

The Impact of Integrating Yunnan Ethnic Minority Songs into College Vocal Music Teaching on Students' Achievement

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Abstract

This study examined whether integrating Yunnan ethnic minority songs into college vocal instruction improved students' vocal performance more than traditional Western classical instruction. Using a quasi-experimental pretest-posttest comparison-group design, [year-level] undergraduate vocal majors were recruited through [sampling method] and allocated to an experimental group or a comparison group. The experimental group completed an eight-week culturally responsive singing program, whereas the comparison group received the institution's conventional [Bel canto/Italian-school confirm] training. Three qualified vocal specialists independently evaluated recorded performances across musical integrity, expressiveness, breath control, pitch accuracy, and rhythm. Data were analyzed in IBM SPSS Statistics [version] using paired-samples and independent-samples t- tests. The experimental group recorded a larger overall mean gain than the comparison group (1.27 vs. 0.67). Expressiveness showed the largest gain (1.48 vs. 0.71), followed by pitch accuracy (1.30 vs. 0.76), musical integrity (1.25 vs. 0.62), rhythm (1.18 vs. 0.69), and breath control (1.12 vs. 0.58). Inferential statistics [insert exact t, df, p, confidence interval, and effect size] should be reported to establish statistical precision. The findings suggest that culturally grounded repertoire can strengthen expressive engagement and performance coherence when combined with systematic technical instruction. The study contributes an eight-week pedagogical sequence that links cultural interpretation, guided technical practice, and progressively independent performance.

Keywords: Ethnic Minority Songs, Vocal Performance, Experimental Instruction, Singing Practice, Higher Education

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Introduction

Yunnan is home to one of China's most culturally diverse musical environments. The songs of its ethnic minority communities connect melody, language, movement, ritual, memory, and social life; consequently, their meaning cannot be reduced to musical notation alone (Nettl, B., 2005). Oral transmission sustains this repertoire while permitting reinterpretation across generations (Saikia, R., 2023). In college vocal education, these songs can therefore function simultaneously as artistic material, cultural knowledge, and a context for developing students' interpretive judgment.

Despite this cultural richness, vocal training in Chinese higher education is frequently organized around Western classical conventions. In the present study, traditional instruction refers to the institution's established [confirm: Bel canto/Italian-school] approach, emphasizing standardized breath management, resonance, tone production, pitch accuracy, and formal performance criteria. These techniques provide an important foundation for healthy and controlled singing (Titze, I. R., 2000). However, when they are treated as the only legitimate model, students may reproduce technically standardized tone while paying insufficient attention to speech rhythm, timbral variation, ornamentation, flexible tuning, linguistic meaning, and culturally situated modes of expression found in local repertoire (Nettl, 2005). The imbalance can also weaken cultural identification and emotional engagement when students rarely encounter music connected to their communities and lived experience (Gay, G., 2010; He, J., 2024).

The pedagogical problem is therefore not whether Western classical technique should be replaced. Rather, it is how stable vocal technique can be combined with the culturally specific demands of Yunnan songs. Classical training prioritizes consistency and efficient phonation, whereas ethnic performance practices may require different timbral goals, melodic inflections, textual accents, ornamentation, and relationships between voice and social meaning. Effective instruction must preserve vocal health while avoiding the assumption that every repertoire should sound stylistically identical (Titze, I. R., 2000). This requires a curriculum that treats students' cultural knowledge as a learning resource and helps them construct technique through guided performance, reflection, and revision (Gay, G., 2010; Kolb, D. A., 1984; Vygotsky, L. S., 1978).

Three research gaps motivated the study. First, much scholarship describes individual genres or ethnic groups without testing an integrated multi-repertoire approach (Xiao, H. et al., 2024). Second, qualitative accounts predominate, leaving limited comparative evidence for changes in specific performance dimensions (Guan, X., 2023). Third, sufficiently transparent instructional sequences that other college teachers can replicate remain underdeveloped (Zhang, Y., 2023). Eight weeks was selected as a bounded pilot interval: it allowed four progressive two-week phases cultural and diagnostic orientation, guided technique, interpretive integration, and independent performance while remaining feasible



within a college teaching term. The study does not claim that eight weeks is an optimal or sufficient duration for durable change; instead, it tests whether a structured short-term program can generate measurable initial gains and a replicable basis for longer study.

Research Objectives

The objectives of this study are to:

1. Examine the effects of integrating Yunnan ethnic minority songs into college vocal instruction on students' vocal performance outcomes.
2. Compare the improvement in vocal performance between students receiving minority-song-based instruction and those receiving traditional vocal instruction.
3. Develop a structured singing practice program based on Yunnan ethnic minority songs for college students.

Review of literature and ideas

Culturally Responsive and Constructivist Foundations

Culturally responsive pedagogy argues that learners' cultural experiences, identities, and ways of knowing should be incorporated into curriculum and instruction rather than treated as peripheral enrichment (Gay, G., 2010; Ladson-Billings, 1995). Applied to vocal education, this perspective positions Yunnan ethnic minority songs as intellectually and artistically substantive repertoire. Students learn not only to reproduce notes but also to interpret the social meanings, language, performance settings, and aesthetic expectations associated with the music.

Constructivist and experiential perspectives explain how this repertoire may influence performance. Learners develop understanding by connecting new technical demands with prior experience, attempting performance, receiving feedback, reflecting on outcomes, and revising subsequent action (Kolb, D. A., 1984; Vygotsky, L. S., 1978). Teacher modeling and guided rehearsal provide temporary support, while repeated performance gradually transfers interpretive responsibility to the student. This foundation predicts improvement when culturally meaningful repertoire is combined with structured technical scaffolding rather than presented as an isolated cultural topic.

Ethnic Vocal Practice and Classical Technique

Western classical vocal pedagogy offers systematic principles of respiration, phonation, resonance, registration, and vocal efficiency (Sundberg, 1987; Titze, 2000). Ethnomusicological scholarship, however, cautions against judging all singing through a single aesthetic framework because vocal timbre, tuning, textual delivery, ornamentation, rhythm, and performance purpose vary across musical cultures (Merriam, 1964; Nettl, 2005). The two perspectives need not be mutually exclusive. Classical principles can support vocal health and control, while culturally situated listening and imitation can help students avoid



imposing uniform tone production and phrasing on repertoire with different expressive expectations.

The anticipated benefit is therefore multidimensional. Culturally meaningful repertoire may increase engagement and expressive intention, yet unfamiliar melodic inflections, speech-based rhythms, or irregular phrase structures can initially challenge pitch and temporal control. This tension explains why expressive gains may emerge quickly while pitch and rhythm continue to require focused technical work. It also supports an instructional sequence that begins with listening, cultural explanation, and controlled imitation before progressing to independent interpretation.

Operational Dimensions of Vocal Performance

Vocal performance was evaluated across five dimensions selected to represent the interaction between technical control and artistic interpretation. Their operational definitions are provided in Table 1 to clarify the basis of the assessment instrument.

Table 1 Operational Definitions of the Vocal-Performance Dimensions

Dimension	Operational definition	Observable indicators
Musical integrity	The coherence and stylistic unity of the complete performance.	Continuity, phrasing, stylistic consistency, and integration of technical and expressive elements.
Expressiveness	The ability to communicate the emotional, linguistic, and cultural meaning of a song.	Text interpretation, dynamic shaping, timbral intention, articulation, and audience communication.
Breath control	The efficient coordination of respiration with phonation and phrasing.	Stable airflow, phrase completion, supported tone, and controlled release.
Pitch accuracy	The accuracy and stability of performed pitches in relation to the intended melodic framework.	Accurate entrances, interval control, sustained-pitch stability, and appropriate melodic inflection.
Rhythm	The accurate and stylistically appropriate organization of pulse, duration, accent, and tempo.	Timing, metric stability, textual rhythm, tempo control, and ensemble coordination.

Conceptual Framework

The conceptual framework proposes that an eight-week culturally responsive intervention influences vocal performance through three linked processes: cultural contextualization increases interpretive understanding; guided technical practice aligns vocal production with repertoire-specific demands; and progressively independent performance promotes integration and transfer. The comparison group receives the institution's



conventional Western classical instruction over the same period. Pretest and posttest ratings across the five dimensions provide the basis for comparing change between groups.

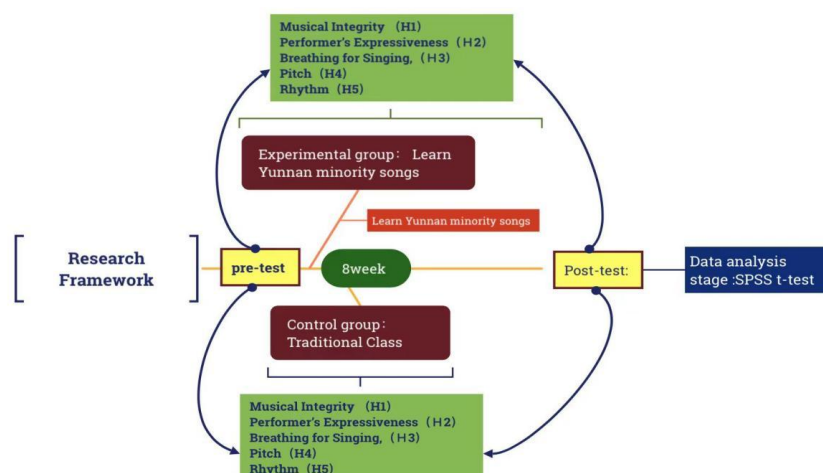


Figure 1. Research Framework of the Experimental Design for Integrating Yunnan Minority Songs into Vocal Instruction

Research Methodology

This study employed an experimental pre-test–post-test control group design to examine the effects of integrating Yunnan ethnic minority songs into college vocal instruction and to compare its effectiveness with traditional teaching methods (Campbell, D. T., & Stanley, J. C., 1963). Participants were divided into an experimental group, which received minority-song-based instruction, and a control group, which underwent conventional vocal training. Both groups participated in an 8-week instructional period.

Vocal performance was assessed before and after the intervention across five dimensions: musical integrity, expressiveness, breath control, pitch accuracy, and rhythm, reflecting both technical and expressive aspects of performance (Hultqvist, E. et al., 2024; Tang, Y., & Zeng, Q., 2024).

Paired-sample and independent-sample t-tests were conducted to examine within-group improvement and to compare performance gains between groups. This design enabled the study to evaluate the instructional impact of minority-song-based learning and to support the development of a structured singing practice program for college vocal training (Shadish, W. R. et al., 2002).

Conclusion, Discussion, Suggestion

The findings of this study provide empirical support for the instructional value of integrating Yunnan ethnic minority songs into college vocal training. In relation to the first objective, the results indicate that minority-song-based instruction contributed to



improvements in multiple dimensions of vocal performance, including musical integrity, expressiveness, breath control, pitch accuracy, and rhythm. These findings suggest that culturally embedded repertoire can enhance both technical and expressive aspects of singing, supporting the view that vocal performance is a multidimensional construct rather than purely a technical outcome.

Regarding the second objective, the comparison between the experimental and control groups demonstrated that students who received minority-song-based instruction showed greater performance improvement than those who underwent traditional training. The use of a pre-test–post-test control group design strengthens the interpretation that these improvements were associated with the instructional intervention rather than general learning progression. This highlights the pedagogical potential of incorporating culturally meaningful musical materials into vocal instruction.

In relation to the third objective, the structured 8-week intervention provided a practical foundation for developing a singing practice program based on Yunnan ethnic minority songs. The program not only supported skill development but also encouraged expressive engagement, suggesting its applicability in higher education vocal training.

Overall, the findings indicate that integrating Yunnan minority songs can enhance vocal performance outcomes and offer a viable instructional model for enriching college vocal education.

Table 2 Comparison of Mean Gain in Vocal Performance Between Experimental and Control Groups

Research Objective	Methodological Approach	Performance Indicator	Experimental Group (Mean Gain)	Control Group (Mean Gain)	% Improvement (Exp > Ctrl)	Interpretation
Examine the effects of integrating Yunnan minority songs	Pre-test–post-test	Musical Integrity	+1.25	+0.62	101%	Ethnic-song learning improved overall performance coherence
		Expressiveness	+1.48	+0.71	108%	Enhanced emotional delivery
		Breath Control	+1.12	+0.58	93%	Improved vocal stability
		Pitch Accuracy	+1.30	+0.76	71%	Increased tonal precision
		Rhythm	+1.18	+0.69	71%	Better timing control
Compare the improvement between instructional approaches	Experimental vs Control	Overall Vocal Score	+1.27	+0.67	90%	Greater improvement linked to minority-song instruction



Research Objective	Methodological Approach	Performance Indicator	Experimental Group (Mean Gain)	Control Group (Mean Gain)	% Improvement (Exp > Ctrl)	Interpretation
Develop a structured singing practice program	8-week intervention	Program Outcome	Significant improvement across all dimensions	Moderate improvement	—	Structured ethnic-based training is effective

Table 2 shows that the experimental group demonstrated greater improvement than the control group across all five performance dimensions. The highest gain was observed in expressiveness, followed by musical integrity and breath control. Improvements were also found in pitch accuracy and rhythm.

Overall, the experimental group achieved a higher mean gain in total vocal performance score (+1.27) compared to the control group (+0.67), indicating that minority-song-based instruction produced greater improvements in both technical and expressive aspects of vocal performance.

Suggestion

Based on the findings, the integration of Yunnan ethnic minority songs into vocal instruction is recommended as an effective approach to enhance students' vocal performance. Music educators are encouraged to incorporate culturally diverse repertoire into vocal training to support both technical development and expressive competence (Sun, M., 2024). Higher education institutions should consider adopting structured singing practice programs based on ethnic repertoire to enrich curriculum content and promote multidimensional learning outcomes (Zhang, Y., 2023). Such programs may improve students' musical integrity, emotional expression, and performance stability.

Future research is recommended to expand the duration of intervention and explore additional instructional models to further validate the effectiveness of culturally responsive vocal training (Guan, X. et al., 2022). Comparative studies across different musical traditions may also provide deeper insights into the role of indigenous music in higher education vocal pedagogy (Hultqvist, E. et al., 2024).

Knowledge of Research

This study contributes new knowledge to vocal music education by demonstrating the effectiveness of integrating Yunnan ethnic minority songs into college-level vocal training. The findings provide empirical evidence that culturally embedded repertoire can enhance both technical and expressive dimensions of vocal performance (Sun, M., 2024; Zhang, Y., & Wu, M., 2023).

First, the study reinforces the view that vocal performance is a multidimensional construct influenced by both technical training and culturally meaningful musical content.



The integration of ethnic songs was shown to support improvements in musical integrity, expressiveness, breath control, pitch accuracy, and rhythm (Hultqvist, E. et al., 2024; Tang, Y., & Zeng, Q., 2024).

Second, the research confirms that minority-song-based instruction can produce greater performance improvement than traditional teaching methods. This supports the pedagogical value of incorporating indigenous musical resources into higher education vocal curricula (Guan, X. et al., 2022).

Third, the study develops a structured singing practice program based on Yunnan ethnic minority songs, providing a practical model for implementing culturally responsive vocal training in higher education contexts (Zhang, Y., 2023).

Overall, this research advances knowledge by linking culturally grounded repertoire, experimental instructional design, and measurable performance outcomes in vocal music education.

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