

Research on Teaching Reform Path: Integrating Ideological and Political Content into Industrial-Themed Painting

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Abstract: Based on the local modern industrial heritage resources of Tangshan and the integrated aesthetic education practice of primary, secondary, and tertiary schools in the College of Fine Arts of Tangshan Normal University, this paper focuses on the practical difficulties of integrating ideological and political education in industrial-themed painting courses. From the perspective of painting creation and art education research, it sorts out the practical problems such as insufficient transformation of local resources, discontinuity in education at different stages, limited implementation of on-site teaching, and a single evaluation mechanism. Based on the practical accumulation of school-based research projects, this study explores the reform path that is suitable for local universities from four dimensions: resource reconstruction, layered teaching, on-site immersion, and diversified evaluation. It builds a model for the in-depth integration of industrial aesthetic education and ideological and political education, providing practical reference for the living inheritance of regional industrial culture and the innovation of ideological and political education in art courses.

Keywords: Industrial heritage; Industrial-themed painting; Ideological and political content; Fine arts teaching reform; Aesthetic education integration

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1. Introduction

Industrial heritage carries the development context and spiritual core of urban industry, and is a high-quality educational carrier with local characteristics for the ideological and political construction of art courses in local universities. Against the backdrop of the reform of aesthetic education in the new era, the teaching of industrial-themed painting has already broken through the traditional boundary of single-technique teaching, and shoulders the dual mission of inheriting regional industrial spirit and shaping student values. From the perspective of school-based teaching practice, problems such as the disconnect between professional training and ideological and political guidance, and inefficient utilization of local resources still exist. Based on the practical experience of the integration of industrial aesthetic education and ideological and political education

in our school, targeted exploration of teaching reform paths suitable for local colleges and universities can effectively fill the gaps in regional aesthetic education and talent cultivation.

2. Industrial-themed painting teaching

Industrial-themed painting is a characteristic category of painting, focusing on the creation of industrial heritage landscapes, industrial production scenes, and industrial spiritual landscapes. The forms of creation cover multiple directions, including industrial heritage on-site sketches, industrial spirit theme creation, and industrial element printmaking design. This teaching module is a characteristic teaching content created by the School of Fine Arts of Tangshan Normal University based on the geographical characteristics of Tangshan. It is different from the traditional training mode of still life and landscape painting, and presents distinct teaching characteristics of local materials, spiritual empowerment, and practical guidance. The course trains students and refines their proficiency in mainstream painting techniques, including oil painting and printmaking, and is more deeply bound to the local industrial and cultural heritage of Tangshan, which has the core function of empowering both professional and ideological education ^[1].

The school relies on stable off-campus research bases such as Kailuan National Mining Park and Qixin 1889 Cement Museum to carry out instructional work, completely breaking the spatial limitations of traditional classrooms and gradually building a complete teaching chain of field research and collection, material system accumulation, professional technique creation, and achievement exhibition. From the perspective of professional training, regular real-life creation training can continuously develop students' abilities in on-site observation, image construction, theme conception, and artistic innovation, further enriching the content system of subject-based teaching within fine-arts programs and diminishing the gap of thematic homogenization in traditional painting teaching.

From the perspective of ideological and political education, Tangshan, as the cradle of modern Chinese industry, has accumulated pioneering spirit, the spirit of craftsmanship, resilience, and national responsibility in its hundred-year industrial development process, all of which can be translated into art through industrial-themed painting creation. This type of teaching model can effectively reverse the traditional art teaching bias of emphasizing skills over content, making aesthetic education and value shaping integrate into the entire teaching process. Based on the previous research data of the school-based project, over 90% of students who participated in practice at multiple stages were able to establish a deep sense of identification with Tangshan's local industrial culture, fully representing the practical value and educational potential of this teaching model.

3. Challenges of integrating ideological and political elements into the teaching reform of industrial-themed painting

3.1. Scattered local industrial ideological and political resources with insufficient adaptability of painting creation transformation

Tangshan, as the cradle of modern Chinese industry, has various industrial relics such as mining, cement manufacturing, and seismic reconstruction, producing rich and diverse ideological and political education elements and providing a rich content foundation for industrial-themed painting creation. The school's preliminary research project has finished the basic sorting work and formed the "Tangshan Industrial Heritage Ideological and Political Elements List." However, this list only completes the basic summary of

spiritual elements and has not been systematically adapted and transformed in alignment with the teaching logic of the painting major.

At present, the visual materials and spiritual connotations of various industrial heritages are in a dispersed state of preservation, without corresponding core teaching modules such as composition design, color expression, picture narrative, and theme conception that match painting teaching. When teachers conduct teaching, they can only guide students to simply replicate external landscapes such as industrial buildings and production equipment. The works created by students mostly remain at the level of realistic scenes, making it difficult to interpret the resilience, pioneering beliefs, and original intentions behind industrial development through visual language. The mismatch between ideological and political elements and the instruction of painting majors has led to a superficial integration of ideological and political education into the curriculum, which cannot achieve a strong educational effect.

3.2. Significant differences in learning situations between different stages and immature integrated teaching system

Based on the collaborative education framework of universities and middle schools established through the project, the school continues to promote cross-disciplinary teaching practice of industrial-themed painting. There are objective differences in art foundation, cognitive ability, and creative thinking among students of different stages, and the existing teaching model has not made targeted adjustments to these differences. Unified teaching standards are difficult to adapt to the needs of differentiated education.

Middle school students are better trained in basic sketching techniques, with insufficient understanding and mastery of the deep connotations of industrial spirit and emotional expression in theme creation, making it difficult to complete artistic works that combine professionalism and ideology. College normal students have a solid foundation in painting creation. However, most students lack a systematic knowledge reserve of Tangshan industrial culture, and have a shallow understanding of the development process and spiritual core of local industry. The objective discontinuity in the transition of academic stages makes it difficult to integrate ideological and political elements into a gradient and hierarchical educational logic, greatly weakening the overall educational effectiveness of integrated aesthetic and ideological education in primary, secondary, and tertiary schools.

3.3. Complex practical learning scene and the great difficulty of implementing immersive ideological and political education

The core teaching advantage of industrial-themed painting lies in immersive real-life creation, and all core teaching activities need to be conducted at outdoor industrial heritage sites. Compared to closed and stable indoor classroom teaching, outdoor teaching has the characteristics of openness, variability, and complexity, bringing many objective difficulties to the normalization of ideological and political integration teaching.

The distribution of various industrial heritage venues in Tangshan is relatively scattered, and the organization process of multiple batches of teachers and students conducting sketching and field research is cumbersome. There is great pressure on site scheduling, on-site order control, and safety protection work. Although the existing security mechanism is equipped with a complete safety plan and management system, it is difficult for teachers to simultaneously conduct multiple tasks such as providing technical guidance to all staff, interpreting industrial spirit and ideological and political education, and following up on student creative processes during on-site teaching. The multiple limitations of on-site teaching have made it difficult

for immersive and scenario-based ideological and political integration teaching to be implemented on a regular basis, and the depth and frequency of practical teaching cannot be stably guaranteed.

3.4. The single educational evaluation system: Difficult to measure the effect of ideological integration

The current assessment and evaluation system for industrial-themed painting courses still follows the evaluation standards of traditional art teaching, with the focus on professional skills such as composition, color matching, and modeling techniques. The construction logic of the evaluation system overly focuses on the final presentation effect of the work, completely ignoring implicit educational achievements such as ideological and political literacy cultivation, cultural cognition enhancement, and value concept shaping.

At present, the teaching process lacks a complete process and long-term evaluation mechanism. The cognitive changes in students' learning process, the ideological inspiration in the creative process, and the long-term accumulation of cultural confidence cannot be measured and fed back through standardized indicators. The single result-oriented evaluation model is not only difficult to objectively judge the actual integration quality of ideological and political elements, but also unable to accurately capture the shortcomings and problems in teaching reform, which is not conducive to the continuous optimization and iteration of teaching models.

4. The teaching reform path of integrating ideological and political elements into industrial theme painting

4.1. Integrating industrial heritage resources into the system and building a targeted teaching material library for ideological and political education in painting

The primary task of teaching reform in response to the core problem of scattered local industrial resources and insufficient professional adaptability is to structurally reconstruct the existing ideological and political resources of industrial heritage, breaking the inherent limitations of fragmented resource utilization. Based on the existing "Tangshan Industrial Heritage Ideological and Political Elements List," combined with the professional logic of painting creation and art teaching, the content of the list is iteratively upgraded to achieve precise integration of spiritual resources, visual resources, and professional teaching.

According to the core industrial heritage types of Tangshan, resources can be classified and sorted into three categories: mining heritage, cement-manufacturing heritage, and post-earthquake reconstruction heritage. In each type of resource system, visual materials such as on-site shooting materials, historical image materials, industrial equipment details, and humanistic story records are synchronously included, corresponding to the extraction of differentiated ideological and political connotations such as innovation, excellence, perseverance, and national responsibility. By combining different teaching modules such as oil-painting sketching, printmaking creation, theme creation, and cultural and creative design, and assigning targeted technical-training priorities and entry points for ideological-political integration to each module, teachers can ensure that each teaching content has its own corresponding resource support and educational guidance^[2].

The teaching team can integrate excellent industrial-themed works from students over the years, teachers' sketching achievements, as well as field research reports to build an exclusive library of painting teaching materials with ideological and political elements. The material library is divided into levels based

on basic sketching, theme creation, and high-quality creation, adapting to the learning needs of students in different stages and with different foundations. In classroom teaching and extracurricular practice, teachers can rely on the material library to guide students to break away from the simple thinking of replicating scenery, and guide students to observe the cultural heritage and the spirit of the times behind industrial landscapes, so that ideological and political connotations can naturally permeate the entire process of picture conception, color application, and detail shaping, avoiding the teaching problem of rigid implantation of ideological and political elements.

This resource integration model is different from simple material stacking, truly achieving the organic integration of local industrial cultural resources, art professional technique teaching, and ideological and political value guidance, providing stable resource support for the implementation of normalized and high-quality curriculum ideological and political teaching.

4.2. Constructing a hierarchical and classified teaching model to break down the barriers between ideological and political education in primary, secondary, and tertiary schools

The core difficulty of the integrated construction of aesthetic education, ideological and political education in primary, secondary and tertiary schools lies in the teaching adaptation caused by the differences in learning situations at different stages. The tripartite collaborative mechanism of “university art teachers+middle school art teachers+ideological and political teachers,” built on the project, can construct a layered industrial-themed painting teaching system and solve the problem of educational gaps at different stages of education.

For middle school students, the teaching core focuses on basic aesthetic education and cultural cognition cultivation. The teaching focuses on basic content such as real-life sketches of industrial heritage, basic modeling training, and color perception exercises, accompanied by simple explanations of industrial history, to help students gain a preliminary understanding of the development of Tangshan’s industry, perceive the charm of local industrial culture, and subtly develop cultural identity and aesthetic literacy in basic technique training, laying a solid foundation for ideological and political education.

For normal university students, teaching focuses on enhancing professional creativity and cultivating educational abilities. The curriculum includes advanced content such as industrial spirit theme creation, industrial element printmaking design, and industrial cultural and creative art creation. Students are required to deeply explore the spiritual core of the works on the basis of solid technical creation, and interpret regional cultural connotations such as industrial spirit and earthquake resistance spirit with artistic language^[3]. Meanwhile, teachers can expand the content of teaching design and integrate ideological and political education into the curriculum, cultivating the aesthetic and ideological education teaching ability of normal university students, and achieving synchronous improvement of professional and educational abilities.

Collaborative teaching teams can develop differentiated teaching syllabi, creative coaching standards, and classroom training priorities based on the educational goals of different stages. Through the linkage mode of university teachers teaching on campus, middle school teachers participating in research projects, and ideological and political teachers fully empowered by theory, the barriers to teaching at different stages of education are broken down, forming an integrated education pattern of primary, secondary, and tertiary education that progresses from shallow to deep, making ideological and political integration teaching more in line with the cognitive laws and growth needs of students at different stages of education.

4.3. Optimizing the operational mechanism of practical research and learning, and building an immersive mobile aesthetic and ideological education classroom

Outdoor on-site learning is the core carrier for achieving ideological and political infiltration in industrial-themed painting teaching, and it is also critical to solve the disconnect between professional teaching and ideological and political education. Relying on the mature resources of the school's off-campus research base and closed-loop teaching mechanism, the quality of immersive ideological and political education can be comprehensively improved through process refinement, management optimization, and precise empowerment, weakening the preaching and labeling sense of ideological and political education.

The teaching team can refine the complete teaching loop of "on-site research and learning, on-site creative practice, and phased communication and review," abandoning the traditional single orientation of emphasizing learning and recording, neglecting spiritual insights, emphasizing work creation, and neglecting value education. At the live teaching site of industrial heritage, teachers will simultaneously promote the guidance of layered techniques and the interpretation of ideological and political connotations. Combining specific heritage scenes and historical context, teachers will explain the corresponding stories and spiritual cores of industrial development. Students can intuitively experience the profound cultural heritage of Tangshan's industrial sector through on-site observation and visual polishing, achieving a resonance between aesthetic experience and spiritual insight.

A paired tutoring mechanism can be implemented, dividing students participating in research into several groups, each equipped with dedicated professional tutors and ideological and political guidance teachers. Teachers follow up with students throughout the entire process of material collection, visual creation, and thought refinement, promptly correct creative misconceptions, and organize ideological cognition ^[4]. At different stages of research and creation, regular group exchanges, work reviews, and experience-sharing activities are carried out to guide students to actively sort out their creative ideas, extract spiritual insights, and transform their shallow understanding of industrial culture into deep emotional expression through visual imagery.

The safety control, venue coordination, and logistical support mechanisms should be continuously improved for outdoor study tours, with refined time planning, personnel division, and emergency response processes for multiple batches of study tours, which can effectively resolve various objective obstacles in real-life teaching, ensuring the normalization and standardization of research-based teaching. The immersive on-site education mode can deeply integrate professional painting training with spiritual value guidance, achieving a long-lasting educational effect through imperceptible influence.

4.4. Reconstructing the four-dimensional comprehensive evaluation system to achieve quantifiable and iterative educational outcomes

In line with the educational characteristics of integrating ideological and political education in industrial-themed painting, and the intended reform directions of the project, this paper reconstructs a comprehensive four-dimensional evaluation system to effectively remedy the limitations of the traditional single evaluation mode and achieve accurate assessment and dynamic optimization of educational effectiveness. The four-dimensional evaluation system covers four aspects: process evaluation, outcome evaluation, feedback evaluation, and long-term evaluation, considering professional competence and ideological and political literacy, short-term results, and long-term growth.

Process evaluation focuses on dynamic content such as students' participation in research and learning, the quality of material accumulation, the process of creative iteration, and classroom communication performance. It fully records the entire growth trajectory of students from research and learning to the formation of their works, avoiding the evaluation misconception of emphasizing results over processes. The achievement evaluation adopts a dual-dimensional scoring standard, which not only assesses the professional indicators such as modeling techniques, color application, and picture composition of the work, but also evaluates the ideological and political indicators such as theme, spiritual expression, and cultural empowerment of the work, taking into account both the professionalism and ideological nature of the work.

Feedback evaluation integrates a multi-party evaluation perspective, incorporating students' self-review and summary, teacher-student cross evaluation, professional feedback from research and study bases, industry expert professional evaluation, and other diverse opinions to enhance the objectivity and comprehensiveness of evaluation results. Long-term evaluation focuses on the long-term growth and changes of students, with a focus on observing the implicit effects such as deepening students' understanding of local industrial culture, cultivating cultural confidence, and shaping artistic values. It tracks and records the sustainability of educational achievements ^[5].

The implementation of the four-dimensional evaluation system can comprehensively and objectively reflect the actual effectiveness of ideological and political integration teaching, accurately locate weak links in teaching reform, provide a reliable basis for optimizing teaching modes, adjusting course content, and iterating educational paths, and promote the formation of a long-term development mechanism for industrial theme painting ideological and political integration teaching.

5. Conclusion

Industrial-themed painting teaching is an important approach for local universities to promote the integration of aesthetic education and ideological and political education based on local resources. Based on the advantages of Tangshan's industrial heritage resources, this article summarizes the objective pain points in current teaching and proposes a reform path from four dimensions: resource integration, layered teaching, real-life education, and evaluation innovation, which can effectively solve the problem of the disconnect between art teaching and ideological and political education, and provide practical references for the implementation of industrial-themed aesthetic education and ideological and political education in local universities, as well as the dynamic inheritance of regional culture.

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