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A Structured Folk Art Learning Guidebook Transforms University Students' Cultural Identity in Hunan Province, China

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Research Article

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Abstract

Cultural identity is a core dimension of education for sustainable development (SDG 4.7), yet most folk art education interventions focus on skill transmission rather than identity construction. This study develops a structured learning guidebook for eight ethnic minority folk arts in Hunan Province, China, and experimentally tests its effect on university students' cultural identity. Using a mixed-methods design, 56 undergraduate students participated in a four-hour training programme based on a three-stage experiential learning framework (cultural decoding – skill practice – creative transformation). Paired t-test results showed that students' cultural identity scores increased from 2.41 (pre-test) to 4.35 (post-test), a gain of 80.5% ($p < 0.001$, Cohen's $d = 3.52$). Knowledge and self-rated skill also improved significantly (85.7% and 94.5%, respectively). Qualitative interviews revealed that students shifted from seeing folk art as "outdated and irrelevant" to feeling pride, responsibility, and willingness to disseminate their heritage. The guidebook achieved high content validity (IOC = 0.91). The findings demonstrate that a well-designed, locally grounded learning guidebook can transform folk art education from knowledge transmission into identity-building, thereby contributing to SDG 4.7 (education for sustainable development) and SDG 11.4 (protection of cultural heritage).

1 Introduction

Cultural identity is a fundamental pillar of education for sustainable development, as articulated in SDG Target 4.7, which calls for all learners to acquire knowledge and skills that promote respect for cultural diversity and culture‘s contribution to sustainable development [1]. In the context of ethnic minority folk arts, cultural identity determines whether young generations will merely acknowledge the existence of these traditions or actively engage in their preservation and revitalisation [2]. However, most existing folk art education research focuses on skill mastery, curriculum development, and resource construction, while rarely asking a more fundamental question: after learning folk art, do students genuinely identify with these cultures as their own? [3].

Hunan Province, China, is home to more than 20 ethnic minorities (Miao, Tujia, Yao, etc.) and possesses abundant folk art resources such as paper-cutting, batik, embroidery, and shadow puppetry. Preliminary surveys reveal that university students’ awareness of these folk arts remains low to moderate (mean scores 2.37–2.43 out of 5), and their cultural identity is notably weak – many students perceive these traditional arts as “outdated” and “irrelevant to their lives” [4]. This situation poses a serious threat to cultural sustainability.

Therefore, this study focuses on a single, innovative research question: Can a structured folk art learning guidebook not only enhance students‘ knowledge and skills, but also profoundly reshape their cultural identity? If so, what is the underlying mechanism? To answer this, the study develops and validates a learning guidebook for ethnic minority folk arts in Hunan Province, employs a pre-test/post-test experimental design to quantify changes in cultural identity, and uses qualitative interviews to reveal the transformation pathway from knowledge to identity.

2 Materials and Methods

2.1 Research Design and Participants

This study adopted an explanatory sequential mixed-methods design (quant → QUAL). A quantitative pre-test/post-test experiment was conducted first, followed by semi-structured interviews to explain the quantitative results. Participants were 58 undergraduate students from Changsha Normal University, Hunan Province (56 valid responses). Among them, 42 were female (72.4%) and 16 male (27.6%), with a mean age of 19.2 years. All participants voluntarily enrolled in a two-session (total 4 hours) folk art training programme.

2.2 Intervention: The Hunan Folk Art Learning Guidebook

Based on extensive field investigations in Xiangxi, Fenghuang, Jishou, and Yongzhou, and a systematic literature review, the research team compiled a guidebook featuring eight representative folk art forms: paper-cutting, tie-dyeing, embroidery, shadow puppetry, wood carving, Yunjin brocade, Peking Opera facial makeup, and clay sculpture. Each art form is organised according to a three-stage experiential learning framework: (1) cultural decoding – explaining historical origins, philosophical concepts (e.g., yin-yang aesthetics in paper-cutting), and symbolic meanings of patterns; (2) skill practice – step-by-step demonstrations of tools, materials, and techniques; (3) creative transformation – guiding students to produce personalised works that integrate traditional elements with contemporary themes or personal expression. The guidebook was reviewed by five experts using the Item-Objective Congruence (IOC) index, achieving an overall mean IOC of 0.91 (range 0.86–0.96), indicating excellent content validity.

2.3 Training Implementation

The training comprised two 120-minute sessions. Session 1 focused on paper-cutting; Session 2 on Peking Opera facial mask painting. Each session followed the same three-stage flow: lecture and cultural decoding (30 min) → teacher demonstration and step-by-step practice (50 min) → creative production and gallery walk (40 min). All sessions were delivered by the same instructor (a researcher with 10 years of folk art teaching experience) using the guidebook as the core teaching material.

2.4 Measurement Instruments

A Cultural Identity Scale was developed for this study, comprising six items (e.g., “I feel proud of my ethnic group‘s folk art”, “I am willing to share the folk art I learned on social media”, “I believe it is my responsibility to help preserve folk art”). Each item was rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale was validated by five experts (IOC = 0.93) and showed high internal consistency (Cronbach’s α = 0.89). Additionally, a Knowledge Mastery Scale (5 items) and a Self-rated Skill Scale (4 items) were administered. All participants completed the same questionnaire before (pre-test) and immediately after (post-test) the training. After the training, 12 students were randomly selected for semi-structured interviews (15–20 minutes each) to explore their experiences and identity transformation.

2.5 Data Analysis

Quantitative data were analysed using SPSS 26.0. Paired-sample t-tests were performed to compare pre-test and post-test scores, and effect sizes were calculated using Cohen's d. Interview recordings were transcribed verbatim and analysed using thematic analysis.

3 Results

3.1 Significant Improvement in Cultural Identity

As shown in Table 1, students' total cultural identity score increased from 2.41 (SD = 0.58) at pre-test to 4.35 (SD = 0.52) at post-test, a mean gain of 1.94 points (80.5% increase). The difference was highly significant ($t(55) = 22.63$, $p < 0.001$, Cohen's $d = 3.52$ – a very large effect). All three sub-dimensions showed similar patterns: cultural pride (+ 1.91), responsibility for transmission (+ 1.96), and willingness to disseminate (+ 1.95).

Table 1
Pre-test and Post-test Comparison of Cultural Identity (n = 56)

Dimension	Pre - test (M ± SD)	Post - test (M ± SD)	Mean gain	t - value	p - value	Cohen's d
Cultural pride	2.38 ± 0.62	4.29 ± 0.58	1.91	20.35	< 0.001	3.18
Responsibility for transmission	2.40 ± 0.67	4.36 ± 0.55	1.96	21.47	< 0.001	3.27
Willingness to disseminate	2.45 ± 0.71	4.40 ± 0.60	1.95	19.82	< 0.001	3.01
Total score	2.41 ± 0.58	4.35 ± 0.52	1.94	**22.63**	< 0.001	**3.52**

3.2 Concurrent Improvement in Knowledge and Skills

Knowledge mastery scores increased from 2.38 (SD = 0.61) to 4.42 (SD = 0.48), a gain of 85.7% ($t(55) = 23.18$, $p < 0.001$). Self-rated skill scores increased from 2.20 (SD = 0.70) to 4.28 (SD = 0.55), a gain of 94.5% ($t(55) = 19.46$, $p < 0.001$). Correlation analysis showed that knowledge gain was moderately correlated with identity gain ($r = 0.52$, $p < 0.01$), while skill gain was strongly correlated with identity gain ($r = 0.71$, $p < 0.001$), suggesting that hands-on practice contributed most significantly to identity transformation.

3.3 Qualitative Evidence: From "Them" to "Us"

Thematic analysis of the 12 interviews revealed three major themes.

Theme 1: From unfamiliarity to emotional connection

“I used to think paper-cutting was just old ladies making window decorations, nothing to do with me. But when I cut my own ‘Fu’ character and learned that the bat, peach, and clouds inside all have auspicious meanings, suddenly this art felt very close to me.” (Female, 20)

Theme 2: From passive learning to active sharing

“After the training, I posted a photo of my facial mask on WeChat Moments. Several classmates asked me where I learned it – they wanted to learn too. I never thought I would become a ‘cultural disseminator’.” (Male, 19)

Theme 3: From skill practice to meaning construction

“The teacher explained that a red mask stands for loyalty and bravery, white for treachery. That‘s not just colour – it’s a moral system. This made me realise that folk art is not backward; it contains our nation‘s values.” (Female, 21)

These findings consistently demonstrate that the three-stage experiential learning pathway (cultural decoding → skill practice → creative transformation) fosters identity internalisation through a composite mechanism of emotional activation, behavioural engagement, and meaning construction.

4 Discussion

4.1 From Knowledge Transmission to Identity Construction: A Novel Contribution

Previous folk art education research has largely focused on surface-level indicators such as whether students master specific techniques or whether courses are well-received [5,6]. This study makes a novel contribution by focusing on cultural identity – a deep, sustainability-relevant outcome. The quantitative data show that after only four hours of structured experiential learning, students‘ cultural identity scores increased by over 80% with a very large effect size (Cohen‘s d = 3.52). This finding has important paradigmatic implications for intangible cultural heritage (ICH) education: an educational intervention must not only teach “how to do it”, but also instil a sense of “why it is worth doing”.

4.2 Why Does Experiential Learning Shape Identity?

The proposed three-stage model – cultural decoding, skill practice, and creative transformation – reveals a micro-mechanism from knowledge to identity. First, cultural decoding provides cognitive legitimacy. When students understand the philosophical concepts, beliefs, and moral systems embedded in folk art, their stereotypical perceptions (“backward”, “rustic”) begin to dissolve. Second, skill practice generates embodied participation. Hands-on activities activate embodied cognition [7], transforming culture from “knowledge about them” into “my own experience”. Third, creative transformation offers agency and self-expression. Allowing students to create personalised works within the traditional framework (e.g.,

designing their own zodiac paper-cuts) turns tradition from a “museum artefact” into “living resource”, thereby completing the internalisation of cultural identity.

4.3 Implications for Education for Sustainable Development

SDG Target 4.7 explicitly calls for education that promotes respect for cultural diversity. However, translating “respect” into measurable educational outcomes has remained a challenge. This study provides a replicable pathway: transform folk art into a structured experiential curriculum and measure identity change using a validated scale. This approach is not limited to Hunan or China; it can be adapted to other regions and other forms of ICH education worldwide.

4.4 Limitations and Future Research

Several limitations should be acknowledged. The sample was relatively small (n = 56) and came from a single university. The training duration was short (4 hours), and no delayed post-test was conducted to assess long-term retention of identity gains. No control group was included. Future research should employ larger, multi-university samples, include a control group, and add delayed follow-up measurements (e.g., 3 or 6 months). Furthermore, the effect of a digital or AR/VR version of the guidebook on cultural identity could be explored.

5 Conclusion

This study developed and validated a learning guidebook for ethnic minority folk arts in Hunan Province, China, and provided the first quantitative evidence that a structured experiential learning intervention can significantly enhance university students‘ cultural identity – an 80.5% increase ($p < 0.001$, Cohen’s $d = 3.52$). Qualitative data revealed that the effect is driven by a composite mechanism of emotional connection, behavioural engagement, and meaning construction through the three-stage model of cultural decoding, skill practice, and creative transformation. The findings suggest that ICH education should be reoriented: not only asking “what have students learned”, but also “who have students become”. The guidebook offers a practical, validated tool for integrating folk art into higher education in alignment with SDG 4.7 and SDG 11.4.

Declarations

Competing interests

All authors declare that they have no financial or non-financial competing interests.

Ethics approval and consent to participate

This study involved human participants. All procedures performed were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later

amendments. This study was reviewed and granted an ethics exemption by the Institutional Review Board of Changsha Normal University (Approval No. CSNU-EDU-2024-015), as it was determined to be a minimal-risk educational intervention involving standard pedagogical practices. All participants were volunteers and provided informed consent.

Consent to participate

Informed consent was obtained from all individual participants included in the study. Participants were informed about the study's purpose, the voluntary nature of their participation, and their right to withdraw at any time without consequence. Given the minimal-risk nature of the educational intervention, verbal informed consent was obtained and documented by the researcher.

Consent for publication

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Author Contribution

Author ContributionsZ.W. (Zeng WeiAn) conceived and designed the study, conducted the field investigations and training activities, performed the data analysis, and drafted the manuscript. K.D. (Krisada Daoruang) supervised the research, reviewed and revised the manuscript. All authors read and approved the final manuscript.

Data Availability

Data availability statementAll data generated or analysed during this study are included in this published article. The questionnaires and interview protocols used in this study are available from the corresponding author upon reasonable request.

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