

Exploring the Integration of Railway Culture into Aesthetic Education Curriculum in Higher Vocational Colleges

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Abstract

Railways carry profound historical heritage and unique cultural value. Integrating railway cultural elements into the aesthetic education curriculum in higher vocational colleges can enrich the curriculum content, innovate educational methods, enhance educational effectiveness, and pass on excellent historical culture. This paper analyzes the significance and value of integrating railway culture into the aesthetic education curriculum of higher vocational colleges, discusses the current state of aesthetic education curriculum construction in these colleges, and provides reference pathways for the integration of railway culture through five aspects: deepening discipline integration, strengthening teacher training, establishing long-term mechanisms, innovating resource application, and enriching curriculum content.

Keywords

Railway Culture; Higher Vocational Colleges; Aesthetic Education; Curriculum.

1. Introduction

"Education is nothing but a turning of the soul." Aesthetic education guides students' spiritual growth and transformation through various means such as art and aesthetics, cultivating their aesthetic taste, innovative thinking, and humanistic qualities. In higher vocational colleges, aesthetic education is a crucial part of promoting students' all-around development and improving their comprehensive qualities. Railway culture, as an important component of human civilization, carries profound historical significance and unique cultural value. It is not merely a mode of transportation but also a way of life and a symbol of spirit; it not only provides convenience for travel but also serves as a significant carrier for showcasing the national image and passing down historical culture. Integrating railway cultural elements into the aesthetic education curriculum of higher vocational colleges not only helps to enrich and expand the content and forms of aesthetic education, innovate the educational methods, and enhance the effectiveness of aesthetic education but also enables students to deeply appreciate the unique charm of railway culture, thereby improving their aesthetic abilities and humanistic qualities.

2. The Significance and Value of Integrating Railway Culture into the Aesthetic Education Curriculum in Higher Vocational Colleges

2.1. Promoting Railway Culture and Passing Down Historical Spirit

Railway culture, with its deep historical roots and distinct contemporary features, is not only a product of transportation development but also a significant marker of human civilization's progress. It blends industrial civilization, technological innovation, and human spirit, acting as a bridge between the past and the future. Its value lies not only in driving economic and social development but also in enriching and enhancing people's spiritual world. The development of China's railways vividly showcases the unique characteristics and value of railway culture.

From the Beijing-Zhangjiakou Railway constructed under the supervision of Zhan Tianyou to today's "Fuxing" high-speed trains, each technological advancement in railways has been accompanied by cultural exchange and integration, absorbing cultural elements from different regions and ethnicities to form a distinctive cultural landscape, injecting new vitality into human civilization. China's railways have not only witnessed the country's industrialization journey but have also become a significant window for demonstrating China's spirit and strength. In this process, railway culture has not only driven economic and social development but also subtly enhanced people's spiritual realm, shaped a positive social ethos, and influenced people's thoughts and behaviors. Promoting railway culture and passing down the historical spirit is not just a tribute to past achievements but also an exploration of future development potential. Integrating railway cultural elements into the aesthetic education curriculum of higher vocational colleges allows students to understand the country's industrial development process more intuitively, enhancing their national pride and cultural confidence, and stimulating their patriotism and social responsibility.

2.2. Expanding Curriculum Content and Enriching Aesthetic Experience

Aesthetic education, as an important means of cultivating students' aesthetic ability, innovative thinking, and humanistic qualities, benefits greatly from the integration of railway culture, which represents modern industrial civilization in China. Railway culture, with its rich historical connotations, unique artistic charm, and profound social significance, provides abundant educational resources and innovative space for aesthetic education curricula. Integrating railway culture into the aesthetic education curriculum of higher vocational colleges is both a continuation of traditional culture and an enhancement of students' aesthetic experience. Railways have not only changed the way people travel but have also provided unique aesthetic experiences at visual, auditory, and spiritual levels. The smooth lines, precise structures, and rich history of railways become valuable resources in aesthetic education. Through railway culture, students can directly experience the grandeur and delicacy of railway architecture, understand the harmony between industrial design and the natural environment. Artistic elements with distinct era and regional characteristics, such as railway symbols, train patterns, and station murals, can offer rich creative inspiration for students. Additionally, railway culture can be combined with other art forms like music and dance to create more diverse artistic experiences. For instance, music works themed around railways can showcase the charm and emotions of railways through melody and lyrics; dance performances set against the backdrop of railways can display the dynamism and power of railways through dance movements and stage design. Therefore, integrating railway culture into the aesthetic education curriculum of higher vocational colleges can not only enrich the curriculum content and enhance students' aesthetic experience but also cultivate their innovative abilities and comprehensive qualities. We should fully utilize this valuable resource, integrating it into aesthetic education curricula to provide students with more comprehensive and in-depth art education.

2.3. Cultivating Professional Qualities and Improving Comprehensive Abilities

As an essential component of fostering students' comprehensive abilities, aesthetic education aims to guide students in discovering, appreciating, and creating beauty. The construction and development of railways embody the sweat and wisdom of countless workers, reflecting the spirit of perseverance and determination. This spiritual beauty is of great significance for cultivating students' professional qualities, social responsibility, and improving their overall qualities. Firstly, railway culture, with its unique charm and rich connotation, provides students with a broad learning platform. By studying the development history, technological innovations, and social impact of railways, students can deeply feel the spirit of perseverance and teamwork inherent in railway culture. Organizing students to visit railway museums and conduct railway

culture-themed practical activities allows them to personally experience the charm of railway culture and recognize the crucial role of railways in social development, appreciating the professional spirit and responsibility of railway workers. Internalizing this spirit helps students form a rigorous, pragmatic, and innovative work style in their future careers, cultivating their teamwork and collaboration skills, and inspiring their innovative spirit and curiosity. Secondly, as a vital infrastructure of the national economy, railways bear the responsibility of connecting urban and rural areas and promoting regional development. By learning about the social responsibility and mission of railway culture, students can recognize their responsibility and mission in social development, building correct professional values and actively engaging in social practice. Moreover, railway culture can help students establish correct values and outlook on life. The core values of railway culture include safety, efficiency, and service, which align with the development needs of modern society and are fundamental to cultivating qualified citizens. Through studying railway culture, students can deeply understand these values' connotations and significance, internalizing them as their behavioral guidelines and life pursuits, thus improving their comprehensive qualities.

3. Current Deficiencies in the Construction of Aesthetic Education Curriculum in Higher Vocational Colleges

3.1. Ambiguous Curriculum Outline and Target Positioning

At present, the objectives of aesthetic education courses in many higher vocational colleges are too broad, lacking specific and quantifiable indicators, leading to unclear directions in teaching implementation and difficulty in achieving expected results. Some higher vocational colleges only vaguely propose the goal of "cultivating students' aesthetic ability" in their aesthetic education curriculum outlines without clearly defining what aesthetic ability is, how to measure its improvement, and how it relates to students' future professional development. This ambiguous goal setting not only confuses teachers and students but also fails to stimulate their intrinsic motivation to learn. As an important part of quality education, aesthetic education should be closely integrated with the students' majors to jointly promote their all-around development [1]. However, in practice, many higher vocational colleges' aesthetic education courses often operate independently of professional education, lacking organic integration with professional courses. This phenomenon weakens the effectiveness of aesthetic education courses and fails to fully exert their positive role in students' professional growth. Additionally, many higher vocational colleges regard aesthetic education courses as "add-ons" separate from professional education, lacking effective connection and deep integration with professional courses. This disjointed state not only limits the role of aesthetic education courses in cultivating students' comprehensive qualities but also fails to realize their potential value in enhancing professional skills. Furthermore, some higher vocational colleges do not design aesthetic education courses based on the characteristics and needs of different majors, leading to a disconnection between course content and professional education, and even a "one-size-fits-all" approach. This neglects students' diverse interests and potentials, limiting the development space of aesthetic education and hindering the comprehensive improvement of students' overall qualities.

3.2. Lack of Course Content and Teaching Resources

In the construction of aesthetic education courses in higher vocational colleges, the issue of monotonous and uninnovative course content is particularly prominent. Many aesthetic education courses remain at the traditional levels of art appreciation and theoretical explanation, such as music appreciation and art history, with outdated content lacking contemporary relevance and innovation. Currently, only a few higher vocational colleges have

established relatively comprehensive aesthetic education resource libraries, covering multiple fields such as music, art, and dance. Students in these institutions have access to excellent domestic and international art works and can participate in high-level art practice activities. However, the majority of colleges have relatively scarce aesthetic education resources, with students often learning through traditional lecture methods, lacking opportunities for hands-on experience and practical application. In some higher vocational colleges, the aesthetic education resources for science and engineering majors are relatively abundant, while those for humanities and art majors are relatively lacking. This imbalance not only limits the diversity and innovation of aesthetic education courses but also affects the improvement of students' comprehensive qualities. Additionally, due to constraints such as funding and facilities, many colleges cannot provide sufficient practical equipment and materials for students [2]. For example, in music courses, some schools lack professional music classrooms and instruments, and students can only listen to music through headphones in regular classrooms, which significantly weakens the emotional impact and expressive power of music, making it difficult to arouse students' interest and enthusiasm.

3.3. Weak Teaching Methods and Faculty

In traditional aesthetic education courses in higher vocational colleges, lecturing as a classic teaching method has long been dominant. This single teaching model often neglects students' subjectivity and interactivity, resulting in a dull classroom atmosphere and low student interest in learning. Some colleges that attempt to introduce multimedia teaching stop at the level of PPT presentations, lacking deep integration and interactive design. This superficial change in teaching methods has not significantly improved students' learning interest and participation. Furthermore, in the construction of aesthetic education courses in higher vocational colleges, there is a notable problem of insufficient and uneven quality of aesthetic education teachers. Some aesthetic education teachers have to undertake a large number of teaching tasks and lack systematic theoretical knowledge and practical experience in aesthetic education, leading to insufficient classroom interaction and low student participation. This makes it difficult to effectively guide students to deeply understand and experience the essence of beauty, limiting the innovation and development of aesthetic education courses. This also results in aesthetic education courses being isolated from other disciplines, making it hard to form complementary and integrated knowledge systems.

3.4. Insufficient Employment Orientation and Interest Stimulation

Some higher vocational colleges lack a close connection between aesthetic education course construction and market demand, resulting in an employment orientation that is not well integrated. Students often view aesthetic education courses as secondary subjects, believing that they do not directly contribute to their future career development and professional skills enhancement, leading to insufficient investment and attention during the learning process. Some students have expressed, "I think aesthetic education courses are just about drawing and singing, which are not useful for my major." This perception overlooks the unique value of aesthetic education in cultivating innovative thinking, enhancing aesthetic appreciation, and promoting interdisciplinary integration. Additionally, the content design of many aesthetic education courses focuses heavily on the introduction and analysis of traditional art forms, such as classical painting and sculpture, while neglecting the exploration of contemporary and digital arts. This results in many students interested in new media and design fields finding the course content outdated and unengaging, making it difficult for them to resonate with the material.

4. Exploring the Integration of Railway Culture into the Construction of Aesthetic Education Curriculum in Higher Vocational Colleges

4.1. Deepening Integration and Strengthening Interdisciplinary Cooperation between Railway Culture and Aesthetic Education Curriculum

Deepening the integration of railway culture and aesthetic education curriculum is not only an innovation in traditional aesthetic education but also an in-depth exploration and inheritance of the unique charm of railway culture. Through the medium of aesthetic education courses, railway culture can be disseminated more widely, allowing more students to understand and appreciate its charm. This integration can enrich the content of aesthetic education courses and enhance students' aesthetic abilities and cultural literacy. The interdisciplinary cooperation between the two is an innovative exploration of traditional educational models and cultural inheritance and innovation. This collaborative model can fully leverage the unique charm of railway culture and the educational functions of aesthetic education courses, jointly cultivating talents with both cultural heritage and aesthetic abilities. Through interdisciplinary cooperation, the rich connotations of railway culture and the diverse forms of aesthetic education courses can be integrated, forming a new educational experience. Aesthetic education courses themed around railway culture can incorporate knowledge from various disciplines such as railway history, architectural aesthetics, and landscape design. This allows students to appreciate the beauty of railway culture while gaining a deep understanding of its historical origins and development. This interdisciplinary learning approach can broaden students' knowledge horizons and stimulate their interest in learning and exploration [3]. In aesthetic education courses, teachers can design a series of art creation courses themed around railways, where students can learn the aesthetic characteristics of railway architecture and create railway landscape paintings and railway-themed sculptures. This not only improves students' artistic creation abilities but also deepens their understanding and appreciation of railway culture. Additionally, interdisciplinary cooperation promotes the sharing of resources and complementary advantages between railway culture and aesthetic education courses, providing rich teaching materials and sources of inspiration, enhancing the quality of aesthetic education courses, and promoting the inheritance and innovation of railway culture.

4.2. Enhancing Training to Improve the Professional Quality and Teaching Ability of the Faculty

Improving the professional quality and teaching ability of the faculty is crucial for the effective integration of railway culture into aesthetic education courses and directly impacts students' learning outcomes and course quality. Higher vocational colleges can formulate specific faculty training plans based on the characteristics and needs of integrating railway culture into aesthetic education courses, enabling teachers to fully understand and master the connotations and characteristics of railway culture and how to effectively incorporate these elements into aesthetic education courses. For example, inviting experts and scholars in the field of railway culture or experienced aesthetic education teachers to conduct special lectures or workshops for the faculty. Through in-depth exchanges and learning with experts, teachers can broaden their horizons, understand the latest research findings and teaching methods, thereby enhancing their professional quality. This allows aesthetic education teachers to deeply understand the development history, characteristics, and aesthetic value of railway culture; organizing activities such as visits to railway museums and exchanges with railway culture practitioners encourages teachers to participate in practical projects integrating railway culture into aesthetic education courses. Through practice, teachers can personally experience the charm of railway culture and gain a deep understanding of its practical application in aesthetic education courses. This firsthand experience enhances teachers' recognition and

understanding of railway culture. Additionally, higher vocational colleges can actively integrate educational resources related to railway culture, such as books, video materials, and physical exhibits, to establish a railway culture education resource library, providing rich teaching materials for aesthetic education courses. They can also collaborate with railway enterprises to jointly develop railway culture aesthetic education courses, achieving resource sharing and complementary advantages.

4.3. Scientific Evaluation: Establishing a Long-term Mechanism for Integrating Railway Culture into Aesthetic Education Curriculum

As a unique cultural form, railway culture contains rich aesthetic value and provides abundant educational resources for aesthetic education courses. Establishing an evaluation and feedback mechanism for integrating railway culture into aesthetic education curriculum allows for periodic assessment of course implementation, collection of feedback from students and teachers, and timely adjustments to course content and methods, ensuring a closer integration of railway culture and aesthetic education [4]. Regarding course content, a combination of qualitative and quantitative evaluation methods can be adopted. Qualitative evaluation can focus on whether the course content thoroughly explores the unique value of railway culture and effectively integrates aesthetic education goals. Quantitative evaluation can collect feedback from students through surveys and satisfaction questionnaires, assessing whether the course content is rich and attractive. In terms of teaching methods, various instructional approaches, such as case analysis, role-playing, and field trips, can be employed to stimulate students' interest and enthusiasm for learning [5]. Additionally, classroom observations and peer evaluations can be used to assess the effectiveness of teaching methods, collecting students' opinions and suggestions on the course. Data analysis tools can be utilized to organize and analyze student feedback, better understanding issues and deficiencies in course implementation.

4.4. Innovative Methods: Promoting the Innovative Application of Railway Cultural Resources

Higher vocational colleges' aesthetic education courses have great potential and space for promoting the innovative application of railway cultural resources. Firstly, by deeply exploring railway cultural elements, the content of aesthetic education courses can be enriched. For example, knowledge of railway history, architecture, and art can be introduced, allowing students to comprehensively understand the connotations of railway culture. Modern technological means, such as virtual reality (VR) and augmented reality (AR), can be used to create immersive railway culture experience courses, enabling students to feel the charm of railway culture through personal experience. Secondly, the innovative application of railway cultural resources can stimulate students' creativity and imagination. In art creation courses, students can be guided to create works themed around railway elements, expressing their understanding and perception of railway culture through their creations. In music creation and appreciation courses, railway-related musical works can be introduced, allowing students to appreciate the beauty of the integration of music and railway culture. Additionally, project-based learning can be introduced, encouraging students to explore the charm of railway culture through practical projects. Colleges can organize students to conduct social surveys on railway culture, allowing them to personally experience the unique charm of railway culture, thereby enhancing their interest in aesthetic education courses. This practical learning approach not only increases student engagement but also cultivates their practical abilities and innovative spirit. Furthermore, the "flipped classroom" teaching model can be adopted, where students learn the basic knowledge of railway culture through self-study before class, and then engage in in-depth discussions through group discussions and role-playing in class. This approach

maximizes teaching effectiveness and cultivates students' practical abilities and innovative spirit, laying a solid foundation for future cultural inheritance and development.

4.5. Excavating Elements to Enrich the Content of Aesthetic Education Curriculum System

In the process of deepening the excavation and organization of railway cultural elements, attention should be paid not only to the historical context and unique value of railway culture but also to its close integration with aesthetic education courses to enrich course content and enhance teaching effectiveness [6]. By collecting and analyzing a large amount of railway cultural material, we can discover the rich aesthetic education resources contained within it. For example, the design concepts of railway architecture, the labor spirit of railway workers, and the operation tracks of trains can all serve as vivid cases for aesthetic education courses. Taking railway architecture as an example, its unique architectural style and design concepts not only demonstrate exquisite engineering technology but also contain profound cultural connotations. In aesthetic education courses, students can be guided to appreciate the beauty of the lines, structures, and functions of railway architecture, thereby cultivating their aesthetic abilities and creativity. By introducing the historical background and cultural connotations of railway architecture, students can better understand the development process and unique value of railway culture. Additionally, the labor spirit of railway workers is also an important resource for aesthetic education courses. By telling the stories of railway workers, students can be guided to feel their labor spirit and dedication, cultivating their sense of social responsibility and civic awareness [7]. Organizing students to conduct field visits and surveys can help them gain an in-depth understanding of the actual situation and development trends of railway culture. Modern technological means, such as digital technology and virtual reality technology, can be used to present railway cultural elements to students in a more vivid and visual way. By fully excavating and utilizing railway cultural elements, we can better cultivate students' aesthetic abilities, creativity, and sense of social responsibility, making positive contributions to the cultivation of well-rounded socialist builders and successors with moral, intellectual, physical, aesthetic, and labor education[8].

5. Conclusion

The integration of railway culture and aesthetic education courses is not only an innovation in traditional aesthetic education teaching, but also an exploration and inheritance of the unique charm of railway culture. We should have a correct understanding of the importance of combining the two, and effectively integrate railway cultural elements into the construction of aesthetic education courses in vocational colleges through various means such as disciplinary integration, teacher training, and mechanism creation. Only in this way can we expand the content and form of aesthetic education courses, innovate the methods of aesthetic education in vocational colleges, enhance the effectiveness of aesthetic education, help students deeply understand the unique charm of railway culture, and improve their aesthetic ability and humanistic literacy.

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