

Integrated Design Strategy of Ethnic Music Aesthetic Education Curriculum in Primary, Secondary and College under the Background of Digitalization

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ABSTRACT

Digital technology provides innovative pathways for integrated ethnic music aesthetic education across primary, secondary, and higher education. This study focuses on core challenges in curriculum integration design, leveraging digital tools' technical advantages to explore practical strategies from four dimensions: curriculum objectives, content systems, teaching methodologies, and evaluation mechanisms. By analyzing current gaps in ethnic music aesthetic education across educational levels, the research proposes constructing cross-stage curriculum bridges through digital platforms. This approach transforms ethnic music cultural resources into tiered teaching materials, ensuring students at all levels gain aesthetically enriched experiences aligned with their cognitive development. The findings demonstrate that digitally-enhanced curriculum integration significantly improves the systematic coherence of ethnic music education. This framework establishes sustainable mechanisms for cultivating students' cultural literacy while providing educators with actionable solutions to preserve and innovate ethnic music culture within basic education systems.

KEYWORDS

Digitalization; primary, Secondary and higher education; Ethnic music; Aesthetic education curriculum; Integrated design

1 Introduction

Ethnic music aesthetic education serves as a vital conduit for preserving China's outstanding traditional culture. The seamless integration of curriculum design across primary, secondary, and tertiary levels directly shapes students' cultural identity development. With digital technologies revolutionizing education, tools like MOOCs, virtual simulations, and AI teaching assistants now empower cohesive course integration. These innovations address longstanding issues in traditional segmented curricula—including content redundancy, ambiguous objectives, and disconnected assessments—through digital solutions. However, current ethnic music education remains fragmented: elementary schools prioritize musical engagement over cultural depth, secondary schools focus on technical training without bridging knowledge gaps, while universities emphasize theoretical research with significant disconnects from foundational education. This fragmented landscape hinders students from building comprehensive ethnic music knowledge systems. Digital platforms offer transformative opportunities: educators can leverage tech-driven tools to consolidate cross-stage resources, design progressive curricula, and embed ethnic music aesthetic education throughout students' foundational learning journey.

2 The current situation of integrated design of ethnic music aesthetic education curriculum in primary, secondary and higher education under the background of digitalization

2.1 Lack of progression in curriculum objectives

The current design of aesthetic education objectives for ethnic music across primary, secondary, and higher education institutions exhibits significant gaps. At the elementary level, teachers primarily focus on "cultivating students' musical interest" through activities like singing nursery rhymes and playing simple instruments, yet fail to integrate the cultural essence of ethnic music into their teaching frameworks. While secondary school teachers incorporate theoretical knowledge of ethnic music, this lacks continuity with elementary-level interest-building efforts. Their objectives tend to emphasize "skill enhancement" while neglecting students' understanding and cultural identification with ethnic music. University-level courses predominantly target music majors, prioritizing "theoretical research and professional skill development" that shows little connection to K-12 curricula. The underutilization of digital tools in goal-setting remains problematic, as most institutions fail to leverage big data analytics to assess students' learning needs at different stages. This results in curriculum objectives that don't align with students' cognitive development patterns, making it difficult for learners to cultivate sustained interest or systematic understanding in ethnic music studies.

2.2 There are repetitions and gaps in the course content

The design of curriculum content serves as the cornerstone of integrating ethnic music into aesthetic education. However, current teaching practices exhibit a paradoxical coexistence of "low-level repetition" and "high-level

discontinuity" across educational stages. Elementary school teachers frequently use classic pieces like "Jasmine Flower" for instruction, while secondary school teachers continue incorporating these works with only minor difficulty-level adjustments, resulting in repetitive content. The transition from basic teaching in primary and secondary schools to advanced topics like ethnic music history and musical anthropology at university level remains abrupt. Digital resources remain fragmented, with schools independently developing teaching materials that lack sharing mechanisms. Primary school resources predominantly consist of animations and games, secondary school materials focus on videos and courseware, while university resources center on academic literature and professional software. These disjointed resources fail to establish a coherent knowledge framework, creating significant gaps in students' cross-stage learning experiences.

2.3 Low compatibility between teaching methods and digital tools

The integration level of teaching methodologies with digital tools directly impacts the effectiveness of ethnic music aesthetic education. While primary school teachers may utilize music game apps as supplementary tools, these applications remain largely confined to entertainment purposes without deepening their connection with traditional music culture preservation. Secondary school educators, burdened by academic pressures, predominantly adhere to the conventional "teacher-lectures, student-listens" model, with digital tools limited to playing instructional videos that fail to leverage their interactive and exploratory potential. Although university instructors employ specialized music software in teaching, the complex operation of such programs creates a disconnect from elementary and secondary school digital tools, forcing students to re-adapt when entering higher education.

2.4 Lack of coherence in the evaluation mechanism

The evaluation mechanism serves as a crucial component in ensuring the integrated implementation of music education curricula. Currently, ethnic music aesthetic education evaluations across primary, secondary, and higher education institutions face challenges of "independent systems" and "inconsistent standards." At the elementary level, assessments primarily rely on "classroom performance + artwork presentations," with relatively lenient criteria. Secondary school evaluations often combine music exams with skill assessments and theoretical written tests, adopting a utilitarian approach. University-level evaluations emphasize academic rigor through thesis writing and professional performances. Digital evaluation tools remain underutilized, as most schools still employ manual assessment methods. These results lack data-driven support, making it difficult to track and analyze students' learning progress across academic stages.

3 The significance of integrated design of ethnic music aesthetic education curriculum in primary, secondary and higher education under the background of digitalization

3.1 Helping to inherit China's excellent traditional culture

Ethnic music constitutes a vital component of China's outstanding traditional culture. Through integrated digital curriculum design, we can systematically incorporate ethnic musical traditions throughout students' foundational education, ensuring their engagement, comprehension, and cultural identification with these heritage elements across all academic stages. In primary education, digital tools spark students' interest in ethnic music, allowing them to experience its charm through animations and interactive games. Secondary education utilizes digital platforms to guide students in exploring the historical context and cultural significance of ethnic music, fostering cultural identity. At the university level, specialized digital tools empower students to participate in the creation and research of ethnic music, driving innovative preservation and transmission of this cultural legacy.

3.2 Improve students' core quality of national music

Digital-integrated design enables progressive skill development across educational stages, eliminating gaps and redundancies in traditional teaching methods. This approach significantly enhances students' core competencies in ethnic music, laying a solid foundation for their holistic development. At the elementary level, digital tools cultivate musical perception through interactive experiences that help students distinguish stylistic features of different ethnic music. In secondary education, digital resources strengthen cultural understanding and aesthetic appreciation by guiding students to analyze connections between ethnic music and regional cultures, historical contexts. At the university level, specialized digital tools foster innovative practical skills, empowering students to adapt and create ethnic music compositions.

3.3 Promoting the reform of aesthetic education curriculum of ethnic music

The fragmented design of traditional ethnic music aesthetic education curricula across primary, secondary, and higher education institutions has constrained curriculum quality improvement. In the digital era, integrated design offers a new

direction for curriculum reform. By consolidating cross-grade course resources, we can break down barriers between schools and educational stages, establishing a "co-construction and sharing" resource system to address redundant development and waste of resources. Leveraging digital tools to innovate teaching methods enables a closed-loop pedagogy: "interest cultivation—knowledge transmission—skill enhancement—innovation practice," transforming the traditional teaching model characterized by monotonous approaches and insufficient interaction. Establishing a coherent evaluation mechanism allows big data tracking of students' learning processes, providing data-driven support for curriculum adjustments and making educational reforms more targeted and scientific.

3.4 Promoting equity in education and sharing of quality resources

By establishing a cross-regional digital curriculum platform, students in remote areas can access high-quality ethnic music animation resources from first-tier cities, middle school students can study ethnic music theory courses recorded by university professors, and college students can participate in national-level ethnic music creation projects. This design helps bridge the gap in ethnic music aesthetic education resources between different regions and schools, ensuring all students receive high-quality instruction and promoting educational equity. Simultaneously, sharing premium resources reduces costs for schools developing materials independently, enhances resource utilization efficiency, and provides a solid foundation for the sustainable development of ethnic music aesthetic education programs.

4 Integrated design strategies of ethnic music aesthetic education curriculum in primary, secondary and higher education under the background of digitalization

4.1 Build a progressive curriculum goal system and realize precise positioning by relying on digital tools

University educators should collaborate with frontline teachers from primary, secondary, and higher education institutions to establish a progressive curriculum framework that follows students' cognitive development patterns: "Interest Stimulation → Knowledge Construction → Skill Enhancement → Innovation Inheritance". Digital tools should be leveraged to precisely target these objectives. At the primary level, the focus is on "Interest Stimulation". Teachers can utilize AI-powered teaching assistants to analyze students' musical preferences, recommending personalized ethnic music animations and educational resources. For instance, interactive videos blending ethnic music with students' favorite cartoon characters could spark interest-driven engagement with traditional music. In secondary education, the emphasis shifts to "Knowledge Construction". Through MOOC platforms, teachers can design knowledge maps that visually present historical development, regional distribution, and instrument classifications of ethnic music. This visual approach guides systematic learning while using big data analytics to track comprehension progress, allowing timely content adjustments to ensure students build comprehensive knowledge frameworks. At the university level, the goal emphasizes "Skill Enhancement and Innovation Inheritance". Educators can employ professional music software and research platforms to engage students in digital creation projects like AI-based adaptations of traditional ethnic compositions or virtual simulations recreating ancient performance settings. These hands-on experiences enhance innovative capabilities and drive the preservation and evolution of ethnic music culture.

4.2 Integrate digital curriculum content and build a spiraling content framework

Educational authorities should spearhead the development of a national digital resource platform for ethnic music education across all educational levels. This integrated system will consolidate curriculum content from primary to university levels, establishing a progressive framework: foundational, intermediate, and advanced tiers. The foundational tier (targeting elementary students) focuses on classic ethnic musical pieces, basic instrument recognition, and traditional music narratives. These elements are transformed into multimedia formats including animated videos, interactive games, and audio storybooks. For example, "The Story of Afanti" is adapted into an animated short film that blends storytelling with Xinjiang's ethnic music, allowing students to appreciate traditional melodies while learning about musical styles. The intermediate tier (for middle schoolers) builds upon foundational knowledge by incorporating music theory, analytical methods, and regional characteristics. This tier features micro-lectures, knowledge maps, and virtual instrument demonstrations. A notable example is the "Virtual Erhu" tool, which simulates erhu techniques and connects with elementary-level repertoire to ensure continuity. The advanced tier (for university students) explores in-depth topics like ethnic music history, ethnomusicology, and digital composition. This section presents academic resources, software tutorials, and research case studies—including videos of digital preservation projects that demonstrate modern inheritance methods. These materials bridge the gap between theoretical learning and practical application, maintaining educational coherence from primary through higher education.

4.3 Innovate teaching methods to improve the compatibility between digital tools and teaching

Educators at all academic levels should adapt teaching methods to students' characteristics and curriculum content,

enhancing the integration of digital tools with instruction to establish a progressive pedagogical framework: "elementary school fun-oriented, middle school inquiry-based, university discipline-focused." Elementary teachers may implement gamified teaching through music interaction apps, such as creating ethnic music puzzle games where students assemble images of traditional instruments while listening to their sounds, thereby learning about musical traditions through play. Meanwhile, AR technology can be utilized to bring virtual performances into classrooms – for example, using AR glasses to let students experience Mongolian dance performances, blending ethnic music with dance to spark interest. Middle school teachers might adopt project-based learning by designing digital research projects like "Regional Ethnic Music Characteristics," where students collect regional musical resources, create digital reports, and produce presentation videos for classroom sharing. Teachers track project progress and provide tailored guidance to develop inquiry skills and teamwork abilities. University educators could employ research-oriented pedagogy, using professional digital tools like Cubase for arranging traditional music or accessing music anthropology databases to conduct fieldwork and write academic papers. Through research platforms, teachers can mentor students' creative processes, enhancing their professional expertise and research literacy.

4.4 Establish a coherent evaluation mechanism and use digital tools to achieve whole-process tracking

Educators should establish an integrated evaluation system combining "process-based assessment + summative assessment + cross-stage tracking evaluation," utilizing digital tools to enable full-process monitoring and data sharing. For process-based assessment, teachers at all educational levels can utilize digital evaluation platforms to document students' learning progress. Elementary school teachers track classroom interactions and music composition completion, middle school teachers evaluate project report quality and knowledge test scores, while university professors monitor research paper progress and creative work outcomes. These platforms automatically compile this data into personalized learning portfolios, providing robust data support for assessments. Regarding summative assessment, each educational stage should develop standardized evaluation frameworks aligned with curriculum objectives: elementary schools focus on "interest and engagement," middle schools emphasize "knowledge mastery and inquiry skills," and universities prioritize "professional competence and innovative practice." Digital evaluation tools are employed to ensure objectivity, such as AI systems assessing pitch accuracy and rhythm in elementary students' folk song performances, evaluating instrumental techniques in middle school students, and analyzing style and innovation in university students' musical compositions, thereby guaranteeing fair and impartial evaluations. Regarding cross-stage tracking and evaluation, digital assessment platforms across academic levels should enable data sharing. Evaluation data from primary school should be automatically synchronized to middle school platforms, while middle school data is transferred to university platforms. Teachers can access students' prior learning progress through these platforms. For example, middle school teachers can review students' ethnic music interest preferences from their primary school years to adjust teaching content, while university instructors can examine students' knowledge acquisition during middle school to design targeted teaching plans.

5 Conclusion

The digital era provides technical support and practical pathways for integrated design of ethnic music aesthetic education across primary, secondary, and higher education. By establishing progressive curriculum objectives, integrating spiraling digital content, innovating adaptive teaching methods, and creating coherent evaluation mechanisms, we can effectively address issues such as discontinuities, redundancies, and disconnections in traditional curricula, ensuring that ethnic music aesthetic education permeates students' entire basic education journey. University teachers should play a leading role in curriculum design and practice, collaborating with frontline educators from all educational levels to explore application scenarios of digital tools. Through continuous optimization of curriculum strategies, we can breathe new life into ethnic music aesthetic education in the digital age, providing robust support for cultivating innovative talents with strong cultural identity who can embrace their era.

References

- [1] Gong Pengzhi. On the Inheritance and Innovation of Ethnic Music Culture [J]. *Canhua*, 2025(18):89-91.
- [2] Yuan Wenjie. On Measures and Pathways for Integrated Music and Aesthetic Education in Primary, Secondary, and Higher Education Institutions in Ethnic Regions [J]. *Yellow River Voice*, 2024(22):120-123.
- [3] Chen Yi. Integration Pathways of Ideological and Political Education with Aesthetic Education in Vocational Music Education under Digitalization [J]. *Sichuan Labor and Social Security*, 2025, (10):206-208.