Vol.6 Iss.3 2025
https://doi.org/10.37420/j.adr.2025.031

Exploring Practical Strategies for Enhancing Adolescents' Innovation Literacy through Aesthetic Education Rooted in Traditional Chinese Culture

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Abstract:
The cultivation of innovation literacy among adolescents has become a central priority in China's educational policy agenda. As a vital carrier of national spirit, traditional Chinese culture holds profound aesthetic and pedagogical value. Focusing on the educational potential embedded in traditional cultural resources, this study draws on aesthetic education practices in primary and secondary schools in Hezhou, Guangxi, to propose practical strategies for enhancing adolescents' innovative literacy. Through an analysis of curriculum goal development, content design, pedagogical innovation, and integrated resource development, the paper argues that aesthetic education rooted in traditional culture must align with adolescents' cognitive development, societal trends, and innovation competency training. It further explores the construction of an aesthetic education system grounded in traditional Chinese culture, offering a viable pathway for improving adolescents' overall competencies in the new era.

Keywords:
Traditional Chinese culture; Aesthetic education; Innovation literacy

Introduction

As a core component of China's "five-dimensional education" framework, aesthetic education has received increasing emphasis in recent education policies. Since 2020, national guidelines have officially incorporated aesthetic education into all stages of schooling, advocating the principles of "cultivating virtue through beauty and culture," with the aim of enhancing students' aesthetic literacy and innovative capacity.[1] Traditional Chinese culture—rich in values such as harmony between humans and nature and unity amidst diversity—serves as a profound resource for aesthetic education. However, current practices in traditional culture-based aesthetic education still face major challenges, including fragmented curricula, weak experiential engagement, and evaluation mechanisms that lack innovation-oriented indicators. In the context of globalization and digitalization, there is an urgent need to establish an integrated educational model that links "cultural

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inheritance – aesthetic experience – innovative practice." This study focuses on transforming traditional cultural resources into pedagogical assets and explores systematic innovations in curriculum objectives, content design, teaching methodologies, and instructional mechanisms, with the goal of providing strategic guidance for enhancing adolescents' overall competencies in the new era.

1 Aesthetic Value and Innovative Potential of Traditional Chinese Culture

As the cultural gene pool of the Chinese nation, traditional culture embodies a unique ecosystem of aesthetic innovation shaped by philosophical notions such as tianren heyi (unity of heaven and humanity) and he er butong (harmony without uniformity). From Confucius' educational paradigm of "being inspired by poetry, grounded in rituals, and perfected through music" to Wang Yangming's doctrine of "unity of knowledge and action," traditional culture has long cultivated innovative literacy through the deep integration of aesthetic perception and cognitive training.

1.1 Imagistic Thinking: A Philosophical Basis for Multimodal Cognition

Scholars such as Wang Guowei and Ye Lang have identified guanwu quxiang ("observing objects and deriving images") as a fundamental mode of aesthetic cognition in Chinese literature and art. Their work helped transform this concept from a religious construct into an aesthetic paradigm, cementing its central position in Chinese aesthetic theory.[2] As a symbolic cognitive mechanism, guanwu quxiang constructs a tripartite model of "form–idea–spirit" through cross-domain restructuring of symbolic systems. Rooted in the imagery of the I Ching, this model later evolved in the arts into a topological framework of metaphorical transformation, essentially training abstract thinking through embodied representation. The traditional principle of qi yi zai dao ("objects as carriers of moral principles"), exemplified in the cultural significance of scholars' desk tools, further reveals a dialogic relationship between material form and spiritual meaning—offering an early prototype of cross-media creative cognition.

1.2 Harmonious Integration: The Generative Logic of Systems Thinking

As evidenced in Kao Gong Ji (The Artificers' Record), ancient Chinese craftsmanship was governed by strict standards in both material selection and production methods, reflecting a systematic embodiment of the philosophical triad of "Heaven–Earth–Human."[3] Traditional design thinking emphasizes organic coordination among elements; Kao Gong Ji reveals the dialectical unity of environment, materials, and techniques. In spatial construction, this integrative wisdom manifests as nested value structures requiring practitioners to negotiate technical rationality, ethical judgment, and aesthetic perception simultaneously—a cognitive model inherently aligned with modern systems theory.

1.3 Ritual and Music: A Social Mechanism for Cultivating Innovation Literacy

According to Wang Xuehan, aesthetic education in the pre-Qin era was deeply embedded in ritual practices, where singing, dancing, lived experience, and social taboos interacted to create an educational ecosystem centered on "collective emotion, normative cognition, and artistic creation."[4] This multimodal, socially embedded pedagogy represents a fusion pathway linking technical transmission, moral cultivation, and cultural

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innovation.

Therefore, contemporary aesthetic education must establish a three-tiered transformation mechanism: (1) constructing a meta-symbolic language system for imagery cognition at the epistemic level; (2) developing topological transformation capabilities for cultural elements at the methodological level; and (3) building a modern diagnostic framework for cultural genes at the evaluative level. Ultimately, this approach reimagines traditional cognitive structures to achieve innovation in both cultural ontology and methodology.

2 Systematic Construction of Curriculum Goals and Value Orientation

Traditional Chinese culture not only embodies profound aesthetic values but also provides unique spiritual nourishment and educational resources for the holistic development of adolescents.

2.1 Designing Value-Oriented Goals Centered on Morality, Wisdom, Aesthetics, and Creativity

The objectives of traditional culture-oriented aesthetic education should be structured around four dimensions: moral cultivation (lide), intellectual enlightenment (qizhi), aesthetic refinement (yumei), and creative development (cuangchuang). First, through classic Confucian texts, rituals, and ethical norms, students should be guided toward correct values, cultural identity, and social responsibility. Second, philosophical concepts such as tianren heyi and gewu zhizhi should be used to foster critical reasoning and metaphysical thinking. Third, exposure to traditional art forms—including painting, music, architecture, and costume—can enhance aesthetic perception and artistic sensitivity. Finally, students should be encouraged to reinterpret traditional culture in modern creative formats, thereby strengthening innovative thinking and practical competence. This framework achieves an integrated development of moral, cognitive, aesthetic, and creative literacy, emphasizing coordinated progress across emotion, cognition, and expression.

2.2 Constructing a Tiered and Progressive Curriculum Objective System by Educational Stage and Category

To better align with the psychological characteristics and cognitive development patterns of adolescents at different growth stages, a tiered and progressive curriculum objective system should be constructed according to the characteristics of the three major educational stages: primary school, junior high school, and senior high school, forming a spiraling pathway of advancement.

At the primary school level, curriculum objectives should primarily focus on stimulating interest and cultivating perceptual awareness of traditional culture. Students can be guided to engage with cultural elements through images, stories, games, and handicrafts, thereby establishing an initial sense of cultural identity. As students enter junior high school, their abstract thinking and logical reasoning abilities gradually strengthen. Accordingly, curriculum objectives should shift toward the understanding and analysis of traditional culture, emphasizing the deepening of aesthetic experience and the construction of cultural connotations. At this stage, history and arts courses can be integrated to guide students in exploring topics such as “festive customs and social relations” or “ritual-music culture and values,” thus enabling the systematic accumulation of cul-

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tural knowledge. By the senior high school stage, curriculum objectives should further advance to the level of expression and creation, encouraging students to redesign and reinterpret cultural knowledge they have acquired.

2.3 Integrating Innovation Competency Indicators to Strengthen the Practical Orientation of Curriculum Goals

In practical implementation, "design thinking" and "project-based learning" can be incorporated as key strategies in curriculum objective setting. Throughout the instructional process, teachers can create problem-based scenarios and adopt group collaboration, creative problem-solving, and outcome presentation to guide students through the full cycle—from cultural understanding to creative expression and ultimately to design production. For example, during thematic instruction on "Solar Term Culture," students may conduct research and analysis on cultural elements related to Lichun (Beginning of Spring), Qingming (Pure Brightness), or Shuangjiang (Frost's Descent), propose cultural and creative design plans, and eventually produce tangible outputs such as posters, cultural merchandise, or experiential event proposals. This instructional strategy not only helps realize the goal of fostering creativity but also significantly enhances students' comprehensive competencies in problem identification, solution design, resource integration, and expressive presentation. In this way, traditional culture is effectively transformed into a driving force for the development of innovation literacy.

3 Integrative Innovation of Teaching Content and Resource Development

The design of teaching content in traditional Chinese culture education should follow a three-stage logic of "resource–transformation–application," emphasizing both cultural depth and educational value while ensuring systematic structure, generativity, and transferability. To this end, a scientifically structured content framework should be constructed across four dimensions: interdisciplinary integration, regional resource development, digital technology application, and project-based learning. This framework aims to comprehensively enhance students' cognitive, interpretive, and practical competencies.

3.1 Building Interdisciplinary Cultural Theme Modules to Deepen Content Integration

First, thematic modules should be organized around a "culture-led" approach, with interdisciplinary teaching units designed to convey the deeper connotations of traditional culture. Representative themes may include "Evolution of Chinese Characters and Calligraphic Art," "Traditional Etiquette and Social Norms," and "Safeguarding Intangible Cultural Heritage." These may integrate components from language arts, fine arts, and history courses to construct modules with both aesthetic value and cultural depth.

To enhance coherence and operability, each module is recommended to include three core components: (1)A knowledge map, outlining key concepts and their interconnections to help students build a systematic cognitive structure; (2) Classic cases, drawing from historical anecdotes or artistic works to guide students in understanding cultural spirit; (3) Practical tasks, offering actionable learning activities that facilitate internalization through practice and achieve the integrated goal of "knowledge–emotion–action."

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3.2 Leveraging Local Cultural Resources to Promote Curriculum Localization

While interdisciplinary content provides the conceptual foundation, effective implementation requires grounding in real, accessible cultural assets—thus introducing the second dimension: localized resource development. Local cultural heritage serves not only as an integral part of national culture but also as a tangible entry point for teaching content.

A "three-level transformation mechanism" should be established to convert cultural assets into curriculum resources. The first stage, resource survey, involves systematically cataloging local intangible heritage such as traditional crafts, folk rituals, and artisanal practices. The second stage, curriculum transformation, integrates survey findings into content modules to develop "Intangible Heritage +" aesthetic education courses—for example, "Yao Embroidery and Costume Design" or "Local Opera and Performing Arts." The third stage, contextual immersion, extends learning into real cultural spaces through a "classroom–workshop–community" linkage model. This enables students to activate knowledge, deepen cultural identity, and cultivate competence through situated learning.

3.3 Integrating Digital Technology and Project-Based Learning to Enhance Practical Effectiveness

With the rapid evolution of educational technology, the third key pathway lies in expanding content delivery and learning space through digital means. In the era of digital teaching innovation, a "technology-empowered" support system should be actively developed. On one hand, AIGC (Generative AI) can be utilized to construct multimedia resource libraries—featuring culturally themed images, audio, and video—to increase diversity and adaptability of teaching materials. On the other hand, immersive technologies such as VR and AR can be applied to virtually reconstruct historical settings—for instance, creating navigable virtual museums or 3D heritage workshops—to enhance engagement and interactivity. In addition, interactive digital platforms such as "Cloud-based Heritage Galleries" or "Online Traditional Culture Studios" can provide multisensory, trans-spatial learning environments that transcend the temporal and spatial limitations of traditional classrooms.

By establishing a content design mechanism centered on "theme-driven planning, resource transformation, technological integration, and project-based implementation," traditional culture is no longer presented as static knowledge but becomes a dynamic source for cultivating youth cultural identity and innovative thinking. The logical coherence, practical orientation, and experiential nature of teaching content thereby constitute the core framework of modern traditional culture-based aesthetic education, providing strong support for innovation-oriented pedagogical practice.

4 Reforming Teaching Methods and Pathways for Cognitive Stimulation

Guided by contemporary educational principles, the instructional approach to traditional culture-based aesthetic education should follow a core pathway of "experience–understanding–innovation," emphasizing the integration of situational immersion, inquiry-based practice, and creative expression. This aligns closely with John Dewey's renowned theory of "learning by doing," which posits that learners construct deep understand-

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ing and sustained capability through direct experience and intentional engagement. Dewey emphasized that such learning encompasses all forms of material manipulation, tool usage, creative performance, and craftsmanship, as long as they involve conscious, deliberate effort toward purposeful outcomes.

To stimulate thinking and ensure the effective transmission of cultural value, three pedagogical strategies should be employed during implementation.

4.1 Immersive Experience: From Situational Emotion to Value Internalization

Immersive experience should serve as the starting point for pedagogical reform. The teaching of traditional culture should not be limited to information transfer but must be cultivated as a lived cultural encounter. Activities such as Hanfu attire workshops, etiquette practice sessions, and calligraphy or seal-carving studios allow students to perceive aesthetic forms and ritual norms through hands-on engagement. Through role-play and interaction, students develop emotional resonance and deepen their humanistic understanding of tradition. This approach—"shaping emotion through environment, reinforcing knowledge through emotion"—facilitates the transformation from emotional identification to value internalization.

4.2 Inquiry- and Project-Based Learning: Deep Knowledge Construction Through Real-World Problems

Building upon experiential engagement, students should be guided into active inquiry. Inquiry-based and project-based learning helps break disciplinary silos and enables knowledge integration within authentic problem contexts. Topics such as "Modern Transmission of Traditional Crafts," "Digital Preservation of Intangible Heritage," or "Redesigning Traditional Festivals" can prompt students to engage in archival research, field investigations, interviews, and artistic creation. In this process, students must analyze cultural context, identify key aesthetics, and reinterpret traditional elements through modern expression—achieving a triadic linkage of "culture–creativity–society." Consistent with Bloom's taxonomy, learners should progress from "remembering" and "understanding" to "analyzing," "applying," "evaluating," and finally "creating," with project-based learning serving as a powerful vehicle for such cognitive advancement.

4.3 Creative Expression and Outcome Presentation: From Brainstorming to Social Dissemination

To stimulate cultural expression and creativity, instruction should incorporate brainstorming, visual thinking techniques such as mind mapping and analogical reasoning, and various forms of creative visualization. Students can be encouraged to deconstruct and reconstruct cultural symbols from multiple perspectives, enhancing associative thinking and ideation skills. With the aid of AIGC tools, textual concepts can be rapidly transformed into images, settings, or dynamic models, enabling integrated modes of "visual–conceptual–creative" expression. The final stage of learning should return to public presentation and social engagement—through exhibitions, thematic speeches, dramatizations, short video productions, or heritage-sharing events—not only to demonstrate learning outcomes but also to reinforce cultural identity and civic responsibility.

Through these strategies, traditional culture can extend beyond the classroom into families and communities, facilitating re-dissemination and re-creation. Anchored in student agency and integrating Dewey's

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"learning by doing" with Bloom's cognitive framework, a full-process instructional pathway of "experience–inquiry–construction–expression" can be established. This promotes the synchronized development of cultural understanding and innovation capacity, ultimately achieving the higher goal of "teaching to inspire thought, thought to drive creation, and creation to cultivate character."

5 Building Teacher Teams and School–Society Collaboration Mechanisms

In establishing an aesthetic education system centered on traditional Chinese culture, reforming curriculum content and pedagogy alone is insufficient. A comprehensive and synergistic support system is essential. The inheritance of traditional culture is, by nature, a systematic sociocultural activity, and its educational value can only be fully realized through the coordinated participation of schools, cultural institutions, social organizations, and families. Therefore, constructing a joint engagement mechanism among teachers, schools, society, and families is key to enhancing the effectiveness of traditional culture-based aesthetic education.

5.1 Professional Development for Teachers: Combining Classical Literacy and Interdisciplinary Research

Teachers serve as the primary implementers of traditional culture education, and their professional competence directly determines its impact. Currently, many primary and secondary school teachers still lack systematic knowledge of traditional culture, aesthetic education literacy, and innovative pedagogical strategies. Thus, it is imperative to strengthen faculty development through a multi-level training framework that enhances their integrative teaching capabilities. On one hand, regular training programs should be organized focusing on classical literature, traditional craftsmanship, and aesthetic appreciation. On the other hand, interdisciplinary teaching and research teams should be formed to promote collaborative curriculum development among teachers of language arts, fine arts, history, music, and other disciplines.

5.2 Co-building School–Community Platforms: Integrating Museums, Intangible Heritage, and Local Communities

Schools should actively connect with external cultural resources to establish collaborative platforms and mechanisms for school–community cooperation. Traditional culture originates from daily life and folk practices; therefore, its transmission and innovation must extend beyond the classroom and be supported by authentic cultural environments. Schools can form long-term partnerships with local museums, cultural centers, intangible heritage bearers, and folk performance groups to introduce real-life scenarios, professional mentorship, and hands-on opportunities.

For example, a middle school in Linyi, Shandong, partnered with the municipal museum to launch the "Traditional Festivals on Campus" initiative. Festivals such as Laba, Lantern Festival, and Dragon Boat Festival were incorporated into the aesthetic education curriculum through live demonstrations, handicraft workshops, and cultural storytelling. This allowed students to experience traditions firsthand, fostering emotional resonance and cultural identification. Such collaborations inject vitality and authenticity into classroom instruction, effectively expanding the boundaries of cultural education.

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5.3 Extending Co-education Between Home and School: Integrating Cultural Tasks Into Family Life

The family plays a crucial role in shaping students' cultural identity and should be regarded as an indispensable part of the aesthetic education ecosystem. Building a "home–school co-education" atmosphere can significantly expand students' cultural experiences. Schools may design homework assignments that integrate traditional culture—encouraging parents to accompany students in activities such as papercutting, lantern making, or documenting family mottos. Joint parent–child learning activities, such as reading classical texts together or practicing household rituals, can strengthen emotional connection and foster shared cultural growth.

As early as the 1920s, renowned educator Cai Yuanpei proposed in Methods for Implementing Aesthetic Education that aesthetic education consists of three components: school education, social education, and family education. He emphasized that "since students are not always at school, and many have already left school, we must provide them with aesthetic institutions elsewhere," highlighting the necessity of social participation in aesthetic education. Specifically, efforts should be directed toward three transformations: shifting from single-institution dominance to multi-stakeholder collaboration; from fixed time-and-space constraints to open and distributed cultural resources; and from standardized instruction to personalized cultural development. This requires the education system to align with social needs and mobilize enterprises, cultural institutions, and community organizations to build a pervasive aesthetic education ecosystem—where "everyone participates and culture is accessible everywhere."

In sum, enhancing teacher professionalism is the foundational guarantee, integrating social cultural resources is the essential support, and fostering family participation is the critical extension. Together, they form a dynamic collaborative system that drives the deepened development of traditional culture-based aesthetic education. Only through co-construction and shared responsibility can traditional culture achieve subtle yet enduring influence among the younger generation, enabling its creative transformation in contemporary contexts.

6 Conclusion

With the continued advancement of the national "Five Domains of Education" strategy, traditional Chinese culture is increasingly recognized as a vital resource for aesthetic cultivation within the basic education system. Adolescence is a critical period for shaping values, aesthetics, and creative thinking. Thus, how to harness cultural beauty to stimulate innovation has become a central question in current educational reform. This paper has systematically explored pathways for enhancing the educational function of traditional culture—from curriculum goal-setting and content design to methodological innovation and collaborative system development—with the aim of providing theoretical support and practical reference for the future-oriented transformation of cultural education.

Funding

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Supported by the Guangxi Education Science “14th Five-Year Plan” 2023 Special Project Practical Research on Enhancing Adolescents’ Innovation Literacy through Aesthetic Education Based on Traditional Chinese Culture (Project No. 2023ZJY1390).

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