music, while the inner aesthetic attributes cannot be explored and expanded.

Based on the investigation and study of piano teaching in colleges and universities, this paper summarizes some targeted measures to solve the problems in combination with the actual problems. Music education is highly theoretical and practical, and the two are mutually integrated. It is also a highly compatible subject. It integrates educational theory, educational technology and music skills. Therefore, music education in colleges and universities must be an organic whole that is professional and teacher-oriented.

Piano teaching has remained unchanged in many colleges and universities. Accepting an unprecedented new round of educational reforms and teaching methods is a huge challenge for teachers and students, but it is also a great challenge for every teacher and student in universities and colleges. And development had a real impact. Although this will be a arduous and long process, we always firmly believe that piano teaching in colleges and universities must meet the reform requirements. Only by shifting the focus of teaching from purely improving students' performance skills to combining students' performance skills and aesthetic abilities can we it can really arouse students' enthusiasm for learning piano, and can really improve piano performance.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

[1] Shuo C, Xiao C. The construction of internet + piano intelligent network teaching system model. Journal of Intelligent and Fuzzy Systems, 2019, 37(89):1-9. DOI: 10.3233/JIFS-179163

[2] Wenzel C H. Aesthetic Education in Confucius, Xunzi, and Kant. Yearbook for Eastern and Western Philosophy, 2018, 2018(3):59-75. DOI: 10.1515/yewph-2018-0006

[3] Minsky A. The Men Who Stare at Cathedrals: Aesthetic Education, Moral Sentiment, and the German Critique of French Revolutionary Violence, 1793–1794. Central European History, 2020, 53(1):23-47. DOI: 10.1017/S0008938919000918

[4] Aliyeva S. Use of examples of folk art in the artistic and aesthetic education of preschool children. Azerbaijan Journal of Educational Studies, 2020, 1(1):11-20. https://doi.org/10.29228/edu.104

[5] Cherkasov V. Number 13 / Part I. Music. 8. The Development of Music-Pedagogical Education of Ukraine in The 60's –70-ies of The XX Century. Nephron Clinical Practice, 2017, 13(1):66-78. https://doi.org/10.1515/rae-2017-0008

[6] Lake R, Kress T. Mamma don\"t put that blue guitar in a museum: Greene and Freire\"s duet of

radical hope in hopeless times. Review of Education Pedagogy & Cultural Studies, 2017, 39(1):60-75. https://doi.org/10.1080/10714413.2017.1262166

[7] Madaras G. Acoustics of Education Facilities Rooms for speech, focus, activity, or music. Construction Specifier, 2019, 72(9):68-75.

[8] John, Habron, Liesl, et al. A conceptual study of spirituality in selected writings of émile Jaques-Dalcroze. International Journal of Music Education, 2017, 35(2):175–188. DOI: 10.1177/0255761415620532

[9] Westerlund H M. The return of moral questions: expanding social epistemology in music education in a time of super-diversity. Music Education Research, 2019, 21(1):1-14. https://doi.org/10.1080/14613808.2019.1665006

[10] Iofis B, Xiaona Q. Classical Harmony in the Music-Theoretical Education in the People's Republic of China. Musical Art and Education, 2019, 7(4):44-64. https://doi.org/10.31862/2309-1428-2019-7-4-44-64

[11] Iuc D. Enhancing Music Listening in Educational Context. Review of Artistic Education, 2016, 1(11):109-114. https://doi.org/10.1515/rae-2016-0013

[12] Pande-Rolfsen M S, Heide A L. Sounding Shakespeare: An Interdisciplinary Educational Design Project in English and Music. Early Modern Culture Online, 2020, 7(1):87-104. https://doi.org/10.15845/emco.v7i1.2830

[13] Krasilnikov I M. Modern technologies of improving the quality of art education at basic school. Quality - Access to Success, 2018, 19(165):103-109.

[14] Thompson-Bell J. Music and the Myth of Wholeness: Toward a New Aesthetic Paradigm, Tim Hodgkinson (2016). Journal of Music Technology and Education, 2018, 11(2):218-224. DOI: 10.1386/jmte.11.2.218_5

[15] Gillian, I, Eriksson. Developing Creative Thinking Through an Integrated Arts Programme for Talented Children. Gifted Education International, 2016, 6(1):8-15. https://doi.org/10.1177/026142948900600103

[16] Yetisen A K, Coskun A F, England G, et al. Art on the Nanoscale and Beyond. Advanced Materials, 2016, 28(9):1724-1742. https://doi.org/10.1002/adma.201502382

[17] Zhang G. Composer Zhang Zhao: a look at the development of modern Chinese piano music. Problems of Interaction Between Arts Pedagogy and the Theory and Practice of Education, 2019, 52(52):85-100. https://doi.org/10.34064/khnum1-52.06

[18] Seo J S, Kwon S J. Analysis for Chloride Penetration in Concrete under Deicing Agent using Multi-Layer Diffusion. Journal of the Korea Contents Association, 2016, 16(4):114-122. https://doi.org/10.5392/JKCA.2016.16.04.114

[19] Zhu B, Dai J, Kong D. Modelling T-bar penetration in soft clay using large-displacement sequential limit analysis. Geotechnique, 2020, 70(2):173-180. https://doi.org/10.1680/jgeot.18.P.160

[20] Kusuma P D, Hadiansyah W M. Telecommunication Penetration Analysis in Indonesia by using K-Medoids Method. Journal of Engineering and Applied Sciences, 2020, 15(6):1289-1297. https://doi.org/10.36478/jeasci.2020.1289.1297