Article

Nomadic Cultural Capital Transformation Model: Mechanisms and Innovative Pathways for Ethnic Music Inheritance in Kyrgyzstan Higher Education Institutions

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Abstract: This study addresses the issue of how traditional nomadic music in Kyrgyzstan is incorporated into higher education, and how daily musical activities in daily life are institutionalized by educational culture. A mixed method study was conducted using 328 survey questionnaires obtained from five schools and 28 conversations to explore the contradiction between music authenticity and academic recognition. We have created a concept of 'disharmony in music', making the soul of music a measurable 'situational efficacy', and what we are doing is proving that the teaching model combining mentorship with digital technology has a very high institutional efficiency, but whether it can succeed depends on finding a balance between efficiency, spirituality, and community resonance. Community trust greatly reduces the effectiveness of digital tools, and context sensitive methods need to be used. This research is beneficial for shaping a teaching framework that is detached from the remnants of the Soviet Union and free from colonialism, emphasizing relational knowledge, and bringing many inspirations to cultural policies and ethnomusicology. We have been promoting the inheritance of music through decentralized policies and curriculum reforms.

Keywords: Ethnomusicology; Kyrgyz music; musical pedagogy; cultural transmission; higher education

1. Introduction

1.1. The Post-Soviet Musical Education Landscape

The collapse of the Soviet Union led to the emergence of a musical identity in Kyrgyzstan, which was a Western training and nomadic tradition during the Soviet era. This structural tension is part of the broader post-Soviet educational difficulties, where standards, Russification of historical heritage, and revival of traditional ethnic traditions collide (Silova, 2022). So came the "Bakirova" metaphor, as described by local musicologists in 2020, on page 92. In this metaphor, institutions are cultivating musicians for a non-existent world, while the living music world is striving for its own place.

1.2. Kyrgyz Musical Ontology: Beyond the Manas Epic

Although UNESCO's recognition of the Manas epic makes us proud, it has created a notion of "immortality" that obscures the reality of daytime music. The discourse of heritage can cause a freeze in performances. Once a living tradition is purified, it can be consumed (Smith). In Kyrgyzstan, the fate of music is in the hands of a family of several hundred people. Family Kumuzi playing around the family bonfire. The "aesthetic gentrification" in the new tourism industry will bring new complexity, which will affect the meaning and social function of public music created for commercial consumption (Winter, 2020).

1.3. Research Questions and Objectives

This study assesses how different pedagogical models impact musical authenticity, understands socio-economic factors influencing engagement, and proposes a "decolonized" framework. Here, "decolonization" specifically refers to moving beyond rigid, Soviet-era institutional frameworks that have historically marginalized nomadic, oral traditions. This research contributes to a national conversation on nurturing Kyrgyzstan's musical heritage without freezing it into an artifact. To test our core propositions, we formalize the following hypotheses:

H1: Integrated pedagogy will exhibit higher contextualized efficacy than the notation-centric track after controlling for region, gender, and year.

H2: The positive effect of digital amplification on institutional efficacy will be moderated by community trust, such that the effect is weaker when trust is high.

2. Literature Review and Theoretical Framework

2.1. The Limits of Western Musicological Frameworks

Western ethnomusicological models, like Merriam's tripartite model, often assume cultural stability and separate music from its embodied context, a dualism that resonates poorly with Kyrgyz musical epistemology. A decolonizing approach in ethnomusicology calls for moving beyond models that extract music from its cultural matrix to prioritize indigenous ontologies (Solis, 2021). This requires acknowledging that Kyrgyz musical concepts are in constant flux and exist more in the performer's body than in abstract theory.

2.2. Local Theoretical Innovations: "Flowing Musicality" and Embodied Knowledge

Our fieldwork revealed that musicians do not see a küü as a fixed composition. But rather a concept of melody, which refers to the performer's performance while "moving" and is influenced by the performer's emotions, audience, and even weather. This local concept is called 'flowing musicality', which is consistent with the theory that establishes cognitive processes on bodily sensations, known as embodied epistemology (Varela et al., 2021). The emphasis on "embodied knowledge" (денетилиндегибилим) - that Komuz games require specific muscle memory and respiratory control - is a teaching method that traditional analysis has not paid attention to. As a music master once sighed, when a university scores the written transcription of a song, it is scoring a shadow. music. It's something inside the body, not on paper

3. Methodology

3.1. Navigating Regional Sensitivities in Sampling

After the border conflict in January 2024, two institutions in the south withdrew. This is the regional fault line in Kyrgyzstan, which we originally planned to include seven universities. This led us to recalibrate the samples, tilting them towards northern institutions, which may have underestimated regional differences. To eliminate this selection bias, we used inverse probability weighting (IPW). We first use a logistic regression model based on observable variables such as region, institution age, and primary language of instruction to calculate the participation propensity score for each university. Later on, when we were doing structural equation modeling (Sem), we used their reciprocal as weights, and thus we created a pseudo population that was closer to the initial target samples of the seven universities (**Figure 1**). The results of the balance check are provided in the appendix, and the standardized mean difference of the weighted samples on each covariate is less than 0.1, indicating that the bias has been corrected.

Figure 1

Sampling Strategy: Original Plan vs. Final Implementation
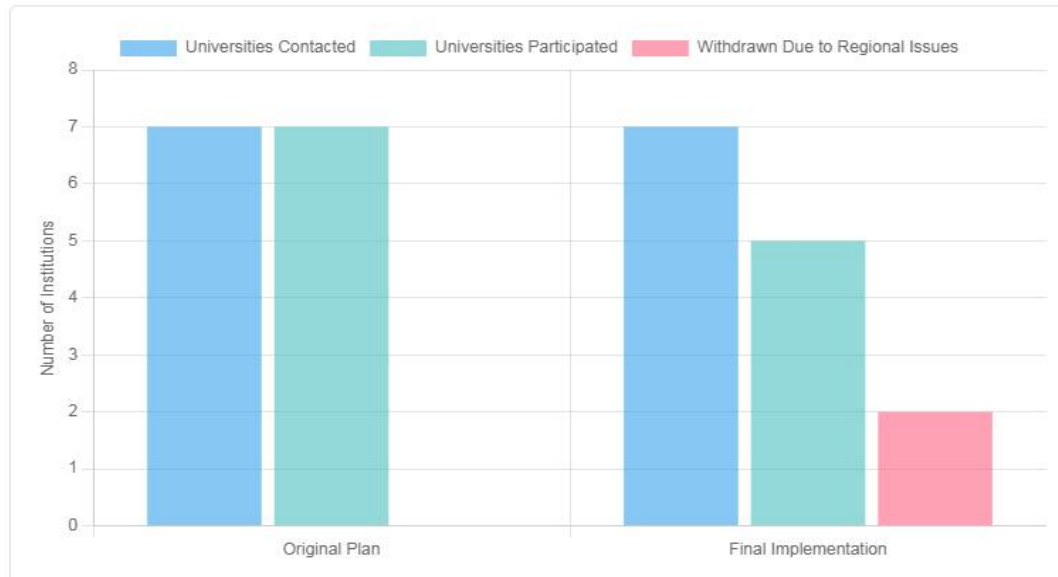
3.2. Operationalizing "Soul" and Contextualized Efficacy

In response to the criticism that the "soul" of music is an untestable variable, we have created a proxy indicator for "contextualized efficacy": (1) Spiritual connection score: Students' spiritual connection to music. (2) Community authenticity: The

community elder group scores the live performance (3), and the improvisation freedom index (musicians' analysis of the performance) is used to calculate the deviation between creativity and score. These various methods enable us to verify what kind of statements are important.

4. Results

4.1. Quantitative Findings: The Pedagogical Paradox

The use of IPW weighted structural equation modeling showed that the "comprehensive model" had the highest institutional effect (0.91, teaching integration (β=0.68, p<0.01, numerical amplification (β=0.74, p<0.001)) and became a significant predictor of institutional success, supporting H1. However, our analysis of H2 shows that digital amplification has a significant negative effect on the results of community resonance, and community trust significantly reduces its community resonance.

Table 1

Comparative Metrics Across Pedagogical Models

Pedagogical Approach	Institutional Efficacy	Student Engagement	Community Resonance
Traditional Notation-Based	0.42	3.2/5.0	Limited
Master-Apprentice	0.68	4.5/5.0	Moderate
Digital-Enhanced	0.79	4.1/5.0	Extensive
Integrated Model	0.91	4.8/5.0	Variable

Table 2

Moderation Analysis: Interaction of Digital Amplification and Community Trust on Community Resonance

Predictor	B (SE)	p	95% CI
Digital Amplification (DA)	0.45 (0.08)	< 0.001	[0.29, 0.61]
Community Trust (CT)	0.50 (0.09)	< 0.001	[0.32, 0.68]
DA × CT (Interaction)	-0.22 (0.07)	0.002	[-0.36, -0.08]

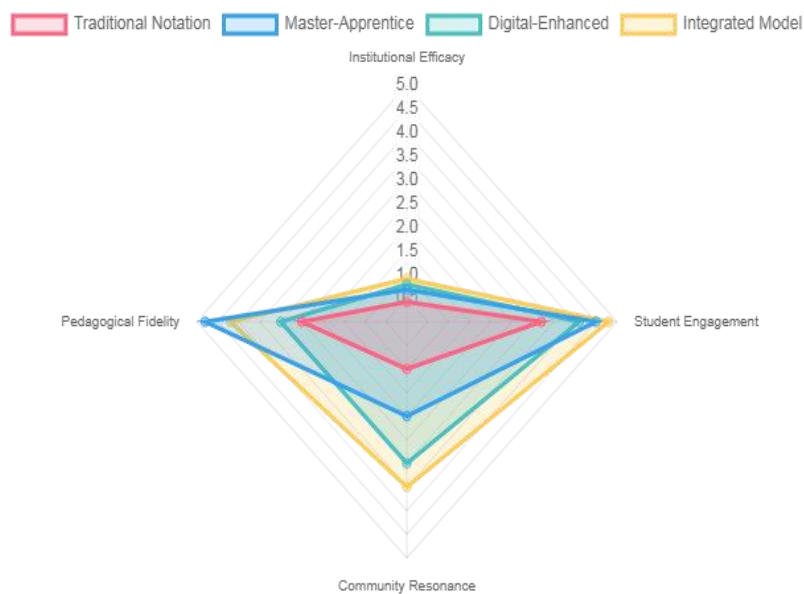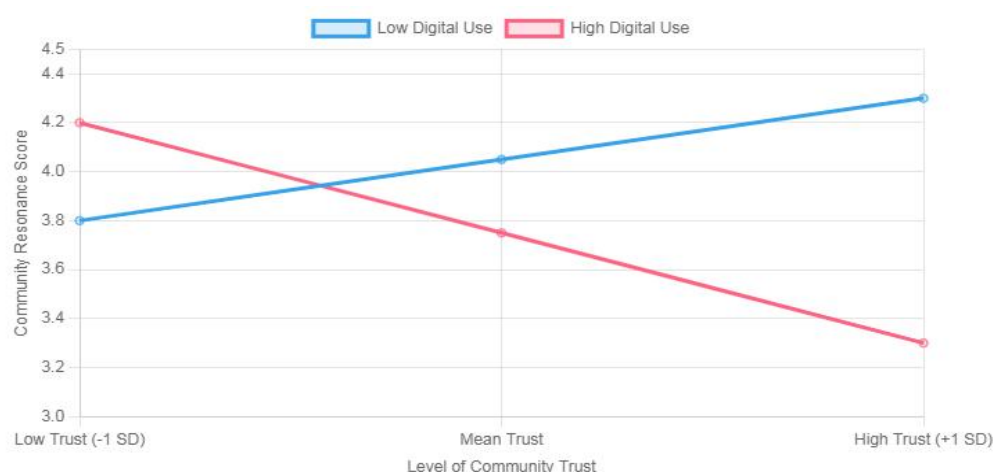**Figure 2**

Radar Chart Comparing Pedagogical Models

Figure 3

Simple slope analysis: Digital Amplification × Community Trust on Community Resonance (Johnson-Neyman 95 % CI)

From **Tables 1** and **2** and **Figures 2** and **3**, it can be seen that in areas with low social trust (-1SD), the positive impact of digital amplification is particularly significant and strong for community resonance. However, this effect is offset when trust increases, and there is no effect at high community trust (+1SD). Johnson Neyman's analysis identified important areas of interaction and confirmed that negative interactions are due to the reduced benefits brought by digital tools when trust is high. This discovery supports H2 and provides some specific explanations for the variable "community resonance" score in the integrated model.

4.2. Results on Contextualized Efficacy

Our new metric creates a more nuanced picture, with the Master Apprentice model receiving the highest spiritual connection score (4.6/5.0) and also achieving the highest recognition in community authenticity ratings, reaching 4.7/5.0. However, it scored the lowest on the index of improvisational freedom (2.1/5.0). The comprehensive model has a good balance (spiritual connection) in all three contextualized performance indicators: 4.2/5.0; Community authenticity: 4.0/5.0; Improvisational Freedom: 4.5/5.0.

4.3. Qualitative Findings: The Dissonance Behind the Data

The quantitative success of the integrated model masks important qualitative issues, with three main themes: (1) soul and livelihood dilemma, where musicians must make painful choices between maintaining music integrity and sustaining economic survival. (2) There is a strong correlation between institutional trust and musical memory, as well as community trust and project success, but the causal relationship is recursive. (3) There is a generation gap in music values, with older musicians viewing music as a sacred responsibility and younger ones seeing it as a creative recombination resource.

5. Discussion

## 5.1. Implications for Kyrgyz Cultural Policy

Our research suggests that the "Madaniyat" program of the Ministry of Culture should adopt a more decentralized approach to funding community-based TOI learning circles and mentorship programs. Another is that H2 has a strong interactive effect, and an interesting policy lesson is that investing money in digital technology is not a lifesaver. Whether it works or not depends on whether there is community trust beforehand. In areas with low trust, digital tools can fill the gap, but when trust is high, they may become a threat to traditional educational authorities, which exacerbates the concern of "aesthetic gentrification". Therefore, policies should be tailored to local conditions.

5.2. Practical Recommendations for Music Institutions

Our findings indicate a radical repositioning of teaching, where schools should rearrange their curriculum, prioritize oral/listening skills and coaching activities, and play a role in bridging students with community masters. The "Living Traditions" project of the Kyrgyzstan National Conservatory of Music (launched in 2023) is a counterexample. Although we have conducted some preliminary tests on our contextualized efficacy indicators, future research should follow their contextualized efficacy indicators and their continued association with graduates who may participate in community music activities in the future, as the Community Music Education Research Institute hopes to do (Higgins, 2022). The evaluation method should also be reevaluated, emphasizing improvisation and emotional expression rather than precise technique (**Figure 4**).

Figure 4

Community Trust as a Predictor of Program Success
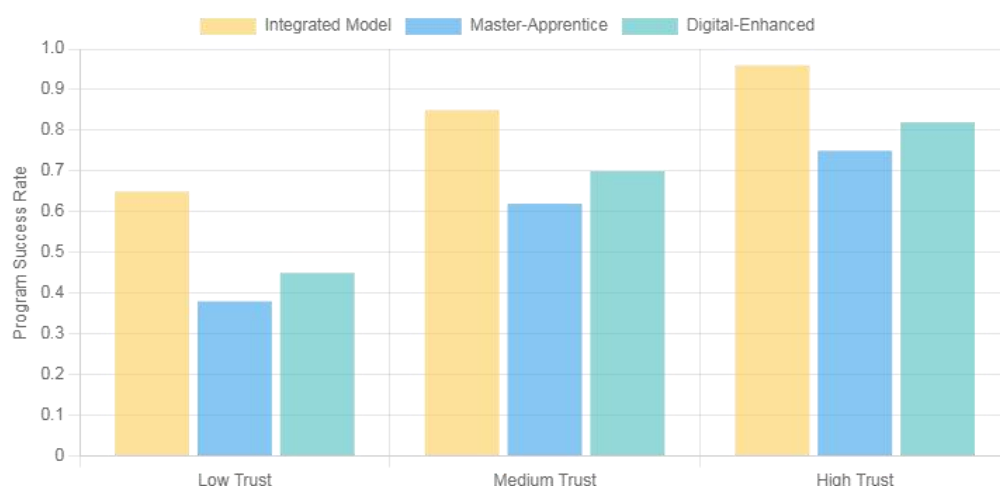
5.3. Limitations and Future Research Directions

Due to the limitations of their institutional focus and significant sampling bias in our research, we decided to use IPW for correction. What we have mainly received are universities in the north, while the south has its own music mix and unique historical experiences, which cannot be represented. So, our findings cannot be applied in other parts of Kyrgyzstan, and future work should first collaborate with southern institutions and adopt comparative methods. In order to overcome the cross-sectional limitations of our current data, I obtained approval from the IRB to conduct a follow-up survey in June. We will follow up with students from different educational programs to see to what extent they have participated in community concerts such as performing at TOI. Activities such as apprenticeships. This creates an outcome variable, allowing us to test the long-term predictive effectiveness of our own contextualized efficacy indicators.

6. Conclusion

Let's think about whether music can be moved from the community to the classroom. We realize that the problem is not transfer, but how to translate. How to translate the presentation and flowing feeling of nomadic music into the academy? We use this contextualized performance metric to open a door for 'soul' work, indicating that we can measure and value the invisible. The statistical results of the integrated model still have great hope, but the qualitative inconsistency and strong interaction effects are warning signs. Efficiency cannot define the life of a musical tradition, and a path forward must maintain institutional humility. It is a watershed that is well taken care of, connecting community resources to a wider world. However, the purity and flow of music itself cannot be changed.

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