



**INTEGRATING ETHNIC CRAFT SKILLS INTO THE FINE
ARTS PEDAGOGY AT CHINESE HIGHER VOCATIONAL
INSTITUTIONS: A STUDY BASED IN GUIZHOU PROVINCE**

YULING YANG

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
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INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHAP
ACADEMIC YEAR 2024
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ABSTRACT

This study examines the integration of ethnic craft skills into fine arts pedagogy at Chinese higher vocational institutions, with a focus on Guizhou Province. The research aims 1) to study the current situation of integrating ethnic skills into art education and teaching in higher vocational colleges in China, especially in Guizhou Province, and the challenges and opportunities of this integration. Advanced layout, optimization, and adjustment provide a reference for policy formulation; 2) to explore the influence of teachers, students, and inheritors on integrating Guizhou national skills into art education and teaching in higher vocational colleges. Lay a solid foundation for further integration, and 3) study the pedagogy-based theoretical cognition, practical ability, and innovative development that contribute to the integration of ethnic craft skills into art education in Guizhou's higher vocational colleges and universities, and how this contributes to the realization of educational goals. A mixed-methods approach was adopted, involving quantitative surveys of 400 participants, including teachers and students, as well as qualitative interviews with ethnic craft inheritors. The findings reveal that, while there is significant interest in ethnic crafts, challenges such as outdated teaching methods, limited involvement of skilled inheritors, and insufficient resources hinder the effective integration of these crafts. Teachers lack adequate training, students need engaging learning methods, and inheritors face barriers to participating in formal education systems. Despite these challenges, opportunities exist to leverage local cultural heritage, such as Miao embroidery and batik, to enrich curricula and foster cultural confidence. The study highlights the importance of harmonizing theoretical knowledge, hands-on practice, and creative innovation in pedagogy. Modernized teaching methods, including project-based learning and workshops with inheritors, enhance students' practical abilities and appreciation of traditional crafts. These insights contribute to curriculum reform, emphasizing the need for stakeholder collaboration and policy support to preserve cultural identity while advancing vocational education.

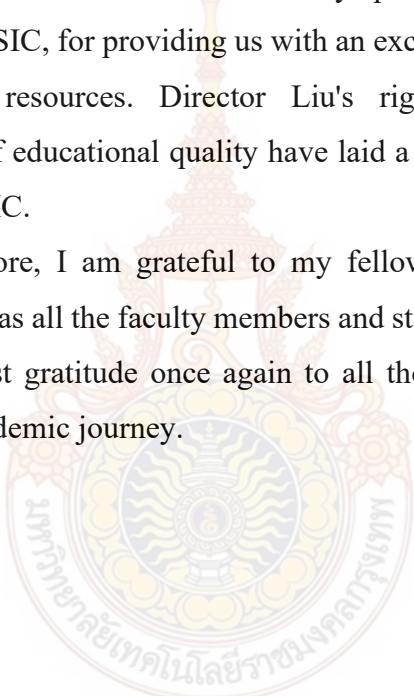
Keywords: Ethnic Skills, Art Education in Higher Vocational Colleges and Universities, Teaching Practice

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CHAPTER I

INTRODUCTION

This chapter assesses China's policies related to promoting the transmission of ethnic skills into vocational colleges and deepening the reform of vocational education and teaching. The factors that influence the integration of ethnic skills into the teaching of vocational art education in Guizhou, a region with a rich yet less-researched cultural heritage. To explore the interactions between teachers' perceptions, students' interests, the influence of the inheritors, and the pedagogy, with the integration of ethnic skills into vocational art education. The research establishes objectives and provides a conceptual framework for subsequent research.

1.1 Research Background

1.1.1 Policy Background

In recent years, Chinese vocational colleges have been shaped by policies on the inheritance of ethnic skills and educational reform, as these issues have gained importance. Between 2003 and 2023, the number of policies and circulars issued by the Chinese government and its related departments on the preservation and inheritance of ethnic culture increased steadily.

In 2013, China's Ministry of Education proposed in “Opinions on Promoting Ethnic Cultural Inheritance and Innovation in Vocational Institutions” that promoting ethnic cultural inheritance and innovation in vocational institutions would improve the cultural literacy of students in these institutions and enhance the schools' ability to serve socialist cultural development. They point out in the working measures the need to promote curriculum reform and enhance the transmission of local skills and cultures (Ministry of Education of China et al., 2013). The policies clarify the responsibilities and obligations of vocational education in promoting national culture and preserving traditional skills.

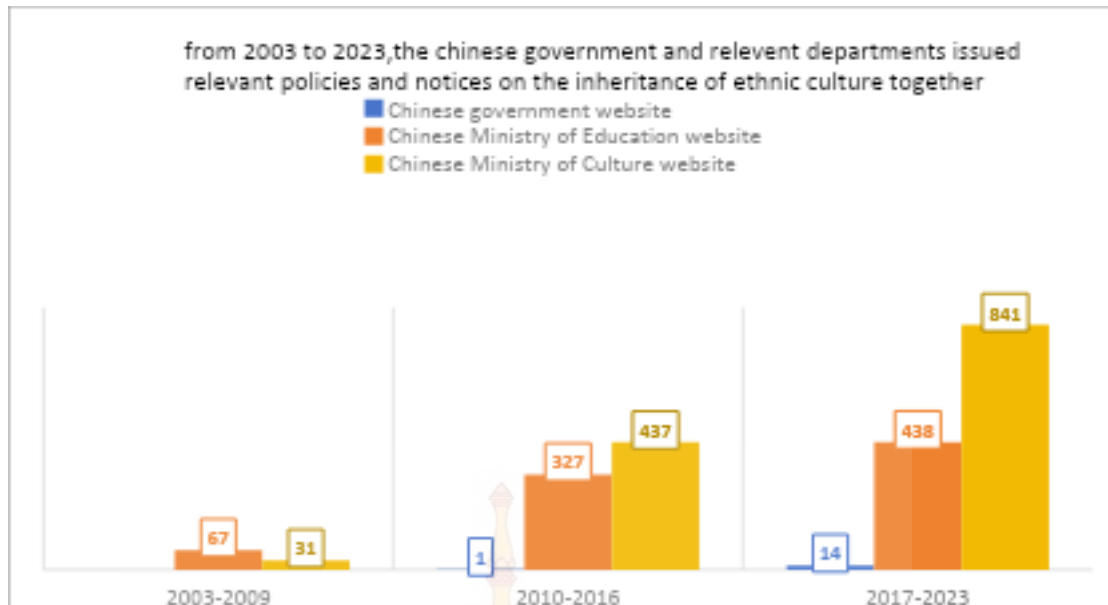


Figure 1.1 Number of Relevant Policies and Circulars on Ethnic Cultural Heritage Issued on Chinese Government Websites, Chinese Ministry of Education Websites, and Chinese Ministry of Culture Websites

Source: Chinese government website, Chinese Ministry of Education website, Chinese Ministry of Culture website (2024.1)

In 2015, the Chinese Ministry of Education proposed strengthening the education of traditional Chinese culture. It is necessary to incorporate more content from traditional Chinese culture into relevant courses. Localities and vocational colleges should fully explore and utilize local Chinese traditional culture as educational resources (China Ministry of Education, 2015).

This policy encouraged vocational institutions across the country to maintain a positive and exploratory attitude towards ethnic cultural heritage. In Guizhou Province, starting from 2021, the province added Miao embroidery and Guiyin specialties to the vocational colleges' teachers and students' skills competitions. In 2023, participants from 33 schools, including Guizhou Vocational and Technical College, Bijie Early Childhood Teacher Training Higher and Specialized College, and Guizhou Shenghua Vocational College, took part in the competitions (Ning, 2023).

Education is a vital means of promoting national cultural heritage, and culture is at the core of high-quality educational development. Vocational education and national cultural heritage have an interactive and symbiotic relationship (Jun et al.,

2023). In 2017, the General Office of the State Council noted that cultural self-confidence is a fundamental, more profound, and enduring force within a community (General Office of the State Council, 2017). The policy emphasizes the importance of promoting national cultural heritage, rooted in China's local aesthetics and craft traditions, serving the needs of the national innovation-driven development strategy, and promoting the formation and dissemination of an aesthetic paradigm based on traditional Chinese culture, which has become the goal of education in line with the needs of the country's development (Lu, 2019).

1.1.2 The Need for the Inheritance of National Skills

Ethnic arts and crafts have evolved over a long period through practice, embodying the spiritual qualities and humanistic psychology of a nation and serving as the cultural foundation for its survival and development (Shi et al., 2022). In Guizhou, for example, traditional handicrafts include batik (Anshun City), Miao silver (Huangping County), and Miao embroidery (Kaili City) (Guizhou Provincial People's Government, 2007). The intangible cultural heritage of ethnic minorities serves as a testament to the historical development of each ethnic group and represents a valuable spiritual wealth of the country; its protection is of great significance (Gao et al., 2015). Take Miao embroidery as an example, as a product of ethnic cultural development, Miao embroidery exhibits distinctive ethnic characteristics, serves as a representation of ethnic culture, and possesses high artistic value (Huang et al., 2023).

As the traditional skills of ethnic folk culture face challenges, their survival can be described as difficult and even perilous, with the risk of extinction. Miao tin embroidery in Jianhe County was a common technique used by the Miao people in the Jianhe area for clothing production. In the 1980s, Miao silver embroidery "dominated", with silver as the primary material used for decorations and patterns, a unique method of clothing production that is rich in artistic, ornamental, and scientific research value. With the advent of economic globalization, tin embroidery replaced silver embroidery, and the art of silver embroidery largely ceased to exist (Sun, 2021). The inheritance and protection of Miao embroidery have become increasingly urgent, and the value and importance of education for Miao folk art have become more prominent (Zhou, 2017). Therefore, how to pass on and protect the ethnic skills has become an urgent task.

The inheritance of ethnic craft skills has received extensive attention

worldwide. Professor Masaru Fujie of Japan analyzed the American educational philosophy that requires art educators to focus on guiding students to understand art from the perspective of shared culture. By integrating the unique aspect of ethnic skills, a shared culture is formed. Russia's Ushinsky analyzed ethnicity as the foundation of the educational system, as important to a nation as its soul. These scholars emphasize the importance of regional culture and skills, as well as the challenges associated with their transmission and preservation.

1.1.3 The Mission of Inheriting Regional Skills into Local Vocational Colleges

With the acceleration of globalization and the deepening of cultural exchanges, the cultural heritage of various countries and nationalities is playing an increasingly important role on the world stage. In this context, higher education, as a vital channel for the transmission of knowledge and culture, assumes the significant responsibility of preserving, promoting, and passing on cultural heritage (Zhu, 2023).

As a unique component of China's education system, regional colleges have made important contributions to training, promoting cultural integration, addressing ethnic issues, and accelerating the economic and social development of the regions. Nationality and multiculturalism are two key characteristics of ethnic vocational colleges, reflecting their cultural integration in response to the influence of general higher education and mainstream culture. This promotes the protection, integration, and development of ethnic culture, while supporting local economic and social development through the preservation of cultural heritage (Li et al., 2016).

Regional colleges should become the centers of ethnic cultural inheritance and innovation. The conditions of talent cultivation, scientific research, campus culture, specialised disciplines, and cultural leadership that regional vocational colleges provide important support for ethnic culture inheritance and innovation (Yang, 2012). Noticing the lack of traditional Chinese culture and regional culture, Wang (2024) focused on teaching art and design majors in vocational colleges in Yunnan, exploring the creation of Lijiang Baisha painting, its cultural inheritance, a carrier of innovation, meeting the spiritual and cultural needs of the local people, and endeavored to promote the development of Lijiang Baisha ethnic area (Wang, 2024).

Regional vocational colleges are the best transmitters for the inheritance of

ethnic skills, and art education as they incorporate the educational concepts of ethnicity and locality, engage with the advantages of the local ethnic culture and skills, build the regional cultural characteristics, promote the integration of ethnic skills into vocational education, and the regional vocational colleges have the mission to pass on the ethnic skills.

1.2 Research Problem

Higher education, with its unique universality and rigor, has shown advantages in national culture and skills inheritance. With the continuous development of China's society and economy, the teaching of art education in vocational colleges is constantly seeking innovation and change. However, in the process of transformation, the integration of ethnic skills into art education teaching in vocational colleges is not optimistic. Integrating ethnic skills into the curriculum and gaining student acceptance are challenges.

In this study, it is necessary to unpack the meaning of "integration". Traditional teaching methods have failed to stimulate students' interest in learning ethnic skills. Contemporary art education should be based on professional knowledge, cultivate students' national self-confidence through curriculum design, and integrate traditional skills with modern design expression.

In 2022, while participating in the Hanyang University Culture and Art Teacher Training Program, the authors invited students from vocational colleges to participate in the "The First Guizhou Vocational Skills Competition," organized by the Guizhou Provincial Department of Human Resources and Social Security. The "Hand Embroidery Project" competition, organized by the Guizhou Provincial Department of Human Resources and Social Security, awarded her second place in Guizhou Province and the title of "Guizhou Provincial Skilled Worker." The author deeply understood the benefits and importance of integrating ethnic skills into art education. As a teacher, the author began to consider how to design teaching in vocational art education to help students understand ethnic skills and develop the ability to learn independently in traditional cultural fields.

The integration of ethnic skills into the teaching of art at the higher

education level is an important, yet underexplored, area of education in China, particularly in a multi-ethnic region such as Guizhou Province. Despite the rich cultural heritage and unique skills of each ethnic group, a clear gap exists in the literature regarding the theoretical framework and practical application of integrating these skills into art education. This gap highlights the urgent need for a comprehensive study that maps the current state of integration and identifies the challenges and opportunities inherent in such educational endeavors.

The current study aims to investigate the relevance of factors and pedagogies in integrating ethnic skills into art education teaching and learning. This study aims to reveal best practice approaches that can significantly improve integration. This exploration is crucial for understanding how better integration can preserve ethnic culture, enhance skill transmission, and foster students' regional culture and self-confidence.

1.3 Research Questions

This study attempts to address three key questions:

1. What is the current status of the integration of ethnic skills into the teaching practice of art education in Guizhou's vocational colleges? What are the challenges and opportunities brought by this integration?
2. What is the relationship between teachers, students, and inheritors of ethnic skills and the integration of ethnic handicrafts into art education and teaching in Guizhou's vocational colleges, and how does this affect teaching practice?
3. How do pedagogy-based theoretical understandings, practical ability, and innovative development contribute to the integration of ethnic craft skills into art education in Guizhou's vocational colleges, and how does this contribute to the realization of educational goals?

Based on the above research questions, this study tested two hypotheses:

H1: stakeholders' perceptions (teachers, students, and ethnic skills inheritors) significantly influence the integration of ethnic skills into the teaching and learning of higher vocational art education in Guizhou (specifically, the positive perceptions and support of these stakeholders are associated with more effective

pedagogical practices and strong policy development that will facilitate the integration of ethnic skills into the curriculum).

H2: Pedagogy-based theoretical perceptions, practical competence, and innovative development significantly increase the extent to which ethnic skills are integrated into fine arts education in Guizhou's vocational colleges, resulting in improved educational outcomes, skill mastery, and cultural transmission.

1.4 Research Objectives

1. To study the current states of integration of ethnic skills into art education and teaching in vocational colleges in Guizhou Province, the challenges and opportunities brought by this integration, advance a vision for the optimization and adjustment of pedagogy, and provide a reference for policy formulation.

2. To explore the influence of teachers, students, and inheritors on the integration of Guizhou ethnic skills into art education and teaching in vocational colleges, a solid foundation for further integration is established.

3. To study theoretical thinking, practical ability, and innovative development based on teaching methods, to improve the integration of Guizhou culturally specific skills into the teaching practice of fine arts education in vocational colleges, and make contributions to the realization of educational goals. To guide the reform of education and teaching, highlight the importance of teaching practice and training, and the important position of innovative training in fine arts majors.

1.5 Conceptual Framework

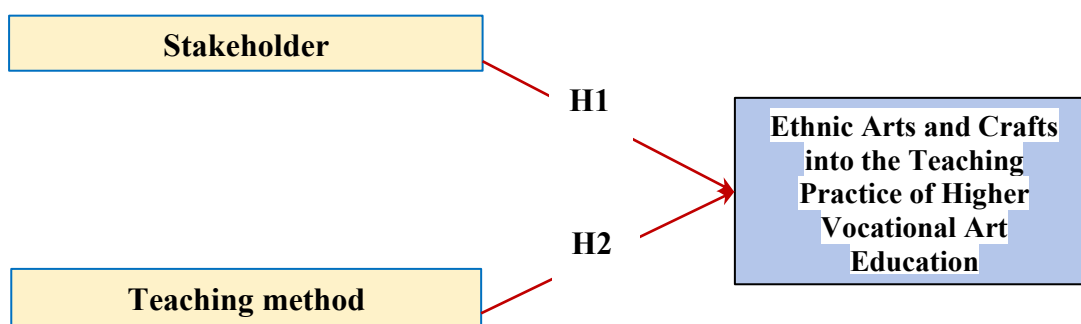


Figure 1.2 Conceptual Framework Diagram

1.6 Research Framework

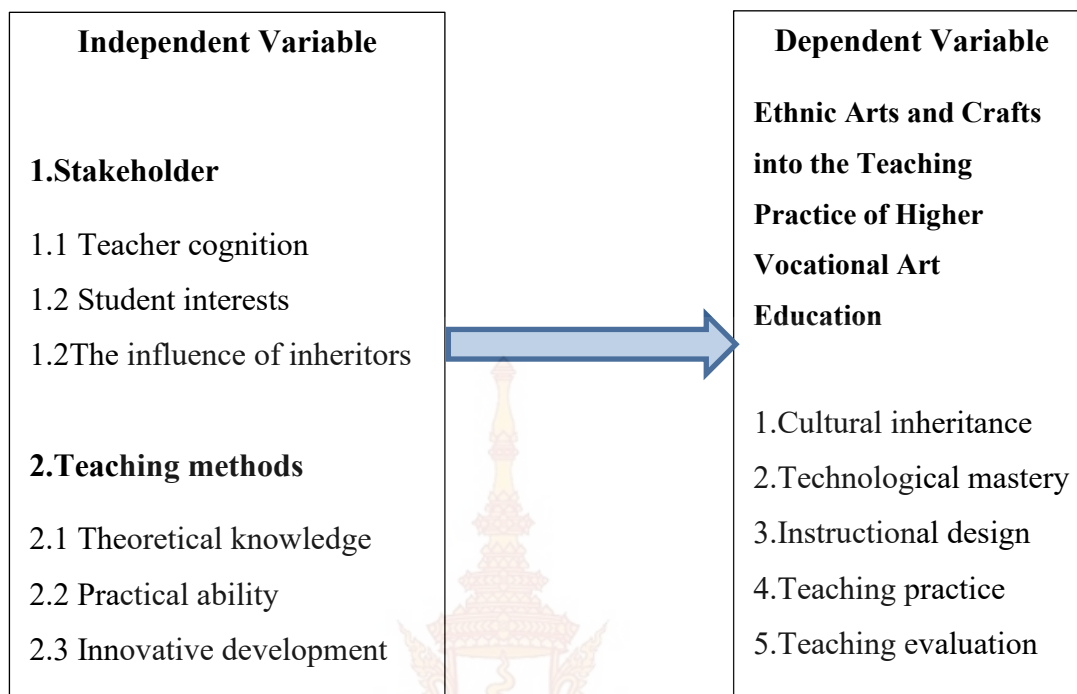


Figure 1.3 Research Framework Diagram

1.7 Definition of Key Terms

1. Vocational art education

Vocational (higher vocational) education aims to train students with practical skills and professional knowledge. Art education is a vital field of vocational education, encompassing painting, sculpture, design, and other visual arts, with an emphasis on practical skills.

2. Ethnic skills

Ethnic skills in this study refer to traditional ethnic skills, which are the core elements of intangible cultural heritage, and the handicrafts that have evolved and are closely tied to people's daily activities and life, having been passed down from generation to generation.

3. Teaching method

The teaching method refers to the teaching strategies and skills adopted by

teachers when instructing, aiming to promote a theoretical understanding of teaching methodologies, enhance teaching ability, and improve the ability to innovate, thereby achieving educational objectives and improving outcomes.

4. Stakeholder

Stakeholders in this study are those who are closely engaged with the integration of ethnic skills into the teaching and learning practices of art education, the implementers who teach the curriculum (the teacher group), the audience of the curriculum (the student group), and the key technology holders (the inheritor group).

5. Ethnic Arts and Crafts into the Teaching Practice of Vocational Art Education

In this study, the integration of ethnic skills into the teaching practice of vocational art education refers to the melding of ethnic skills with modern art education, to enable students to better understand, master and pass on these skills through practical activities, to enrich the content and form of art education, and to promote the protection and development of ethnic skills.

1.8 Research Methods

This study employed a mixed-methods approach to data collection and analysis, aiming to gain a comprehensive understanding of the integration of ethnic skills into vocational art education in Guizhou, as well as the impact of relevant stakeholders and pedagogies on the integration of ethnic culture.

1. Data collection method

This study distributed a questionnaire to 22 teachers and 378 students enrolled in related majors at five local vocational colleges, namely, Guizhou Industry Polytechnic, Tongren Polytechnic, Qiannan Polytechnic for Nationalities, Qiandongnan Nationalities Polytechnic, and Southwest Guizhou Vocational Technical College for Nationalities. The questionnaires were carefully designed to assess the impact of the sampled stakeholders and pedagogies on the integration of ethnic skills into vocational art education teaching in Guizhou.

The study conducted semi-structured interviews with key personnel to understand the specific issues and challenges associated with integrating ethnic skills

into vocational art education in Guizhou.

2. Data Analysis Methodology

The descriptive statistics applied were mean, standard deviation, frequency distribution, and coefficient of variation to elucidate the factors that influence the integration of ethnic skills into the teaching and learning of art education in higher educational institutions.

Factor analysis and correlation analysis were used to elucidate the correlations between the key variables in this study. This analysis was crucial in examining various aspects of integrating ethnic skills into the teaching of art education. Regression analysis was employed to critically examine and determine the impact of various factors on the integration of ethnic skills into art education teaching.

For the qualitative data of the study, the main focus was on the specific issues and challenges surrounding the integration of ethnic skills into art education teaching in Guizhou, as described in the interview transcripts.

By integrating these approaches, the study develops a comprehensive analysis of the factors influencing the integration of Guizhou ethnic skills into the teaching and learning of vocational art education (through questionnaires) and the specific issues and challenges facing the integration of Guizhou ethnic skills into the teaching and learning of vocational art education. This mixed-methods strategy ensures a detailed and comprehensive understanding of the research questions and contributes to the research on integrating ethnic skills into the teaching of vocational art education.

1.9 Research Scope

The scope of the research :

1. Geographical Scope

The five higher education institutions are located in Guizhou Province, China.

2. Sample

The subjects of this study were teachers (22), students (378), and inheritors (5) from the 5 higher education institutions, totaling 405 individuals, representing the respective perspectives of the different populations.

3. Thematic scope

The study focused on two themes:

Influencing Factors - To assess the influence of stakeholders and pedagogy on the integration of ethnic skills into art education teaching.

Problems and Challenges - to analyze the specific problems and challenges facing the integration of ethnic skills into the teaching of higher-level art education in Guizhou.

4. Range of Methods

Quantitative method - A questionnaire was utilized to collect relevant data from a sample of teachers, students, and inheritors.

Qualitative method - semi-structured interviews with different categories of inheritors to gain a deeper understanding of the specific problems and challenges facing the integration of ethnic skills into the teaching practice of vocational art education.

5. Scope of analysis

Descriptive statistics and factor analysis - analyzing questionnaire data; determining teachers' and students' perceptions of issues related to the integration of ethnic skills into art education teaching.

Correlation analysis - to study the correlation between teachers' perceptions, students' interests, inheritors' influence, theoretical understanding, practical abilities, innovative development, and the integration of ethnic skills into the teaching practice of vocational art education.

Regression analysis - to test the hypothesis that there is a significant influence of stakeholders (teachers, students, inheritors) and pedagogy on the integration of ethnic skills into vocational art education teaching practices.

Subjective analysis - to analyze the qualitative data in order to explore the specific issues and challenges facing the integration of ethnic skills into the teaching of vocational art education.

6. Time Frame

From April to July 2024, the researcher visited the five selected colleges in Guizhou to distribute questionnaires and conduct interviews with ethnic skills inheritors.

1.10 Significance of the Research

The insight of this study not only enacts the relevant policy directions issued by the Chinese government but also serves as a reference for research on the teaching of art education in vocational colleges, especially the transmission of ethnic skills. To understand the factors affecting the integration of ethnic skills into the teaching of art education in vocational colleges.

This study generates empirical evidence and theoretical advances that provide a foundation for future research in these areas. This study offers a comprehensive examination of a relatively under-explored area, providing research information to advance curricular reforms in art education, with a particular emphasis on the transmission of regionally and culturally embedded skills.

In addition, it is essential to promote the reform of vocational art teaching and learning, as well as to enhance the ability to transmit skills. It is our responsibility as educators and researchers to promote students' learning interests and ability to innovate.

1.11 Limitation of the Research

This study is based on data analysis of teachers and students from five vocational colleges in Guizhou: Guizhou Industry Polytechnic College, Tongren Polytechnic College, Qiannan Polytechnic for Nationalities, Qiandongnan Nationalities Polytechnic, and Southwest Guizhou Vocational Technical College for Nationalities. Therefore, it provides only a snapshot of vocational colleges. Given the limitations of the survey and other practical factors, it does not reveal the entirety of the facts on the integration of ethnic skills into the teaching and learning of art education. The results obtained through the survey provide valuable insights for promoting the inheritance of ethnic skills in art education.

CHAPTER II

LITERATURE REVIEW

This chapter examines the reality of art education and teaching in vocational education, including research on the inheritance of ethnic skills and the teaching of ethnic skills and art in vocational colleges. The chapter examines the impact of teachers, students, inheritors, and teaching methods on the integration of ethnic culture into art education in vocational colleges.

2.1 Teaching and Learning in Art Education (Current Status)

As an integral part of China's education system, vocational art education plays a crucial role in the overall development of students. In his theory of multiple intelligences, psychologist Howard Gardner notes that human intelligence is not a single entity, but rather comprises nine distinct kinds of intelligence. Among the nine kinds of intelligence, eight kinds are related to art (Shen, 2004). Two types of intelligence — natural observation and visual-spatial intelligence — are directly related to art education. Consequently, it is essential to develop students' intelligence and innovative thinking, and to prioritize art education in vocational colleges.

In recent years, China's emphasis on vocational education development has increased, and traditional vocational educational concepts and models have undergone profound changes (Li, 2008). However, in the actual teaching process of art education in vocational colleges, due to the influence of traditional teaching methods, some art teachers in vocational colleges focus on theoretical knowledge and ignore training and developing students' practical ability, which, leads to deviations in the direction and goal of training students in vocational art, and is not conducive to improving students' understanding (Zuo, 2024).

In addition, art education in vocational colleges also shoulders the important responsibility of passing on national culture. In terms of teaching content, the current reference is Western art education, and the application of national and regional culture in China is overlooked. Thus, the reality of Chinese vocational art education teaching is problematic, with obvious shortcomings that cannot effectively meet the

learning needs of students. Therefore, teaching reform is necessary for art education in vocational colleges. The reform of fine arts education in colleges should acknowledge regional cultural factors, guide the new generation to a deeper understanding of the social and aesthetic value of regional cultures, enhance national pride, and carry forward and pass on an improved national culture (Liu, 2010).

Today, as China promotes the active preservation and development of traditional Chinese culture among young people, vocational colleges play a vital role in our cultural heritage, and fine arts education is crucial in preserving regional skills.

2.2 Integration of Ethnic Skills into the Teaching of Vocational Art Education

Traditional ethnic arts and crafts are the core elements of intangible cultural heritage, representing handicrafts that have been perfected over time and are closely tied to people's daily lives, having been passed down from one generation to the next (Sun, 2021). There are many ethnic arts and crafts in China. In Guizhou, ethnic arts and crafts are vibrant, featuring batik, Miao embroidery, wood carving, pottery, silver jewelry, and other traditional forms of art.

Whilst there is a considerable amount of literature on the value, innovation, and inheritance of ethnic skills, there is less literature on the education and teaching of regional skills. Moreover, contemporary ethnic skills are facing three major practical dilemmas: the space for survival is constantly compressed, the existing inheritance mode is conservative, closed, and inefficient, and the practical relationship between the inheritor and the inherited is shallow (Shi et al., 2022). In the face of these dilemmas, the government has introduced relevant policies to encourage schools to address these deficiencies actively.

Associate Professor Liu Junsuan in "The Significance, Difficulties and "Methodological Reflections on Pedagogical Research on Traditional Culture" notes that a large number of folk practices along with traditional cultural education have emerged, as school education is rapidly absorbing the elements and methods of traditional culture education, and has carried out colorful exploratory experiments (Liu, 2019). When college teaching integrates regional culture into art education, it enhances

the quality of art education in China's colleges. The goal is not only to improve teaching but also to promote the inheritance and development of China's national culture. Students need to understand the importance of national culture through art education in colleges (Jin, 2014). Meanwhile, in the "Opinions of the Ministry of Education and the Ministry of Culture of the State People's Committee on Promoting the Inheritance and Innovation of Ethnic Culture in Vocational Colleges and Universities", it states that: Vocational colleges have to serve the transformation and upgrading of the relevant ethnic industries. They should focus on transforming economic development and industrial structure, cultivating innovative and skilled talent with the ability to innovate culturally, serving the transformation and upgrading of national and cultural industries, and creating value-added, internationally competitive products (China Ministry of Education, et al., 2013).

Vocational colleges play not only an important role in preserving national skills, but also serve as a means for cultivating the inheritors of ethnic skills. They play a pivotal role in the inheritance and innovation of national culture, enhancement of cultural competitiveness, and promotion of the development of specialty industries.

How to engage students with unique traditional cultural symbols and establish a sense of national belonging and self-worth is an important topic in higher art education. Art education has been a highly important teaching content in human society since ancient times and holds a special position in national education. In modern society, incorporating traditional culture into the art classroom is an effective way to preserve and pass on cultural heritage. It helps shape the sense of national cultural identity. It holds a positive and significant value and importance for innovation in teaching and teaching methods, as well as the improvement of practical innovation ability (Zhao, 2019).

Therefore, understanding how to pass on the value of national culture, reforming and innovating the teaching methods of vocational art courses, and better integrating regional cultural skills into vocational art education has profound research significance.

2.3 Teachers, Students, Inheritors and the Integration of Ethnic Skills into Higher Art Education

Culture is the way of the road, and culture is the way of the people. Education is the life mechanism of culture, and the inheritance of national culture requires teachers' cultural self-awareness. Teachers' cultural self-awareness necessitates that they value their own culture, understand multiculturalism, and accurately perceive their role in preserving national culture (Lu et al., 2010). In education and teaching in vocational schools, teachers should be the guide and facilitator of students' development, the organizer and regulator of the teaching process, and the reflector and creator of teaching activities (Huang, 2006). Teachers' beliefs and attitudes toward teaching and learning in specific subject areas in higher education serve as indicators of classroom practices in these areas (Grauer, 1998). Strengthening the reform of vocational education has the potential to help promote the transmission of ethnic skills in vocational schools.

Teachers are the leaders and the mainstay of instructional reform. Their attitudes towards the pressure and challenges brought by the reform are important (Xia, 2007). Li (2023) conducted a research on 224 teachers, and the results show that: there is a large gap between the implementation of reform by the teachers and the policies promoting reform; teachers ignored the academic value of the teaching reform, and did not hold the teaching reform in the same regard as scientific research; the teachers have a general cognitive bias on teaching reform; teachers' awareness and willingness to participate in teaching reform is low due to the restriction place by college policies and their interests (Li, 2023). With the development of college education, art teachers should deeply excavate and utilize the regional cultural skills as an educational resource and when possible integrate them into art teaching, innovating and improving the content of art teaching, enabling students to experience and feel the excellent regional/ethnic culture, form a good sense of innovative art, and promote the inheritance and development of China's national culture (Yang, 2023). Effective teaching promotes the integration of ethnic skills into vocational art education.

China's intangible cultural heritage occupies a pivotal position in the whole nation. Strengthening the protection of China's intangible cultural heritage and

promoting its continued development are important means and necessary choices to enhance cultural confidence and establish a strong cultural identity (Zhi et al., 2022). Young students are both possessors and practitioners of cultural confidence. It is essential to foster cultural self-confidence and take conscious responsibility for safeguarding the country's cultural sovereignty. Vocational colleges rely on the unique advantage of inheriting regional skills, so that the unique charm and excellent quality of regional skills can enter the students' vision, penetrate their hearts, and be integrated into their bloodstream, so that the students can radiate the light of Chinese culture from the inside out (Chen, 2021).

College students are the leading actors in China's implementation of innovation-driven development and the promotion of mass entrepreneurship. College students are also the inheritors of China's regional crafts and national culture. It is incumbent upon vocational education to incorporate regional specialty products, crafts, and culture into modern vocational education training, thereby cultivating mastery of skills and becoming the inheritors of an intangible cultural heritage (Hu et al., 2016).

However, the existing teaching methods in art courses rely on traditional teaching modes, such as laboratory drawing and imitation studies, which have neglected the individual differences and learning needs of students (Li, 2018). In addition, a small number of teachers still use teacher-centered teaching methods, neglecting the students' subject position and the interaction between students and teachers. Modern educational concepts advocate for a more student-oriented approach to teaching, emphasizing teacher guidance and student participation to stimulate students' interest and motivation (Lou, 2023). Jin Xuguang emphasizes the importance of enabling students to gain a profound understanding of the role of college art in the transmission of ethnic culture. In this way, the significance of ethnic culture inheritance can be reflected in art teaching itself (Jin, 2014).

The inheritor, as the primary conduit of skills transmission, plays a special role in the continuation of national culture and vernacular skills (Wang et al., 2014). Sun Jiazheng, former Minister of Culture, once said, "An important feature of intangible cultural heritage is its living nature, which is carried by people and passed down from generation to generation. However, with the development of society and the economy, the traditional mode of inheritance does not effectively promote ethnic skills.

New ideas and approaches should be adopted to effectively implement the training of successors. The development of ethnic skills should be promoted in all walks of life, including colleges and universities, to achieve a mutually beneficial and win-win effect (Chen, 2015). Integrating traditional Chinese skills into campus education has become a necessary means to preserve these cultural skills, thereby becoming another form of inheritance and development of these skills (Liang, 2009).

The inheritors are the important bearers and transmitters of intangible cultural heritage. They master and carry the knowledge, demonstrating the exquisite skills of intangible cultural heritage, and are both the living treasury of intangible cultural heritage and the representative figures of intangible cultural heritage passed down from one generation to the next (Hai, 2007). The inheritors will be an important bridge for ethnic skills to enter the colleges.

Liu Qiuya discusses the cooperation between inheritors and colleges. Suggesting that vocational colleges should take into account their own reality and school conditions, the example is given of hiring or inviting Huishui Buyi maple dyeing inheritors to teach and advocate in schools, coordinate with art teachers on campus, and explore how to pass on and innovate regional skills. The establishment of a master's studio ensured the professionalism of Buyei maple incense dyeing in the context of vocational art teaching practice. It expanded its influence among the new generation of college students (Liu, 2022). Strengthening the connection between inheritors and vocational colleges is a crucial aspect of integrating ethnic skills inheritance into colleges.

2.4 Theoretical Understanding, Practical Ability, Creative Development and Integration of Ethnic Skills into Higher Vocational Art Education

Mr. Huang Yanpei, a pioneer of vocational education in China, proposed the principle of "using hand and brain together, doing and learning together, theory and practice in parallel, knowledge and skills" as early as the 1920s (Zheng et al., 2008). However, many vocational colleges have not given enough attention to teaching methods. Therefore, it is of practical significance to explore the pedagogy of vocational

education for integrating ethnic skills into teaching practices in vocational art education. In terms of pedagogy, integrating ethnic skills into vocational art education involves several key factors, including theoretical understanding, practical ability, and innovative development.

According to Paul Kirschner, the basic knowledge required of a good teacher includes cognitive psychology, the working principles of the brain, and educational questions such as "how people learn". He argues that it is more important for teachers to know the "why" than the "how," because they often need to make judgments in teaching. For example, why do certain teaching styles work for novice learners but not for expert learners? Why are the effects of teaching in certain contexts reversed? To understand these phenomena and make accurate judgments about them, teachers must master the question of "how people learn" (Cai et al., 2021).

For vocational colleges to quickly improve the practical teaching level of art students, a change in teaching understanding is necessary. Although traditional teaching methods have merit, many outdated practices are no longer suitable for the development of modern education. The practical reality of traditional teaching concepts is that they have a constraining effect on the smooth development of modern teaching. By selecting and continuing useful ideas, removing inappropriate teaching methods, and combining modern teaching concepts with practical skills training, vocational colleges can be effectively developed. The cultivation of practical abilities in art education leads to greater insight and better outcomes (Du, 2012).

In the process of reform and development of vocational colleges, it is necessary to enhance students' ability to innovate, adopt scientific teaching practices, strengthen innovation in teaching methods, and continually develop students' core qualities. The cultivation of students' ability to innovate is of great significance to the development of students in vocational colleges. It serves as the necessary basis for producing high-quality graduates, thereby comprehensively enhancing the quality of training. This analysis of reforming teaching methods in vocational colleges to cultivate students' ability to innovate is crucial (Shao, 2022).

The innovation in teaching methods in vocational education is reflected not only in the improvement and benefits to individuals, but also in the selection and application of effective teaching strategies in vocational education. The manifestation

of this innovation should be the combination of diversity and comprehensiveness. The diversity of teaching methods is not only to adapt to different educational content, but also to make targeted choices according to the characteristics of different educational objects, in order to cater to the unique needs of each student and promote the development of their personality. Emphasizing the comprehensive application of multiple teaching methods aims to transform traditional teaching strategies and make them conducive to cultivating the talents needed in the new economic era (Lu, 2010).

2.5 Summary

Based on the above literature review, the current study identified the following gaps:

1. Teachers, Students, Inheritors, and Ethnic Skills Integration into the Teaching of Vocational Art Education

The integration of ethnic skills into vocational art education is necessary. We need to conduct a more detailed study of teachers, students, and inheritors, especially at present, when the inheritance of ethnic skills is facing a difficult situation. Despite the extensive literature that highlights the importance of ethnic skills, a significant gap remains in addressing the challenge of promoting and preserving these skills. This study provides an in-depth investigation into how teachers, students, and inheritors can positively impact the integration of ethnic skills into vocational art education.

2. The methodology of pedagogy in the integration of ethnic skills into vocational art education

Existing literature suggests that teaching methods promote effective instructional design and ensure teaching effectiveness. Theoretical understanding, practical ability, and innovative development must be combined to promote the better integration of ethnic skills into the teaching of vocational art education, a concept that warrants further exploration.

These studies provide theoretical advances and empirical insights to fill the gap in the existing literature on integrating ethnic skills into teaching practices in vocational art education.

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the relationship between teachers, students, inheritors, pedagogy, and the integration of ethnic skills into the teaching and learning of art education in China. The chapter outlines the mixed-methods research approach, data collection methods, and analysis techniques. It ensures the reliability and validity of the research findings. It provides a comprehensive understanding of integrating ethnic skills into vocational art education.

3.1 Research Design

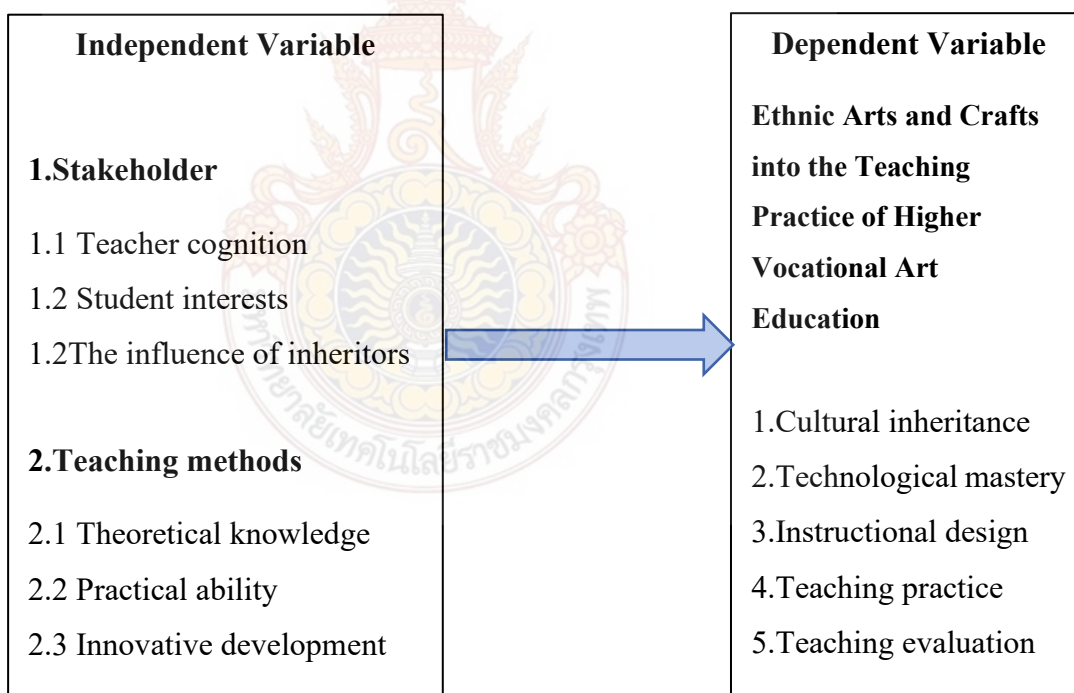


Figure 3.1 Qualitative data collection and Quantitative Data Selection

Taking teachers and students from five Guizhou vocational colleges and various types of ethnic skills inheritors in Guizhou as research subjects, this study adopts a mixed research methodology to collect data on the integration of ethnic skills

into the teaching and learning of vocational art education in China, first, quantitative data collection, and second, qualitative data collection.

In the quantitative data collection stage, a structured questionnaire was distributed to 400 teachers and students from five vocational colleges and universities in Guizhou. Through the questionnaire, the teachers' and students' perceptions of integrating ethnic skills into vocational art education in China were gathered.

In the qualitative collection phase of this study, semi-structured interviews were conducted with several ethnic skills inheritors in Guizhou to provide a deeper and more detailed understanding of the integration of ethnic skills into the teaching of fine arts education in China. Presenting inheritors' different understandings of the integration of ethnic skills into teaching through qualitative methods

The mixed-mode research methodology provides a more comprehensive description of the intricate relationship between teachers, students, inheritors, pedagogies, and the integration of ethnic arts into Chinese vocational art education. In addition to exploring the specific problems and challenges facing the integration of ethnic arts into vocational art education,

3.2 Samples and Sample Size

3.2.1 Population

The research population of this study consisted of teachers and students in vocational colleges in Guizhou, as well as various ethnic art inheritors in the province. The research subjects came from various groups in Guizhou, sharing their own experiences and unique insights into integrating ethnic skills into vocational art education and teaching. There are 25 teachers, 20,000 students, and 5 inheritors.

To answer research questions 1 and 2, the researchers selected five ethnic skills inheritors in Guizhou Province. To answer research questions 2 and 3, the researchers selected a sample population of teachers and students from five vocational colleges in Guizhou.

3.2.2 Samples

Krejcie & Morgan (1970) were used in this study. In 1970, Krejcie & Morgan (1970) created a direct reference table to determine the appropriate sample size

for any population size.

Table 3.1 Table for Determining the Sample Size of a Finite Population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381

According to the table above, approximately 196 teachers and students can be selected as samples for this paper, representing teachers and students of art-related majors in higher vocational education in Guizhou. According to the teacher-student ratio of 1:18, a key monitoring index for the conditions of vocational institutions in the Implementation Program of Vocational Education Achievement Project, based on a sample size of 400, the number of teachers and students who received the

questionnaires was determined to be 11 and 185, respectively. To make the sample of the research more general, the researcher increased the number of questionnaires distributed to 400, comprising 22 teachers and 378 students. By increasing the sample size and scope of the survey, more opinions and feedback from participants with diverse backgrounds and characteristics were obtained, thereby improving the reliability and applicability of the research findings.

Table 3.2 Sample Table Presents the Sample Size Who Are Teachers, Students and Inheritors

Vocational Colleges	Teacher	Student	Inheritor
Guizhou Industry Polytechnic College	6	78	
Tongren Polytechnic College	4	75	
Qiannan Polytechnic for Nationalities	4	75	
Qiandongnan Nationalities Polytechnic	4	75	
Southwest Guizhou Vocational Technical College for Nationalities	4	75	
TOTAL	22	378	5

The sample population in Table 3.2 needs to meet the following conditions:

1. Teachers

This study selected 22 teachers, representing the group of teachers in Guizhou's vocational colleges, to study Objectives 2 and 3. In the selection of teachers in Guizhou's vocational colleges, it was important to give due consideration to the fact that they are engaged in work related to the teaching of vocational art education, have a bachelor's degree or higher, possess at least five years of work experience, and understand Guizhou's ethnic arts.

2. Students

This study selected 378 students to represent the student population of vocational colleges in Guizhou, in accordance with Research Objective 3. When selecting students from Guizhou's vocational colleges, it was necessary to consider that they are students majoring in fine arts-related fields at Guizhou's vocational colleges.

3. Inheritors

This study selected five different categories of ethnic skills inheritors in Guizhou, with research objectives 1 and 2. In selecting ethnic skills inheritors in Guizhou, it was determined that the inheritors must have been engaged in ethnic arts for more than 10 years, hold certificates or have studios issued by official authorities, and have experience in training these skills.

3.3 Data Collection

3.3.1 Quantitative Data Analysis

Data were collected using Questionstar online survey software. The questionnaire consisted of two parts; the first part included demographic questions, such as gender, age, status, education level, and ethnicity. The second part consisted of 30 questions on "Practical Research on the Integration of Ethnic Skills into the Teaching and Learning of Art Education in Vocational Schools". See Appendix A. Data was analyzed using the SPSS tool. The tools used ensured the confidentiality and privacy of the participants. The statistical data were analyzed for frequency, percentage, mean (\bar{X}), and standard deviation (S.D.).

3.3.2 Qualitative Data Analysis

Based on the findings of the literature study, a semi-structured interview was designed to explore the research topic and conducted face-to-face with respondents. The interviews provided qualitative insights that were used to supplement the quantitative data collected by the questionnaire.

3.4 Research Instrument

3.4.1 Quantitative Research Tools

The questionnaire was designed based on relevant literature and research objectives. The questionnaire was tested to ensure clarity and comprehensibility. The questionnaire was in two parts:

Part I: Demographic factors

This part consisted of 5 closed-ended questions. This basic information provided insight into the background characteristics of the sample.

Part II: A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education

The Likert (1932) scale was used, comprising five areas with six questions each, totaling 30 questions.

1. Cultural inheritance
2. Skill mastery
3. Teaching design
4. Teaching practice
5. Teaching Evaluation

3.4.2 Qualitative Research Tool

The qualitative research tool employed was a guided interview, conducted face-to-face, with online interviews using Tencent conference and Zoom in special cases. The focus was on ethnic skill inheritors, and a total of 10 semi-structured, open-ended questions were designed to understand the views of different skill inheritors in Guizhou on the difficulties faced in inheriting ethnic skills, as well as the level of integration of ethnic skills into vocational art education.

3.5 Content Validity and Reliability

3.5.1 Content Validity

A panel of research experts reviewed this questionnaire to ensure content validity.

1. The process of developing the questionnaire for research on the integration of ethnic skills into the teaching practice of vocational art education.
2. The concepts and developmental process related to the integration of ethnic skills into the teaching practice of vocational art education.
3. The drafting of the questionnaire: level 5 Likert (1932) rating scale (Likert, 1938), strongly disagree, disagree, uncertain, agree, strongly agree, with 30 questions.

4. Questionnaire validated by the consultant.
5. Questionnaire modified according to suggestions.
6. Questionnaire validated by 3 experts.
7. Questionnaire modified according to suggestions.
8. Data collection.

Three experts considered the questionnaire.

Data analysis

The data were analyzed, and the rating was +1, indicating that it "meets the definition." The rating is 0. "Uncertain it meets the definition." The rating is -1. "Definition violated." Find IOC (Index Objective Conformance). A standard index of content consistency of 0.5 or greater is considered appropriate for use in research.

3.5.2 Reliability

To assess the reliability of this study, a pre-questionnaire test was conducted on 40 eligible participants. The purpose of this pretest was to assess participants' understanding of the problem and measure internal consistency using Cronbach's alpha coefficient (α). A value of 0.7 or higher was considered acceptable for the internal consistency of the questionnaire.

3.6 Data Analysis

3.6.1 Descriptive Statistics

Using descriptive statistics, we analyzed the demographic characteristics of the respondents, including their gender, age, education level, identity, and ethnicity, using frequency and percentage. The researchers standardized the interval during the analysis phase using the following formula:

$$\begin{aligned}
 N \text{ (Width of the range)} &= \frac{\text{Maximum} - \text{Minimum}}{\text{Level}} \\
 &= \frac{5-1}{5} \\
 &= 0.8
 \end{aligned}$$

Table 3.3 The 5-point Likert Scale on Level of Agreement (Vagias, 2006)

Likert-Scale Description	Likert-Scale	Likert-Scale interval
Strongly disagree	1	1.00-1.80
Disagree	2	1.81-2.60
Neutral/Uncertain	3	2.61-3.40
Agree	4	3.41-4.20
Strongly agree	5	4.21-5.00

3.6.2 Inferential Statistics

Inferential statistics were used to test hypotheses at the 0.05 level of statistical significance. The analysis assessed the relationship between the dependent and independent variables in accordance with the hypotheses.

Hypothesis 1: Stakeholders' perceptions (teachers, students, and ethnic skills inheritors) significantly influence the integration of ethnic skills into fine arts education in Guizhou's vocational institutions. Exploratory factor analysis, correlation factor analysis, and regression analysis were used to test the hypotheses.

Hypothesis 2: Pedagogy-based theoretical knowledge, practical ability, and innovative development significantly increase the degree of integrating ethnic skills into art education in Guizhou's vocational colleges. Correlation factor analysis and regression analysis were used to test the hypothesis.

3.7 Ethical Considerations

Guizhou is a multi-ethnic province, in which minority populations account for 39% of the total population; among these, the Miao in Guizhou are the largest. The folk culture of the Miao is vibrant, and the batik and embroidery techniques of the Miao have profound cultural significance and distinctive artistic styles.

The ethnic arts in this study focus on Miao embroidery and silverwork. It has ethnic specificity. This study is based on teachers and students from five vocational colleges and universities in Guizhou Province. It contains a small number of Miao and non-Miao ethnic groups, including both Miao and non-Miao minority ethnic groups.

3.8 Methodological Limitations

3.8.1 Limitations of the Research Methodology

Although this study employed a combination of qualitative and quantitative research methods to provide diverse perspectives, it has limitations. The quantitative data obtained from the questionnaires do not capture the subtle biases of individual students, and the research data collected from the interviews lack representativeness and generalizability due to the vastness of the country.

3.8.2 Limitations of the Research Theory

This study examines the application of theoretical understanding, practical ability, and creative development in pedagogy as it relates to the integration of ethnic skills into the teaching practice of art education, while also considering the perspectives of educational theories that do not focus on the arts.

3.8.3 Geographical Limitations

The sampling for this study was conducted in Guizhou Province, a western region of China that is underdeveloped. Although it provides an in-depth look at this region, the findings are not necessarily applicable to other parts of China.

3.9 Summary

In this chapter, a mixed research method was employed to conduct a questionnaire survey of 400 teachers and students from five vocational colleges in Guizhou. A comprehensive analysis of the current integration of ethnic skills into vocational art education was carried out through structured data collection. At the same time, semi-structured interviews were conducted with various groups of inheritors in Guizhou, and the problems and challenges associated with integrating ethnic skills into vocational art education were discussed in depth.

CHAPTER IV

ANALYSIS RESULT

This chapter presents the results, which include an explanation of how the data were collected, the validation tests, and the reliability tests of the instruments used for the measurements. Quantitative analysis of the data, employing descriptive statistics to elucidate the perceptions of teachers and students in art-related majors within educational institutions undergoing the integration of ethnic skills, the mastery of skills, instructional design, teaching practices, and the evaluation of teaching in the context of integrating ethnic skills. Finally, the results of the interviews in the qualitative study were recorded.

4.1 Demographics of Respondents

Table 4.1 Demographic Data of the Respondents

Population Problem	Options	Frequency	Percent
Gender	Male	223	55.75
	Female	177	44.25
Age	18-25 years old	378	94.50
	26-33 years old	5	1.25
	34-41 years old	15	3.75
	42 years old or above	2	0.50
Identity	Teacher	22	5.50
	Student	378	94.50
Educational Level	Below undergraduate level	378	94.50
	graduate	8	2.00
	postgraduate	14	3.50
Nation	The Han nationality	236	59.00
	Minority nationality	164	41.00
Total		400	100.0

The majority of the respondents were male (55.75%), the largest age group

was 18-25 years old (94.50%), the respondents were predominantly students of higher education institutions (94.50%), with students in a bachelor's degree in education (94.50%), and the majority of the respondents were of Han Chinese ethnicity (59.00%).

Part 1: What is the relationship between teachers, students, and inheritors of ethnic arts on the integration of ethnic arts into art education and teaching in Guizhou's vocational colleges, and how does this affect teaching practice?

Part 2: How do pedagogy-based theoretical understandings, practical ability, and innovative development contribute to the integration of ethnic craft skills into art education in Guizhou's vocational colleges, and how does this contribute to the realization of educational goals?

4.2 Descriptive Statistics

Descriptive statistics using the Likert scale, mean value, standard deviation, skewness, and kurtosis, to assess the basic level of topics in the scale and the distribution of data.

Table 4.2 Descriptive Statistics

Variable	Question	Mean Value (x)	Standard Deviation (S.D.)	Kurtosis	Skewness	Coefficient of Variation (CV)
1 Cultural inheritance under the integration of ethnic skills	1. You are interested in regional culture	4.01	0.74	0.42	-0.45	18.57%
	2. Students read books about ethnic culture	3.86	0.70	-0.20	-0.03	18.02%
	3. Professional teachers know ethnic culture	3.91	0.66	0.23	-0.16	16.97%
	4. There are inheritors in the campus studio or off-campus training base	3.91	0.73	1.03	-0.50	18.54%
	5. The current policy attaches importance to the inheritance of ethnic culture	3.95	0.68	-0.42	-0.09	17.15%
	6. You can accept the integration of culture into the vocational arts-	3.90	0.71	-0.20	-0.20	18.11%

Variable	Question	Mean Value (x)	Standard Deviation (S.D.)	Kurtosis	Skewness	Coefficient of Variation (CV)
related courses						
2. The mastery of skills through the integration of regional skills	7. You understand ethnic art	4.10	0.66	0.61	-0.38	16.04%
	8. Students have the will to learn ethnic skills	4.16	0.68	0.25	-0.40	16.22%
	9. Professional teachers are willing to participate in ethnic skills-related competitions	4.10	0.65	0.46	-0.32	15.95%
	10. The school has held lectures on ethnic skills given by inheritors	4.06	0.63	-0.30	-0.11	15.63%
	11. The propaganda and promotion of ethnic skills are widespread	4.13	0.68	0.12	-0.36	16.56%
	12. The integration of ethnic skills into relevant courses helps to cultivate national self-confidence	3.96	0.72	-0.04	-0.34	18.24%
3. Teaching design under the integration of ethnic skills	13. You have confidence in the integration of ethnic skills into the curriculum	3.94	0.71	0.75	-0.42	18.01%
	14. Students are interested in integrating ethnic skills into relevant courses	3.92	0.71	0.28	-0.31	18.04%
	15. Professional teachers are willing to explain ethnic skills in relevant courses	3.87	0.75	0.77	-0.46	19.33%
	16. The inheritance experience shared by inheritors is of great significance to teaching design	3.85	0.71	0.45	-0.27	18.52%
	17. Current policies encourage ethnic	3.83	0.72	0.30	-0.22	18.83%

Variable	Question	Mean Value (x)	Standard Deviation (S.D.)	Kurtosis	Skewness	Coefficient of Variation (CV)
4. The teaching practice under the integration of ethnic skills	heritage to be incorporated into relevant curricula					
	18. The teaching reform has promoted the integration of ethnic skills into the teaching design of relevant courses	3.82	0.71	0.03	-0.16	18.54%
	19. The teaching practice under the integration of ethnic skills is conducive to the innovation of teaching activities	3.87	0.68	-0.31	-0.07	17.56%
	20. Students like the teaching practice with the integration of ethnic skills	3.86	0.67	-0.45	0.02	17.31%
	21. Professional teachers believe that it is necessary to integrate ethnic skills into the teaching practice of relevant courses	3.97	0.64	-0.23	-0.09	16.17%
	22. Inheritors believe that teaching practice is the inevitable path to inheriting ethnic skills	3.97	0.63	-0.44	0.02	15.79%
	23. Current policies support the transfer of teaching practice results	3.89	0.60	-0.29	0.05	15.45%
	24. Integrating ethnic skills into teaching practice can improve students' hands-on ability	4.07	0.67	0.28	-0.29	16.35%
	25. The teaching results under the integration of ethnic skills increase the intuitiveness of teaching evaluation	4.05	0.61	-0.28	-0.02	14.99%
	26. The traditional way	4.06	0.71	-0.75	-0.17	17.52%
5. Teaching evaluation under the integration of ethnic						

Variable	Question	Mean Value (x)	Standard Deviation (S.D.)	Kurtosis	Skewness	Coefficient of Variation (CV)
skills	of teaching does not generate enthusiasm for learning					
	27. Teachers believe that the development of curriculum teaching under the integration of ethnic skills is more authentic	4.05	0.68	-0.68	-0.11	16.81%
	28. Inheritors pay more attention to the evaluation of achievements under the integration of ethnic skills	4.05	0.70	-0.67	-0.15	17.29%
	29. The current policy is conducive to pluralistic teaching evaluation	3.98	0.66	-0.52	-0.03	16.55%
	30. In the evaluation process, showing the ethnic artworks can stimulate students' interest	4.06	0.70	-0.96	-0.08	17.29%

The mean, standard deviation, skewness, and kurtosis were calculated. Whether the data follow a normal distribution has a significant impact on the subsequent analysis. Kline (1998) suggests that if the absolute value of skewness is less than 3 and the absolute value of kurtosis is less than 10, the sample is likely to follow a normal distribution. Both skewness and kurtosis satisfy the conditions of normal distribution. It indicates that the data collected from the questionnaire can be used for reliability and validity analysis.

4.3 Reliability Test

Reliability refers to the homogeneity of measurements and experimental results. Reliability in this study was measured using Cronbach's coefficient (Cronbach). It is the mean value, and the higher the coefficient, the higher the reliability of the

questionnaire, if the alpha coefficient is higher than 0.8, it indicates high reliability; if the alpha coefficient is between 0.7 and 0.8, it indicates good reliability; if the alpha coefficient is between 0.6 and 0.7, it indicates acceptable reliability; and if the alpha coefficient is less than 0.6, it indicates poor reliability.

Table 4.3 Cronbach's α Coefficient

Number of Terms	Sample Size	Cronbach α Coefficient
35	400	0.96

Table 4.3 shows that the Cronbach α coefficient is 0.961, indicating that this study is both accurate and reliable.

Table 4.4 Cronbach's α Coefficient of the Five Variables

Variable	Number of Items	Cronbach α Coefficient
1. Cultural inheritance under the integration of ethnic skills	6	0.92
2. Mastering skills through the integration of ethnic skills	6	0.94
3. Teaching design with the integration of ethnic skills	6	0.96
4. Teaching practice under the integration of ethnic skills	6	0.93
5. Teaching evaluation under the integration of ethnic skills	6	0.89

Table 4.4, the Cronbach α coefficient of the five variables of the questionnaire (cultural inheritance under the integration of ethnic skills, mastery of skills under the integration of ethnic skills, teaching design under the integration of ethnic skills, teaching practice under the integration of ethnic skills, and teaching evaluation under the integration of ethnic skills) is greater than 0.8, indicating that the data are characterized by high reliability.

4.4 Validity Analysis

Validity analysis is used to measure whether the items designed in the

questionnaire are reasonable and can accurately reflect the researcher's research purpose. Factor analysis (exploratory factor analysis) method was used in this study. KMO values and Bartlett sphere tests were used to learn if the selected index can be factor analyzed.

Table 4.5 KMO and Bartlett Tests

KMO Number		0.95
Bartlett sphericity test	Approximate chi-square	13931.36
	df	595
	p number	0.00

Table 4.5 indicates that the KMO value of the scale is 0.95, exceeding the threshold of 0.6, which meets the requirements for exploratory factor analysis. The Bartlett's spheroid test is less than 0.05, which means that the data are suitable for exploratory factor analysis.

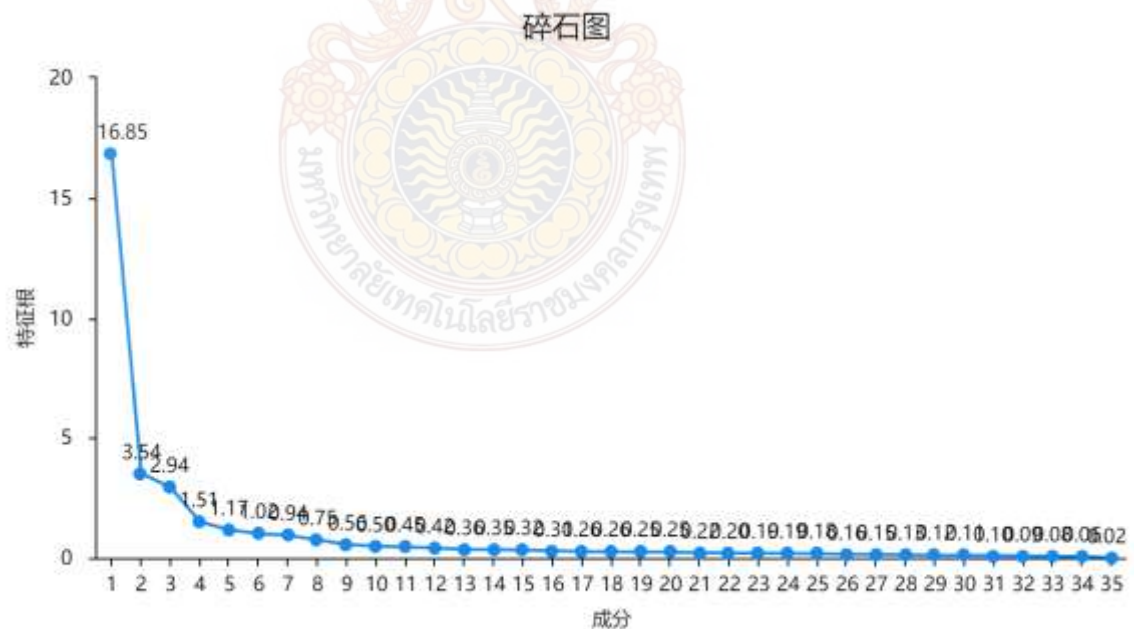


Figure 4.1 Main Factor Lithotripsy

Figure 4.1 is the lithotripsy diagram, from which you can see the number of factors to be extracted. It is drawn from "feature roots" and "component" data, with

feature roots arranged in descending order. As can be seen from the figure, the change of feature root value slows down after the 6th factor.

Table 4.6 Table of Variance

No.	Characteristic Root			Principal Component Extraction		
	Characteristic Root	Variance Interpretation Rate%	Accumulation %	Characteristic Root	Variance Interpretation Rate%	Accumulation %
1	16.85	48.14	48.14	16.85	48.14	48.14
2	3.54	10.10	58.24	3.54	10.10	58.24
3	2.94	8.39	66.64	2.94	8.39	66.64
4	1.51	4.32	70.96	1.51	4.32	70.96
5	1.17	3.34	74.29	1.17	3.34	74.29
6	1.02	2.91	77.20	1.02	2.91	77.20
7	0.94	2.69	79.89			
8	0.76	2.16	82.05			
9	0.56	1.60	83.64			
10	0.50	1.42	85.06			
11	0.45	1.30	86.36			
12	0.42	1.20	87.55			
13	0.36	1.03	88.58			
14	0.35	1.01	89.59			
15	0.32	0.93	90.51			
16	0.31	0.88	91.39			
17	0.26	0.75	92.14			
18	0.26	0.74	92.87			
19	0.25	0.72	93.59			
20	0.25	0.71	94.30			
21	0.22	0.62	94.92			
22	0.20	0.58	95.51			
23	0.19	0.56	96.06			
24	0.19	0.54	96.60			
25	0.18	0.51	97.11			
26	0.16	0.45	97.56			
27	0.15	0.42	97.98			
28	0.13	0.36	98.34			
29	0.12	0.33	98.67			
30	0.11	0.33	99.00			
31	0.10	0.29	99.29			
32	0.09	0.24	99.53			
33	0.08	0.23	99.76			
34	0.06	0.18	99.94			
35	0.02	0.06	100.00			

Table 4.6 presents the factor analysis results, indicating that a total of six

factors were extracted. The cumulative explanatory variation of these factors is 77.20%, exceeding the recommended standard for cumulative variation. In the field of social sciences, more than 60% represents a good level.

Table 4.7 Rotation Component Matrix

Variable	Question	Ingredient					
		1	2	3	4	5	6
1. Cultural inheritance under the integration of ethnic skills	1. You are interested in ethnic culture	0.36	0.34	0.07	0.11	0.59	0.04
	2. Students read books about ethnic culture	0.50	0.45	0.13	0.02	0.51	0.05
	3. Professional teachers know ethnic culture	0.54	0.51	0.12	0.01	0.48	0.02
	4. There are inheritors in the campus studio or off-campus training base	0.53	0.43	0.12	-0.05	0.53	0.12
	5. The current policy attaches importance to the inheritance of regional culture	0.55	0.50	0.14	0.01	0.38	0.10
	6. You can accept the regional culture into the vocational arts-related courses	0.57	0.45	0.12	0.01	0.26	-0.03
2. Skill mastery through the integration of ethnic skills	7. You understand ethnic arts	0.29	0.82	0.11	0.00	0.20	-0.02
	8. Students have the will to learn national skills	0.31	0.85	0.05	-0.01	0.09	-0.03
	9. Professional teachers are willing to participate in ethnic skills-related competitions	0.39	0.81	0.10	0.03	0.14	0.00
	10. The school has held lectures on ethnic art given by inheritors	0.45	0.75	0.10	0.01	0.11	0.06
	11. The marketing and promotion of ethnic skills are widespread	0.43	0.74	0.09	-0.00	0.06	0.03
	12. The integration of ethnic skills into relevant courses helps to cultivate national self-confidence	0.58	0.44	0.11	-0.06	0.21	0.20
3. Teaching design	13. You have confidence in the integration of	0.66	0.49	0.15	-0.01	0.27	0.15

Variable	Question	Ingredient					
		1	2	3	4	5	6
under the integration of ethnic skills	ethnic skills into the curriculum						
	14. Students are interested in integrating ethnic skills into relevant courses	0.71	0.42	0.12	0.01	0.19	0.14
	15. Professional teachers are willing to explain ethnic skills in relevant courses	0.79	0.29	0.12	-0.03	0.16	-0.01
	16. The inheritance experience shared by inheritors is of great significance to teaching design	0.84	0.31	0.12	0.02	0.14	-0.01
	17. Current policies encourage ethnic heritage to be incorporated into relevant curricula	0.87	0.27	0.14	0.03	0.13	-0.08
4. The teaching practice under the integration of ethnic skills	18. The teaching reform has promoted the integration of ethnic skills into the teaching design of relevant courses	0.88	0.26	0.12	0.03	0.12	-0.05
	19. The teaching practice under the integration of ethnic skills is conducive to the innovation of teaching activities	0.87	0.27	0.11	-0.0	0.07	0.00
	20. Students like the teaching practice with the integration of regional skills	0.81	0.35	0.15	-0.03	0.09	0.02
	21. Professional teachers believe that it is necessary to integrate ethnic skills into the teaching practice of relevant courses	0.72	0.53	0.12	-0.03	0.08	-0.01
	22. Inheritors believe that teaching practice is the inevitable path to inheriting ethnic skills	0.61	0.58	0.06	-0.05	-0.03	-0.01
	23. Current policies support the transfer of	0.48	0.61	0.02	-0.03	-0.1	0.02

Variable	Question	Ingredient					
		1	2	3	4	5	6
	teaching practice results						
5. Teaching evaluation under the integration of ethnic skills	24. Integrating ethnic skills into teaching practice can improve students' hands-on ability	0.53	0.57	0.09	0.17	-0.01	0.03
	25. The teaching results under the integration of ethnic skills increase the intuitiveness of teaching evaluation	0.53	0.68	0.11	-0.07	-0.10	-0.06
	26. Traditional teaching evaluation is not conducive to generating ongoing enthusiasm in students	0.08	0.11	0.84	-0.06	0.07	-0.04
	27. Teachers believe that the development in curriculum under the integration of ethnic skills is more accidental than authentic	0.12	0.11	0.88	-0.1	0.09	0
	28. Inheritors pay more attention to the evaluation of achievements under the integration of ethnic skills	0.13	0.08	0.91	-0.03	0.02	-0.01
	29. The current policy is conducive to pluralistic teaching evaluation	0.13	0.06	0.9	0.07	-0.05	0.02
	30. In the course evaluation process, increasing the display of their art stimulates students' interest	0.16	0.05	0.89	0.03	-0.00	0.01

Extraction method: principal component analysis.

Rotation method: Kaiser normalized maximum variance method.

The rotation has converged after 7 iterations.

As seen in Table 4.7, the factor loadings of the question items are greater than 0.5, implying that the amount of information on the research items can be extracted effectively.

4.5 Correlation Analysis

Correlation analysis was employed in this study, and SPSS was used to verify the correlation and closeness between the variables. If the absolute value of the correlation coefficient between two variables is closer to 1, the stronger the correlation between the two variables. In this study, a correlation coefficient lower than 0.3 indicates a weak or no correlation between the two variables. 0.3-0.6 is a moderately strong correlation, and 0.6 or more is a strong correlation. If the coefficient is positive, there is a positive correlation between the two variables; conversely, if the coefficient is negative, there is a negative correlation between them.

Table 4.8 Results of Correlation Test Between Relevant Variables

	Teacher Cognition	Student Interest	Inheritor Influence	Theoretical Understanding	Practical Ability	Innovative Development	Integration of National Skills into the Teaching Practice of Vocational Art Education
Teacher cognition	1						
Student interest	0.94**	1					
Inheritor influence	0.97**	0.91**	1				
Theoretical understanding	0.85**	0.87**	0.82**	1			
Practical ability	0.83**	0.84**	0.79**	0.68**	1		
Innovative development	0.83**	0.82**	0.83**	0.70**	0.61**	1	
Integration of ethnic skills	0.97**	0.94**	0.97**	0.83**	0.87**	0.81**	1

* $p < 0.05$ ** $p < 0.01$

4.5.1 Analysis Between Relevant Variables

Correlation analysis was used to investigate the correlation between teachers' perceptions, students' interests, heirs' influence, theoretical knowledge, practical abilities, and innovative development, as well as the integration of ethnic skills into the teaching practice of vocational art education. Pearson's correlation coefficients were used to indicate the strength of the correlation.

Table 4 -8 showed strong positive correlations between teachers' perceptions, student interests, legacy impact, and the integration of ethnic skills into vocational art education. The highest correlation was found between ethnic skill integration and teachers' perceptions ($r = 0.97^{**}$), followed by legacy impact ($r = 0.97^{**}$) and student interests ($r = 0.94^{**}$), highlighting the significant role of these factors in shaping effective teaching practices.

There is a significant correlation between teachers' understanding, students' interest, inheritor's influence, theoretical understanding, practical ability, innovative development and the integration of ethnic skills into the teaching practice of art education in vocational education, and the correlation coefficients are 0.97, 0.94, 0.97, 0.83, 0.87, 0.81, all greater than 0, there is a positive correlation. Thus, it can be concluded that H1 and H2 have a positive correlation with the integration of ethnic skills into the teaching practice of vocational art education.

4.5.2 Analysis Between Teachers' Perception, Students' Interest, Inheritors' Influence and Variables

Correlation analysis was used to investigate the correlation between teachers' perception, students' interest, and heirs' influence in H1 and the five items of cultural transmission, skill mastery, instructional design, instructional practice, and evaluation of teaching and learning under the integration of ethnic skills, using Pearson's correlation coefficients to indicate the strength of the correlation.

Table 4.9 Results of Correlation Test between Teachers' Perception, Students' Interest, Inheritor's Influence and Related Variables

	Teacher Understanding	Student Interest	Inheritor Influence	Cultural Heritage	Skill Mastery	Instructional Design	Teaching Practices	Teaching Evaluation and Learning with the Integration of Ethnic Skills
Teacher cognition	1							
Student interest	0.94**	1						
Inheritor influence	0.97**	0.91**	1					

	Teacher Understanding	Student Interest	Inheritor Influence	Cultural Heritage	Skill Mastery	Instructional Design	Teaching Practices	Teaching Evaluation and Learning with the Integration of Ethnic Skills
Cultural heritage	0.88**	0.88**	0.88**	1				
Skill mastery	0.88**	0.89**	0.86**	0.77**	1			
Instructional Design	0.90**	0.92**	0.88**	0.80**	0.99**	1		
Teaching Practices	0.89**	0.89**	0.90**	0.80**	0.81**	0.84**	1	
Teaching Evaluation and Learning	0.58**	0.41**	0.61**	0.38**	0.38**	0.39**	0.405**	1

* $p < 0.05$ ** $p < 0.01$

Table 4.9 showed strong positive correlations between teachers' perceptions, students' interests, and legacy impact with various aspects of ethnic skill integration in teaching. The highest correlations are between teachers' perceptions and student interests ($r = 0.94^{**}$), as well as between teachers' perceptions and legacy impact ($r = 0.97^{**}$), indicating that teachers' attitudes have a significant influence on both student engagement and cultural heritage integration.

The teachers' perceptions of cultural heritage skills integration, skill mastery, instructional design, instructional practice, and instructional evaluation of ethnic skills integration show significance, with coefficients of 0.88, 0.88, 0.90, 0.89, and 0.58, respectively, all greater than 0. There is a positive correlation between teachers' perceptions and the five items of cultural heritage. The significant positive correlations with teachers' perceptions were, in descending order, instructional design, instructional practice, cultural heritage, skill mastery, and instructional evaluation for regional skill integration.

The correlation coefficients between students' interest and cultural heritage, skill mastery, instructional design, instructional practice, and instructional evaluation of ethnic skill integration are all significant, 0.88, 0.89, 0.92, 0.89, and 0.41, respectively, all greater than 0, there is a positive correlation between students' interest and the five items of cultural heritage. The significant positive correlations with students' interest were, in order of importance, instructional design, skill mastery,

instructional practice, cultural heritage, and instructional evaluation for the integration of ethnic skills.

There was a positive correlation between the influence of the inheritor and the five items of cultural transmission of ethnic skills integration, skill mastery, instructional design, instructional practice, and instructional evaluation. The correlation coefficients were 0.88, 0.86, 0.88, 0.90, and 0.61, respectively. The significant positive correlations with the influence of the inheritors were, in order, teaching practice, teaching design, cultural heritage, skill mastery with the integration of ethnic skills, and teaching evaluation.

4.5.3 Analysis between Teaching Methods and Related Variables

Correlation analysis was employed to examine the relationship between theoretical understanding, practical ability, and innovative development in H2, as well as the five items of cultural inheritance, which were integrated with ethnic skills, skill mastery, instructional design, instructional practice, and instructional evaluation, respectively. Pearson's correlation coefficient was used to indicate the strength of the correlation.

Table 4.10 Results of Correlation Test between Teaching Methods and Related Variables

	Theoretical Understanding	Practical Ability	Innovative Development	Cultural Heritage	Skill Mastery	Instructional Design	Teaching Practices	Evaluation of Teaching and Learning
Theoretical Understanding	1							
Practical ability	0.68**	1						
Innovative development	0.70**	0.61**	1					
Cultural heritage	0.93**	0.72**	0.75**	1				
Skill mastery	0.74**	0.96**	0.69**	0.77**	1			
Instructional Design	0.76**	0.92**	0.73**	0.80**	0.99**	1		
Teaching Practices	0.74**	0.74**	0.88**	0.80**	0.81**	0.84**	1	
Evaluation of Teaching and Learning	0.36**	0.34**	0.38**	0.38**	0.38**	0.39**	0.41**	1

Table 4.10 shows a strong positive relationship between various teaching methods and variables, with significant correlations among theoretical understanding, practical ability, and skill mastery. The strongest correlations were between skill mastery and teaching design ($r = 0.987^{**}$), as well as between practical ability and skill mastery ($r = 0.957^{**}$), indicating that integrating ethnic skills enhances both teaching effectiveness and student competency.

The correlation between theoretical understanding and the variables of cultural heritage, skill mastery, instructional design, instructional practice, and instructional evaluation shows significance, with correlations of 0.93, 0.74, 0.76, 0.74, and 0.36, all of which are greater than 0. There is a positive correlation between theoretical cognition and the five items. The significant positive correlations with theoretical perceptions were, in descending order, cultural heritage, instructional design, instructional practice, skill mastery, and instructional evaluation in the context of ethnic skills integration.

The correlation coefficients between practical ability and the five items of cultural heritage, skill mastery, instructional design, instructional practice, and instructional evaluation with ethnic skill integration are all significant, with correlation coefficients of 0.72, 0.96, 0.92, 0.74, 0.34, all greater than 0, therefore a positive correlation between the practical skills and the five items. Significant positive correlations were found with practical skills in the following areas: skill mastery, instructional design, instructional practice, cultural heritage, and instructional evaluation, in that order, in the integration of ethnic skills.

The correlation coefficients between innovation development and cultural heritage, skills mastery, instructional design, instructional practice, and instructional evaluation of ethnic skills integration are all significant, with correlation coefficients of 0.75, 0.69, 0.73, 0.88, and 0.38, respectively, greater than 0, implying that innovative development is related to the cultural heritage of ethnic skills integration.

The significant positive correlations with innovation development were, in descending order, instructional practice, cultural heritage, instructional design, skill mastery, and instructional evaluation with integration of ethnic skills.

4.6 Regression Analysis

Regression analysis verifies the relationship between the views of stakeholders (teachers, students, and inheritors of ethnic skills) in question 2 and the theoretical understanding, practical ability, and innovative development based on teaching methods in question 3 regarding the integration of ethnic skills into art education in Guizhou vocational colleges.

The regression analysis in this study involves two models. The independent variables in Model 1 are teachers' understanding, inheritor's influence, and students' interest. In contrast, the independent variables in model 2 are theoretical understanding, practical ability, and innovative development, and the dependent variable in the model is the integration of ethnic skills into the teaching practice of vocational art education.

4.6.1 Regression Analysis, Teacher Perceptions, Student Interest, Inheritor Influence and Dependent Variables

Table 4.11 Results of Linear Regression Analysis between Teachers' Perceptions, Students' Interest, Inheritors' Influence and Dependent Variables (n=400)

	Non-standardized Coefficient		Standardized Coefficient	t	p
	B	Standard Error	Beta		
Constant	0.33	0.04	-	8.57	0.00**
Teacher understanding	0.28	0.04	0.30	6.32	0.00**
Student interest	0.19	0.03	0.23	7.50	0.00**
Inheritor influence	0.46	0.04	0.47	12.41	0.00**
R ²			0.96		
Adjust R ²			0.96		
F		F (3,396) =318.63, p=0.00			
D-W number			1.99		

Table 4.11 shows that all three independent variables—Teachers' Perceptions, Student Interests, and Legacy Impact—have significant positive relationships with the dependent variable, as indicated by their positive standardized coefficients (B) and highly significant p-values ($p < 0.000^{**}$). Among them, Legacy Impact has the most substantial effect (Beta = 0.474), followed by Teachers' perceptions (Beta = 0.299) and Student Interests (Beta = 0.225).

Dependent variable: the integration of ethnic craft skills into the teaching practice of vocational art education

* $p < 0.05$ ** $p < 0.01$

Teachers' perception, students' interest, and inheritor's influence are

independent variables, while ethnic skills integration into higher vocational art education is the dependent variable in the linear regression analysis, the formula: Ethnic skills integration into vocational art education teaching practice = $0.33 + \text{Teachers' perception } 0.28^* + \text{Student's interest } 0.19^* + \text{Inheritor's influence } 0.46^*$ The R-square value of the model was 0.96, which indicates teachers' cognition, students' interest, and inheritor's influence can explain 96.0% of the changes in the teaching practice of ethnic skills integration into vocational art education.

The F-test of the model ($F = 3181.63$, $p < 0.05$) indicates that, at the minimum, one of the teachers' understanding, students' interest, and inheritors' influence has an impact on the relationship between the integration of ethnic skills into the teaching practice of vocational art education.

The value of the regression coefficient for teachers' cognition was 0.28 ($t = 6.32$, $p < 0.01$), which supports H1a (Teachers' perception will have a significant positive influence on the integration of ethnic skills into the teaching practice of art education).

The regression coefficient of students' interest was 0.19 ($t=7.50$, $p=0.00<0.01$), accepting H1b (students' interest will have a significant positive influence on the integration of ethnic skills into the teaching practice of art education).

The regression coefficient value of the inheritor's influence was 0.46 ($t=12.41$, $p=0.00<0.01$), accepting H1c (the inheritor's influence will have a significant positive influence on the integration of ethnic skills into the teaching practice of vocational art education).

Summarizing the analysis, H1 (Teachers' perception, Students' interest, Inheritors' influence) had a significant positive influence on the integration of ethnic skills into the teaching practice of vocational art education.

4.6.2 Regression Analysis between Teaching Methods and Dependent Variables

Variables

Table 4.12 Results of Linear Regression Analysis between Teaching Methods and Dependent Variables (n=400)

	Non-standardized Coefficient		Standardized Coefficient	t	p
	B	Standard Error	Beta		
Constant	0.72	0.05	-	13.46	0.00**
Teacher understanding	0.22	0.02	0.28	11.81	0.00**
Student interest	0.38	0.02	0.49	22.80	0.00**
Inheritor influence	0.23	0.02	0.31	14.00	0.00**
R ²			0.91		
Adjust R ²			0.91		
F			F (3,396) =1313.01, p=0.00		
D-W number			2.00		

Table 4-12 presents the results of a linear regression analysis examining the relationship between teaching methods and the dependent variable: the integration of ethnic craft skills into the teaching practice of vocational art education.

Linear regression analysis was performed, with theoretical understanding, practical ability, and innovative development as independent variables, and ethnic skills integration as the dependent variable. Ethnic skills integration = 0.72 + theoretical understanding 0.22* + practical ability 0.38* + innovative development 0.23*,. The R-squared value of the model was 0.91, indicating that theoretical understanding, practical ability, and innovative development collectively accounted for 90.9% of the variation in the teaching practice of integrating ethnic skills into vocational art education. The F-test (F = 1313.01, p < 0.05) indicates that at least one of the theoretical understanding, practical ability, or innovative development had an impact on the integration of ethnic skills into the teaching practice of vocational art education. The regression coefficient value for theoretical understanding is 0.22 (t = 11.81, p < 0.01), which supports H2a (theoretical understanding will have a significant positive influence on the integration of ethnic skills into vocational art education teaching).

The regression coefficient value for practical ability was 0.38 (t = 22.80, p < 0.01), supporting H2b (practical ability will have a significant positive influence on the integration of ethnic skills into teaching practice in art education). The regression

coefficient for innovation development was 0.23 ($t = 14.00$, $p < 0.01$), supporting H2c (innovative development has a significant positive influence on the integration of ethnic skills into the teaching practice of vocational art education).

Summarizing the analysis, we can see that H2 (theoretical understanding, practical ability, innovative development) had a significant positive influence on the integration of ethnic skills into the teaching practice of vocational art education.

Part 3: What is the status of the integration of ethnic skills into the teaching practice of art education in Guizhou's vocational colleges? What are the challenges and opportunities brought by this integration?

4.7 Weight Analysis

Weight analysis was proposed by Johnson in 2000. The relative importance means that after considering the independent contribution of an independent variable on the dependent variable and the common contribution when combined with other independent variables, the greater the contribution ratio of the independent variable to the dependent variable (Johnson, 2004), the greater the contribution of the independent variable to the dependent variable.

4.7.1 Weight Calculation

Table 4.13 AHP Hierarchical Analysis Judgment Matrix

Mean Value	Item	Teacher Understanding	Student Interest	Inheritor Influence	Theoretical Understanding	Practical Ability	Innovative Development
3.975	Teacher understanding	1	1.01	1.00	1.02	0.96	1.03
3.948	Student interest	0.99	1	1	1.02	0.96	1.03
3.968	Inheritor influence	1	1.01	1	1.02	0.96	1.03
3.885	Theoretical cognition	0.98	0.98	0.98	1	0.94	1.01
4.122	Practical ability	1.04	1.04	1.04	1.06	1	1.07
3.845	Innovative development	0.97	0.97	0.97	0.99	0.93	1

Table 4.13: The AHP hierarchical analysis judgment matrix revealed a

comparison of six factors: Teachers' Perceptions, Student Interests, Legacy Impact, Theoretical Understanding, Practical Ability, and Innovative Development. It includes average values for each factor and their pairwise comparisons, showing relative importance and influence in a structured decision-making framework.

According to the AHP hierarchical analysis method, the weight is calculated by averaging the values of each analysis item. The average value of each item is used to create the judgment matrix, where a larger value indicates greater importance and a higher ranking. The weights were as follows: practical ability (4.12), the teacher's cognition (3.98), the influence of the inheritor (3.97), students' interest (3.95), theoretical understanding (3.89), and innovative development (3.85).

4.7.2 Consistency Test

The selection of evaluation indexes was determined after expert consultation and network search, resulting in a significant degree of subjectivity. This error cannot be eliminated, but instead constantly reduced, which also impacts the calculation of eigenvalues at a later stage. Therefore, it is necessary to perform the consistency test, which aims to minimize errors and enhance the accuracy of the results.

Table 4.14 Results of AHP Hierarchical Analysis

Item	Eigenvector	Weighted Value	Maximum Eigenvalue	CI Number
Teacher understanding	1.01	16.74%	6.00	0.00
Student interest	1.00	16.63%		
Inheritor influence	1.00	16.71%		
Theoretical understanding	0.98	16.36%		
Practical ability	1.04	17.36%		
Innovative development	0.97	16.20%		

The AHP hierarchical method was used to construct a 6-order judgment matrix for teachers' cognition, students' interest, inheritor's influence, theoretical cognition, practical ability, and innovative development (calculated using the sum-product method), and to analyze the corresponding weight values of the feature vectors. In addition, the maximum characteristic root (6.00) was calculated by combining the characteristic vectors. Then the CI value (0.00) is calculated by using the maximum

characteristic root value $[CI=(\text{maximum characteristic root}-n)/(n-1)]$, and the CI value was used in the consistency test as described below.

Table 4.15 Summary of Consistency Test Results

Maximum Characteristic Root	CI Number	RI Number	Consistency Test Results
6.00	0.00	1.26	Pass

4.8 Qualitative Data Analysis

4.8.1 Introduction to the Interviewee

The researchers conducted interviews with Guizhou ethnic skills inheritors to gain a deeper understanding of the specific problems facing the integration of Guizhou ethnic skills into vocational art education. We examined the relationship between teacher understanding, student interest, inheritor influence, teaching methods, and the integration of ethnic skills into vocational art education teaching from five perspectives: cultural inheritance, skill mastery, teaching design, teaching practice, and teaching evaluation. Different categories of inheritors represent different dimensions of cognitive concerns, and we visited five inheritors in Guizhou. The table below shows the data related to this theme.

Table 4.16 Summary of Interviewers of Ethnic Skill Inheritors in Guizhou

Number	Name of Interviewee	Work Unit	Inheritor Category	Work Experience
1	ZWW	A company	Hmong embroidery technique inheritor	24 years
2	PJ	B company	Inheritor of silver jewelry making techniques	15 years
3	ZTT	C company	Inheritors of traditional printing and dyeing techniques	20 years
4	WKM	D company	Maple Printing and Dyeing Heirloom	18 years
5	LZL	E company	Hmong embroidery representative inheritor	31 years

4.8.2 Interview Transcripts

At the beginning of the interview, the researcher introduces the interviewee and clearly explains the purpose of the interview, including a request for permission to take photographs of the interview process. The researcher also informed the interviewee of the confidentiality of the interview data, emphasizing that the interview transcripts were to be accessed only by the researcher and not by anyone else. The researcher created 10 semi-structured questions for the interviews, which were designed to examine the degree of control in the five areas of cultural heritage, skills mastery, instructional design, instructional practice, and instructional evaluation to establish the focus of ethnic skills integration into higher vocational art education teaching and the way to synthesize and consider the issues. The transcripts of the interviews with three of the five interviewees are presented as follows.

R: Do you think current policies emphasize ethnic culture? What do you think about the cultural heritage under the integration of ethnic skills?

PJ: *Valuing. Ethnic skills are not only the skills themselves, but also an expression of cultural identity. Through traditional skills, people can enhance their sense of identity and belonging to their own culture.*

WKM: *Attention. Ethnic skills and national culture are closely intertwined, and the transmission of ethnic skills is a crucial means of preserving the vitality of national culture, which not only preserves tradition but also infuses modern society with rich cultural connotations.*

ZTT: *I think great importance is attached to it, and in 2023, at the Ethnic Symposium, President Xi Jinping also proposed that continuing to promote cultural prosperity from a new starting point and building a cultural powerhouse is our new mission in the new era. Therefore, the current policy places great importance on ethnic culture. Ethnic culture is the foundation of ethnic skills, and ethnic skills are one of the carriers of ethnic culture.*

R: What do you think is the biggest challenge facing ethnic arts?

PJ: *Traditional skills are at risk of being marginalized. Young people are often more inclined to pursue modern lifestyles and are less interested in traditional skills, which can lead to difficulties in passing these skills on to future generations. Additionally, some traditional skills may be over-commercialized, resulting in the*

original cultural connotations and values being overlooked, which in turn affects their development and transmission.

WKM: *Ethnic skills require the accumulation of time and experience. The gradual decline of the older generation of skills inheritors and the lack of opportunities for young people to participate and learn have led to these skills facing loss.*

ZTT: *Difficulties in passing on the skills.*

R: Where do you see the solution to the dilemma?

PJ: *Raise awareness of ethnic arts and crafts and publicize their cultural connotations and values through the media, public exhibitions, and community activities. Encourage exchanges and cooperation between schools and organizations to increase young people's interest in ethnic performing arts through cultural festivals, competitions, and other activities. Strengthen the combination of traditional skills and modern design to create products with a contemporary feel and market potential to attract young consumers.*

WKM: *Encourage the older generation of skills inheritors to accept apprentices and pass on traditional skills through the master-apprentice relationship to maintain the original flavor of the skills.*

ZTT: *I think it is not enough to rely only on the inheritors. We should utilize colleges to attract young people through targeted courses, workshops, and practical activities. We should work together to pass on and promote the ethnic skills.*

R: What do you think is the current situation of Guizhou's vocational colleges in integrating ethnic skills in the teaching of art education?

PJ: *As a multi-ethnic province, Guizhou has a rich ethnic culture and unique ethnic skills. I think it is an inevitable process to integrate these ethnic skills into the teaching of art education in vocational colleges. Since I have had the opportunity to cooperate with vocational colleges for a long time, and I also have a studio, I think the current situation of integration is roughly as follows: some vocational colleges have already set up courses related to ethnic skills, and they have also integrated ethnic cultures and skills into the relevant art education courses. They have also begun to bring in teachers with backgrounds and experience in ethnic arts and crafts, or non-genetic inheritors, to teach in the schools; most often, we are invited to schools to provide training in ethnic arts and crafts to teachers.*

WKM: *I think the current situation of Guizhou's vocational colleges integrating ethnic skills into art education and teaching is very good, and many schools with courses related to ethnic skills are actively contacting us to build training rooms and carry out school-enterprise cooperation programs, and they also invite us to give lectures in their schools regularly, so that students can experience the charm of ethnic culture in practice.*

ZTT: *I think the status of integrating ethnic skills into art education in your state's institutions is better now than it was before, because teachers or students from vocational schools often contact us. Teachers primarily contact us for teacher training, while students mainly reach out to us for competitions and research opportunities. In the past few days, we have also been approached by students from Guizhou Light Industry Vocational and Technical College, who wish to participate in the 2024 Student Innovation and Entrepreneurship Competition and are interested in cooperating with us. This phenomenon is increasing with the implementation of favorable policies, and such training and collaborations have become more common in recent years.*

R: **What are some of the challenges and opportunities you see with this convergence?**

PJ: *I think the challenge of this integration is mainly the need for more teachers who master ethnic skills, teaching materials, and practical training sites, and some tertiary institutions may face a relative lack of teaching resources. In addition, in terms of teaching methods, it is essential to inherit and carry forward traditional skills authentically, while integrating modern reforms and innovations effectively. As for the opportunities brought by the integration, I think that based on the advantages of local ethnic cultural resources, we can do a good job in integrating ethnic skills into the teaching of art education in vocational colleges and universities, which will provide an opportunity for reform of art education in vocational colleges and universities. It will develop young people with ethnic skills backgrounds and thereby be better positioned in the job market, especially in today's society, where creative and cultural industries are booming.*

WKM: *I think the challenge is how to make ethnic skills break through the traditional way of inheritance and better promote the inheritance of ethnic skills on the platform of vocational colleges. In terms of opportunities, I believe the challenge lies*

in integrating modern aesthetics into ethnic arts through young people, thereby giving ethnic arts a new contemporary look and opening up new horizons for the ethnic arts market.

ZTT: *I think many challenges come with this integration. First of all, teachers will face challenges. Although they have certain professional skills, it will take some time for them to learn and become skilled in ethnic arts. In addition, schools will also face challenges, including teacher training, practical training conditions, and curriculum development, among others. The opportunities brought about by integration, I believe, are more about giving vitality and possibilities to ethnic skills, so that these skills can have a broader space to continue.*

R: What do you think are the strengths of colleges for ethnographic skills transmission?

PJ: *I think colleges have many advantages over institutions and enterprises, first of all, the advantage of personnel, which is known to all. Secondly, colleges can utilize their academic influence and social resources to promote ethnic arts and crafts by organizing exhibitions, lectures, art festivals, and other activities, thereby raising young people's awareness and interest in these arts and crafts.*

WKM: *I think that colleges have natural advantages for the inheritance of ethnic arts and crafts, such as teachers with rich qualifications, excellent young people from all over the world, modernized teaching facilities, sufficient research funds, and good communication platforms.*

ZTT: *There are many advantages for the inheritance of ethnic skills in colleges, such as academic advantages: colleges have research institutes and professional scholars, which can deeply excavate the history, characteristics, and value of ethnic skills and provide academic support for the inheritance of ethnic skills. Advantage in resources: colleges have rich teaching resources and teachers who can guide students in learning and inheriting ethnic skills. Advantage in teaching: Through systematic curriculum and teaching design, colleges can help students learn and master the techniques of ethnic skills.*

R: What do you think is the most important aspect of good instructional design with the integration of ethnic skills?

PJ: *I think the most important thing for a good instructional design under*

the integration of ethnic skills is to encourage students to develop their creativity in the process of learning ethnic skills, and to allow them to innovate and design personalized works based on their skills, which not only enhances the fun of learning, but also boosts students' self-confidence.

WKM: *I think it is most important to have an in-depth understanding of ethnic skills, including their history, cultural significance, regional characteristics, and traditions of skill transmission. This understanding enables the instructional design to convey the cultural connotations behind the skills more effectively, allowing young people to not only learn the skills themselves but also understand their importance.*

ZTT: *In the instructional design under the integration of ethnic skills, the most important thing is to respect and protect the ethnic cultural heritage, to pass on and carry forward the essence of ethnic skills, and at the same time, to combine modern teaching methods and technologies to enhance students' interest in learning.*

R: **Please share some of your experiences in passing on the teaching practices of ethnic skills.**

PJ: *I believe that the practice and self-identification of skills are very important in the practice of teaching heritage ethnic skills. For example, I will often share information about competitions with students, encourage them to participate, and utilize their initiative. This provides students with the motivation to continue practicing their skills and develop a sense of identity.*

WKM: *I think the most important thing in teaching the heritage of ethnic skills is not only the skills themselves, but also modern design concepts. For example, in my teaching, I do not always use traditional patterns for practice but also cater to modern aesthetics. Take a look at this piece of my work; it is a table flag that expresses the beauty of space by dyeing it in three different colors. Different perspectives present different spatial illusions. The multiple arrangements of the patterns give the work a modern feel, breaking the traditional impression of the artwork.*

ZTT: *First of all, I think it is very important to demonstrate the production process of ethnic skills and guide students to practice the process in the inheritance process. Let students learn intuitively and experience hands-on practice. Secondly, I like to share with students some of my experiences and stories about learning ethnic skills, including the difficulties and challenges I encountered during the learning*

process and how I overcame them, in order to inspire students' motivation and courage to learn. Finally, I also invite students to share the history, characteristics, and applications of ethnic skills to maintain a good interactive exchange.

R: What are your suggestions for evaluating teaching and learning with the integration of ethnic skills?

PJ: *I believe that in the evaluation of teaching and learning, a comprehensive evaluation should be adopted, focusing on both the students' in-student process performance, participation, practical skills, creativity, and so on, as well as the outcome. It facilitates a more comprehensive assessment of students' learning outcomes and understanding of ethnic skills.*

WKM: *In order to ensure better integration of ethnic skills in teaching, teaching evaluation is crucial. I believe that teaching evaluation should include: the degree of skill integration, student participation, and the effect of skill transmission. Teaching evaluation is not only about teachers evaluating students' knowledge and skill mastery, but also students' self-assessment and mutual evaluation. We (the inheritors) can also participate in providing professional evaluation and feedback on the transmission of ethnic culture and skills.*

ZTT: *I think diversified evaluation methods are more suitable for teaching evaluation. I highly recommend the addition of display evaluation: students can showcase the ethnic skills they have engaged in, and teachers and the public can evaluate the work according to its completeness, creativity, and technical level. In addition to displaying the work, it serves to publicize and promote ethnic skills.*

R: As an inheritor, what do you think are your responsibilities, and what will you do in promoting the inheritance of national skills afterward?

PJ: *I think the burden on me is still very heavy, because silver jewelry making is a relatively solitary pursuit and has a high skill threshold among the many arts. In the future promotion of inherited skills, I will devote myself to educating more people, especially young people, about silver jewelry, including its appreciation and participation in the craft of silver jewelry making.*

WKM: *As an inheritor of maple dyeing and printing, I believe I have the responsibility to protect, pass on, promote, and innovate the art of maple dyeing and printing. To this end, I will endeavor to participate in activities such as teaching skills,*

cultural exchanges and displays, utilizing modern media, seeking cooperation, and innovating and developing new products, to promote and pass on regional ethnic skills.

ZTT: *As an inheritor of traditional printing and dyeing techniques, I believe that I bear the responsibility of inheritance and innovation. In the subsequent promotion and inheritance, I will try my best to study and hone my skills, innovate based on inheritance, and actively participate in the education of ethnic skills, cooperate and exchange with colleges, other inheritors, and cultural institutions, etc., to jointly devote myself to the inheritance and development of ethnic skills.*

4.8.3 Interview Coding

The data were categorized and filtered according to thematic analysis (Miles & Huberman, 1994) to find comparable terms or co-terms. This study used two cycles of manual coding (Saldana, 2013) to analyze the data.

Table 4.17 Heirloom Interview Coding Sheet

Serial Number	Interviewer's Questions	Initial Code	Initial Themes
1	Do you think that current policies emphasize ethnic culture? What do you think about cultural heritage under the integration of ethnic skills?	Current policy emphasizes national culture and considers national skills to be the embodiment of cultural identity. The transmission of ethnic skills is a vital means of preserving national cultures, maintaining traditions, and infusing cultural significance into modern society. President Xi Jinping's mission to build a strong cultural nation emphasizes the importance of national culture and skills. National culture is the foundation of skills, and skills are one of the carriers of culture. The biggest challenge facing ethnic skills is the risk of marginalization, with young people preferring modern lifestyles, leading to diminished interest in traditional skills and difficulties in passing them on.	National culture is the basis of skills.
2	What do you think is the biggest challenge facing ethnic arts?	Some traditional skills may be over-commercialized, disregarding cultural connotations and values, and thereby affecting their development and transmission. The gradual passing away of the older generation of skills inheritors, combined with the lack of learning	Ethnic skills face transmission difficulties.

Serial Number	Interviewer's Questions	Initial Code	Initial Themes
		opportunities for young people, has led to a decline in skills. Difficulties in passing on skills are a challenge for national performing arts.	
3	What do you think is the direction to solve the puzzle?	Raise awareness of ethnic skills through the media and community activities and encourage exchanges and cooperation between schools and organizations. Combine traditional skills with modern design to attract young consumers. Encourage the older generation of inheritors to pass on their skills through apprenticeships. Take advantage of colleges to attract young people through targeted courses and activities.	The solution to the dilemma lies in the attitude of young people.
4	What do you think is the current situation of Guizhou's vocational colleges in integrating ethnic skills in art education and teaching?	In Guizhou, many vocational colleges integrate ethnic skills and culture into art education. Some schools offer courses related to ethnic skills, hire teachers with experience in ethnic arts, and invite experts to train teachers. Many schools actively engage with experts, establish training rooms, implement cooperative programs, and invite experts to deliver lectures, enabling students to experience diverse ethnic cultures. The integration of ethnic skills and arts education is increasing, with more opportunities for teachers and students to connect for training and cooperation.	Ethnic skills are being integrated into the teaching of art education.
5	What do you see as the challenges and opportunities of this convergence?	Integrating ethnic skills into higher vocational colleges and universities presents challenges, including the need for teachers with expertise in ethnic skills and ensuring that modern reforms are effectively incorporated while preserving traditional approaches. Opportunities include utilizing local cultural resources, producing more skilled graduates, and catering to the growing creative and cultural industries. The challenge is to modernize ethnic skills by breaking with traditional methods of transmission. At the	Challenges for teachers, teaching, cultural industries

Serial Number	Interviewer's Questions	Initial Code	Initial Themes
		same time, the opportunity lies in giving ethnic skills a new perspective and rejuvenation, as well as opening up new market horizons.	
6	What do you think are the advantages of colleges for the transmission of ethnic skills?	Colleges and universities possess the advantages of talent, academic influence, and social resources in preserving ethnic skills, and they can promote these skills and raise awareness among young people through various activities. Universities have natural advantages in terms of faculty, internationalized talent, modern facilities, and communication platforms. Research institutes and scholars provide academic support, as well as rich resources and effective teaching designs, which help students learn and master ethnic skills. To design effective content for teaching ethnic skills, creativity, innovation, and individualized learning must be encouraged. At the same time, a deep understanding of the history, cultural significance, regional characteristics, and traditional ways of passing on ethnic skills is also essential to convey cultural content. Respect for and preservation of cultural heritage, while incorporating modern methods and technologies, is essential to ensure that students learn and appreciate these skills.	Advantages of talent, resources, venues, and platforms
7	What do you think is the most important aspect of good instructional design?	Self-identification and modern design concepts are emphasized. Students are encouraged to participate in competitions to create contemporary aesthetic pieces such as table flags that combine traditional and modern designs. Inspire students by demonstrating the production process and sharing personal stories, and discuss with them the history, characteristics, and applications of the techniques.	Understanding of cultural connotations, focusing on modern methods and techniques
8	Please share some of your experiences in passing on the practice of teaching ethnic skills.	It is recommended that an integrated approach to evaluation be used, focusing on student learning processes and outcomes. Evaluation should include skills	Encouraging participation, sharing experiences, and enhancing discussion
9	What are your suggestions for evaluating		Comprehensive evaluation,

Serial Number	Interviewer's Questions	Initial Code	Initial Themes
	teaching and learning?	integration, student participation, and skills transfer. Diversified methods are recommended, including work-show evaluations that allow students to demonstrate their skills and receive feedback from teachers and experts.	focus on results
10	As an inheritor, what responsibilities do you think you shoulder, and what will you do in the future to further the promotion and inheritance of ethnic skills?	As an inheritor, I feel a responsibility to protect, pass on, and innovate traditional skills. To promote and pass on the skills of silver jewelry making and maple leaf printing and dyeing, I will ensure that these skills are passed on through teaching, cultural exchanges, and modern media. I will also innovate and research new products to ensure that the skills are passed on and developed.	Protection, Inheritance, Promotion, Innovation



CHAPTER V

CONCLUSION AND DISCUSSION

Analysis revealed that teachers' understanding, students' interest, inheritors' influence, theoretical understanding, practical ability, and innovative development all significantly impacted the integration of ethnic skills into teaching practice in vocational art education. The relative importance of the six factors was then analyzed, and the problems and challenges associated with integrating ethnic skills were examined.

The relevant factors and key links affecting the integration of ethnic skills into vocational art education are identified, and the current state of integration, as well as the challenges and opportunities facing it, are examined. In the Recommendations section, opinions and suggestions on integrating ethnic skills into teaching and learning in vocational art education were presented.

5.1 Discussion

Data were analyzed using correlation analysis, regression analysis, and weighting analysis. The regression analysis involved two models: the relationship and level of importance of the six independent variables, and their influence on the relationship between the integration of ethnic skills into teaching and learning in art education.

Part 1: To explore the influence of teachers, students, and inheritors on the integration of Guizhou regional ethnic skills into art education in vocational colleges and lay a solid foundation for further integration.

5.1.1 Significant Stakeholder Influence on the Integration of Ethnic Skills into the Teaching and Learning of Art Education (Dependent Variable of the Model is: Ethnic Skills Integration into the Teaching and Learning Practices in Art Education)

5.1.1.1 Teacher Perception ($\beta = 0.30$)

The results of the analysis imply that teachers' understanding has a significant positive relationship with the teaching practice. The rankings of significant

positive relationships with teachers' understanding are, in order, instructional design, instructional practice, cultural inheritance, skill mastery, and instructional evaluation. This finding is consistent with previous authors, who suggest that teachers need to effectively utilize evidence to make rational judgments on learning situations by integrating regional ethnic wisdom, situational awareness, and using external sources for effective learning design. (Cai et al., 2021) "Effective" means that learners can master the tasks in a specified period. Designing compelling learning experiences for students is closely related to teachers' understanding of vocational art education.

5.1.1.2 Student Interest ($\beta = 0.23$)

The analysis implies that students' interest has a significant positive relationship with the teaching practice of vocational art education. The rankings of significant positive relationships with students' interests are instructional design, skill mastery, instructional practice, cultural heritage, and instructional evaluation. Therefore, students' interest has a significant impact on the teaching design of ethnic skills integration.

Wu Gao Ming mentioned that in art teaching, it is essential to stimulate students' interest in learning. It is not only a means to increase the subject's attractiveness, but also an important way to cultivate students' aesthetic sensibilities, creative thinking, and comprehensive understanding. Interest in learning is the intrinsic driving force that motivates students to engage with the subject, further stimulating their curiosity and desire for knowledge about art. By designing interesting and challenging tasks, students are encouraged to explore new approaches to artistic expression and develop their creative thinking and problem-solving skills (Gao, 2024). As Ernest Rothkopf, a researcher at Bell Labs in the U.S., said, "We take a horse to a pool, and the water only goes into the horse's stomach if the horse drinks itself" (Rothkopf, 1970). Similarly, in the integration of ethnic skills into art education, the key to effectiveness is not only the teaching resources (e.g., "water") that the teacher provides to the students, but also how the students utilize these resources (e.g., "how to drink water"). It is clear that although teachers can provide effective teaching design, students' interest is equally important for integrating ethnic skills into vocational art education.

5.1.1.3 Inheritor Influence ($\beta = 0.47$)

The results of the analysis imply that the inheritor's influence has a significant positive relationship in the teaching practice of vocational art education. The significant positive relationships with the inheritor influence are teaching practice, teaching design, cultural heritage, skill mastery, and teaching evaluation. Therefore, the influence of the inheritor is significant for teaching practice. This finding aligns with previous research, which suggests that an important characteristic of Intangible Cultural Heritage (ICH) is its living nature, which is carried by human beings and passed on from one generation to the next. Inheritors are the important bearers and transmitters of ICH; they master and carry the knowledge and exquisite skills and are both the living treasury of ICH and the representative figures of ICH (Hai, 2007).

XI Bin proposes that vocational colleges protect and pass on intangible cultural heritage by bringing it onto campus, establishing a symbiotic, interactive relationship, and setting a path forward with heritage bearers (XI, 2020). The influence of inheritors is a crucial link in integrating ethnic skills into the teaching of vocational art. For example, the popular public elective course "The Art of Han Embroidery" at Wuhan Textile University is promoted through the combined efforts of National Heritage Items. (NHI) Moreover, the National Heritage Learning Center (NHLC) enables students interested in NHIs to learn aspects of Han embroidery's artistic expression, Han embroidery stitching techniques, Han embroidery culture, and to pass on and revitalize Han embroidery, which is widely praised among the students and is an in-demand class (Liu et al., 2023).

Part 2: To study how the pedagogy-based theoretical understanding, practical ability, and innovative development contribute to the integration of ethnic craft skills into art education in Guizhou's vocational colleges, and how this contributes to the realization of educational goals.

5.1.2 The relationship between pedagogy and the integration of ethnic skills into the teaching and learning of art education (the dependent variable of the model is: the integration of ethnic skills into the teaching and learning practices of art education)

5.1.2.1 Theoretical Perception ($\beta = 0.28$)

The results of the analysis imply that theoretical understanding has a

significant positive relationship with the integration of ethnic skills into the teaching practice of vocational art education. The rankings of significant positive relationships with theoretical understanding are, in order, cultural transmission, teaching design, teaching practice, skills mastery under ethnic skills inheritance, and teaching evaluation. Therefore, theoretical understanding has a significant influence on cultural transmission of ethnic skills inheritance. Teachers should develop effective teaching strategies tailored to the specific situation to enhance students' cognitive abilities in art knowledge (Sun, 2023).

Paul Kirschner noted that when conducting course curriculum, teachers need to adjust the learning design program appropriately. For learners with high prior knowledge, teachers may only need to design certain instructional prompts to help them accomplish specific learning tasks. In contrast, for learners with low prior knowledge, teachers may need to design detailed instructional explanations and provide them with exercises to help them accomplish specific learning tasks (Cai et al., 2021). It can be seen that in the integration of ethnic skills into vocational art education, teachers need to provide students with personalized and precise interventions based on a theoretical understanding, enabling them to engage in high-quality learning of cultural heritage.

5.1.2.2 Practical Skills ($\beta = 0.49$)

The results of the analysis suggest that practical ability has a significant positive relationship with the teaching of ethnic skills in vocational art education. The rankings of significant positive relationships with practical ability are, in order, skill mastery, instructional design, instructional practice, cultural inheritance, and instructional evaluation. Thus, practical ability has a significant impact on skill mastery. It is the case that art education courses related to the integration of ethnic skills are practical courses. Practical courses are hands-on and have an ordered pattern of movements, which requires teachers to explain key knowledge points, guide and rehearse the movements, and practice repeatedly. Simple rote learning and operation can help improve the transfer of skills (Duan, 2017).

5.1.2.3 Innovative Development ($\beta = 0.31$)

The results of the analysis suggest that the development of innovation has a significant positive relationship with teaching practice when integrating ethnic skills into vocational art education. The rankings of significant positive relationships with

innovative development are, in order, teaching practice, cultural inheritance, teaching design, skill mastery, and teaching evaluation. Therefore, innovation development has a significant impact on teaching practices. This finding is consistent with the previous researchers. Zeng proposed that teachers should rationally arrange teaching content according to students' actual situations and provide them with more art learning resources, enabling students better to master knowledge and skills during the learning process, thereby cultivating their innovative thinking and creativity (Zeng, 2020).

In vocational colleges, due to the unique characteristics of art majors, cultivating students' innovative abilities is problematic. It is necessary to reform traditional art education, enhance students' innovative abilities, and utilize advanced teaching methods and instructional tools so that students can learn independently and enjoy the learning process. Change the traditional education mode in art education by transitioning from passive learning to active learning, allowing students to fully utilize their subjective initiative in creating art (Liu, 2020).

Part 3: To study the current situation of integrating ethnic skills into art education and teaching in vocational colleges in Guizhou, China, as well as the challenges and opportunities brought by this integration.

5.1.3 Determining "Practical Ability" as a Key Issue in Integrating Ethnic Skills into the Teaching and Learning Practices of Vocational Art Education

When calculating the weights according to the Analytic Hierarchy Process (AHP), the weight rankings obtained according to the size of the mean are practical ability (4.12), teacher understanding (3.98), inheritor influence (3.97), student interest (3.95), theoretical understanding (3.89), and innovative development (3.85). Of all the independent variables, practical ability is a key determinant in integrating ethnic skills into the teaching practice of vocational art education. Du Lina suggests that art teaching is a subject that requires students to be the primary focus and teachers to be the support, as students must persist in order to reach a level of professionalism (Du, 2012). Teachers led students in undertaking practical activities, such as sketching exercises. These practical activities help students transform what they learn in class into actual creative content (Sun, 2023). It shows that practical ability affects creativity, and creativity is a key to integrating modern aesthetics and ethnic skills, which the

preferences of young people will determine will determine. Therefore, in integrating ethnic skills into the teaching of vocational art education, strengthening the cultivation of practical skills is key to effective integration.

5.1.4 Challenges and Opportunities Arising from the Current Situation and Integration of Ethnic Skills into the Teaching of Art Education in Guizhou's Vocational Colleges

Based on the analysis of the interview codes, all five interviewees agreed that the status quo of Guizhou's vocational colleges in integrating ethnic skills in art education and teaching is improving. The current situation is reflected in the following: 1) in the curriculum, many vocational colleges have integrated ethnic skills into the relevant art education courses; 2) in the faculty, they have begun to bring in teachers with backgrounds and experiences in ethnic skills, as well as inviting non-hereditary inheritors to carry out teacher trainings or hold lectures in the schools; and 3) in practical teaching, they have built professional training rooms, carried out school-enterprise cooperation projects, and sought cooperation in guiding relevant skills competitions.

The five interviewees also unanimously recognized the challenges and opportunities brought by the integration, which are reflected in the following: 1) teaching resources, there is a need for more teachers with mastery of ethnic skills, more teaching materials, and more specialized practical training venues; 2) pedagogical strategies, how to break through the traditional inheritance of ethnic skills, and how to effectively integrate them with modern reforms and innovations. Opportunities are: 1) it will provide an opportunity for reform of art education in higher vocational colleges, which will then give students with knowledge of ethnic skills and therefore be more competitive in the job market; 2) it will give vitality and possibilities for ethnic skills to be influenced by modern aesthetics, which will open up new horizons in the market of regional ethnic craft skills.

5.2 Conclusion

This study employed correlation analysis, regression analysis, weight analysis, and coding analysis to investigate the integration of regional ethnic skills into

the teaching practice of art education in vocational colleges. The conclusions were:

1. The views of stakeholders (teachers, students, and inheritors of ethnic skills) have a significant impact on the integration of ethnic skills into art education in Guizhou vocational colleges. Specifically, teachers' understanding, students' interest, and inheritors' influence have a significant positive correlation with cultural inheritance, mastery of skills, teaching design, teaching practice, and teaching evaluation. They promote the integration of regional ethnic skills into the teaching practice of vocational art education.

2. The theoretical understanding, practical ability, and innovative development based on teaching methods will significantly improve the degree of integration of ethnic skills into fine arts education in Guizhou vocational colleges, thus improving educational outcomes, mastery of skills, and cultural inheritance. Practical ability is the key problem of integrating regional ethnic skills into the teaching practice of vocational art education.

3. If vocational colleges want to improve the integration of national skills into art education and teaching, the key is to improve practical ability, which requires joint efforts across many aspects. First, there is a need to change the teaching strategies and ensure the teaching method adapts to the teaching demand. Secondly, the curriculum should be optimized to integrate intangible cultural heritage with fine arts education and teaching, which can help teachers and students better understand and inherit regional ethnic culture. This approach can also help them inherit and carry forward classic skills, creative spirit, and artistic essence into the national culture through learning traditional culture and regional craft skills. Finally, teachers should continually enrich their theoretical understanding and practical skills to improve their teaching level and practical ability.

4. At present, regional art skills are being integrated into the process of vocational art education and teaching in Guizhou. This type of integration is of great significance in addressing the challenge of inheriting regional ethnic skills. The acceptance by young people of ethnic skills affects the promotion of their culture and the inheritance of local skills. The integration of ethnic skills into the coursework incorporates modern aesthetics and designs into ethnic skills products, thereby giving relevance to these skills. Although the integration poses challenges for teachers,

regional ethnic vocational colleges, which focus on teaching and culture, have the advantages of talent, resources, and venues. By exploring the cultural implications, paying attention to modern teaching methods and techniques, encouraging participation in practical activities, and refining the evaluation mechanism, we will be better equipped to face the challenges and opportunities.

5.3 Implication for Practice

1. Optimize the curriculum: Add courses related to ethnic skills to the curriculum of fine arts-related majors in vocational colleges, such as "Miao batik Skills", "Miao Embroidery Skills", "Pedagogical Pottery Making Skills". Enhance the integration of ethnic culture and skills in relevant courses, such as incorporating ethnic pattern design into Pattern Design, adding ethnic style soft outfit design to Soft Outfit Design, and integrating Miao product design and production into Product Design and Production.

2. Strengthen teacher training: facilitate the development of the teaching teams, introducing teachers with ethnic skills background and experience, or non-genetic inheritors to teach in the school, conduct ethnic skills training for existing professional teachers, and improve knowledge of ethnic skills, to promote the transformation and cultivation of quality in both teachers and graduates.

3. Emphasize practical links: strengthen the cultivation of practical ability, and ensure teachers and students participate in social activities related to ethnic skills through observation, investigation, meetings, competitions, and exhibitions to encourage their interest and practical ability. Strengthen practical teaching through organizing students to visit and participate in practical projects, visit ethnic skills studios and art villages, move classes to project-based learning, produce works and exchange and learn with folk artists up close, and systematically learn the technical process and cultural connotation of ethnic skills. Be familiar with the historical origins and current development status of regional art skills, and personally appreciate the charm of such skills, thereby enhancing students' practical abilities and innovative thinking.

4. Strengthen school-enterprise cooperation: Strengthen cooperation with

enterprises and inheritors, transform teaching results into products, and promote the integration of regional skills into teaching and the art market.

5. Promote the improvement of teaching methods: allow teachers to teach "effectively" and students to learn "interesting" and integrate regional skills into the teaching practice of vocational art education based on a clear understanding, practical ability, and innovation. Conduct regular teaching evaluation to understand the satisfaction and opinions of professional teachers and students on the integration of regional art skills into education. According to the evaluation results, it is necessary to adjust teaching strategies to improve teaching outcomes and quality continually.

6. Integrated innovation and student focused education: In the future, fine arts education in vocational colleges need to combine and innovate regional skills with modern art and, develop student focused education, pay attention to the integration of elements of regional skills into modern works of art, create art works with unique style and meaning, pay attention to students' interests and specialties, and provide students with more choices and space to develop. Regional ethnic art skills complement disciplines such as history, culture, and folklore, cultivating high-quality students with an innovative spirit and practical abilities.

5.4 Recommendation for Future Research

1. Studies to focus on how to establish an effective evaluation mechanism to assess the effect and degree of regional skills integration into the curriculum, the participation and satisfaction of students, and the completion and transformation of teaching outcomes.

2. The factors affecting the integration of regional skills into vocational art education and teaching practice can be explored more profoundly and comprehensively.

3. In future studies, the application of different teaching methods when integrating regional art skills into vocational art education teaching practice can be studied.

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APPENDICES

Appendix A

Questionnaire for the Research on the Practice of Integrating Ethnic Skills into the Teaching and Learning of Vocational Art Education

Questionnaire Instructions:

Dear Teachers and Students,

To understand the situation related to research on integrating ethnic skills into vocational art education, we have organized this questionnaire. The content is intended solely for statistical analysis and research purposes. Please feel free to answer the questionnaire. Here I also solemnly promise: your relevant answers and information will never be disclosed in any form to the outside (or to others)! The questionnaire is filled in anonymously. Please tick the appropriate option. Thank you for your support and cooperation.

Part I: Demographic Information

1. What is your gender?

☐ Male ☐ Female

2. Age

☐ 18-25 years old ☐ 26-33 years old ☐ 34-41 years old ☐ 42 and above

3. Status

☐ School teacher ☐ Student

4. Education Level

☐ Below bachelor's degree ☐ bachelor's degree ☐ Postgraduate Degree

5. Nationality

☐ Han Chinese ☐ Minority

Part 2: Research on the practice of integrating ethnic skills into the teaching of art education

Please use (✓) to provide your opinion on the most appropriate of the five choices. (1) Strongly Opposed, (2) opposed, (3) neutral, (4) agree, (5) strongly agree.

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education	Problem	Level					Comment
		1	2	3	4	5	
1. Ethnic culture under the integration of ethnic arts and crafts	1. You are interested in ethnic culture						
	2. Students will read books on ethnic culture						
	3. Specialized teachers have knowledge related to ethnic culture 识						
	4. On-campus studios or off-campus practical training bases with heritage people in residence						
	5. Current policies emphasize national cultural heritage						
	You are receptive to the integration of ethnic cultures into art-related courses.						
2. Skill practice in the context of ethnic skill inheritance	7. You know ethnic arts and crafts						
	8. Students have a desire to learn ethnic skills						
	9. Specialized teachers are willing to participate in competitions related to ethnic skills						
	10. Schools have held lectures on folkloric arts given by inheritors.						
	11. Dissemination and promotion of ethnic arts and crafts in general						
	12. Integration of ethnic skills into relevant curricula helps foster national self-confidence						
3. Instructional	13. You are confident in the integration of ethnic skills into the						

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education	Problem	Level					Comment
		1	2	3	4	5	
Design with Ethnic Skills Integration	teaching curriculum						
	14. Students are interested in integrating ethnic skills into related courses						
	15. Professional teachers are willing to teach ethnic skills in relevant courses						
	16. Legacy experiences shared by inheritors have valuable implications for instructional design						
	17. Current policies encourage the integration of ethnic cultural heritage into relevant curricula						
	18. Pedagogical reforms have promoted the integration of ethnic skills into the instructional design of relevant courses						
4. Teaching Practices with the Integration of Ethnic Skills	19. Teaching practices with the integration of ethnic skills contribute to the innovation of teaching and learning activities						
	20. Students enjoy hands-on teaching activities with the integration of ethnic skills						
	21. Specialized teachers see the need to incorporate ethnic skills in the teaching practices of relevant courses						
	22. Inheritors believe that teaching practice is an inevitable path to pass on ethnic skills.						
	23. Current policies support the translation of teaching practice outcomes						
	24. Integration of Ethnic Skills into Teaching Practice Enhances Students' Hands-on Skills						

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education	Problem	Level					Comment
		1	2	3	4	5	
5. Evaluation of Teaching and Learning with the Integration of Ethnic Skills	25. Teaching and learning outcomes with the integration of ethnic skills increase the visualization of teaching and learning assessment						
	26. The traditional way of evaluating teaching is not conducive to the generation and continuation of students' learning motivation						
	27. Teachers perceive developmental assessment as more contingent and authentic in the integration of ethnic skills into the teaching of the lower curriculum						
	28. Inheritors pay more attention to the evaluation of results under the integration of ethnic skills						
	29. Current policies favor diverse teaching evaluations						
	30. Adding a presentation of results in the course evaluation session can stimulate student interest						

This concludes the questionnaire. Thank you again for your support and cooperation. We wish you good health and success in your work.

Appendix B

Interview guide for the research on the integration of ethnic skills into the teaching practice of art education

1. Do you think current policies emphasize ethnic culture? What do you think about cultural inheritance under the integration of ethnic skills?
2. What do you think is the biggest problem facing ethnic skills?
3. What do you think is the direction to solve the problem?
4. What do you think is the current situation of integrating ethnic skills in the teaching of art education in Guizhou's vocational colleges?
5. What do you think are the challenges and opportunities brought by such integration?
6. What do you think are the advantages of ethnic skills inheritance in colleges?
7. What do you think is the most important thing for a good teaching design with the integration of ethnic skills?
8. Please share your experience in teaching and practicing the transmission of ethnic skills.
9. What suggestions do you have for the evaluation of teaching and learning under the integration of ethnic skills?
10. As an inheritor, what do you think are your responsibilities, and what will you do in the promotion and inheritance of ethnic skills in the future?

Appendix C

Questionnaire IOC Assessment Form

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education		Expert 1	Expert 2	Expert 3	IOC Index
1. Ethnic culture under the heritage of ethnic arts and crafts	1. You are interested in ethnic culture	+1	+1	+1	1
	2. Students will read books on national culture	+1	0	+1	0.67
	3. Specialized teachers have knowledge related to national culture	+1	+1	+1	1
	4. On-campus studios or off-campus practical training bases with heritage people in residence	+1	+1	+1	1
	5. Current policies emphasize national cultural heritage	+1	+1	+1	1
	6. You are receptive to the integration of ethnic cultures into art-related courses	+1	+1	+1	1
2. Skill practice in the context of national skill inheritance	7. You know ethnic arts and crafts	+1	+1	+1	1
	8. Students have a desire to learn ethnic skills	+1	+1	+1	1
	9. Specialized teachers are willing to participate in competitions related to ethnic skills	0	+1	+1	0.67
	10. Schools have held lectures on folkloric performing arts given by inheritors.	+1	+1	+1	1
	11. Dissemination and promotion of ethnic arts and crafts in general	0	+1	+1	0.67
	12. Integration of national skills into relevant curricula helps foster national self-confidence	+1	+1	+1	1
3. Instructional	13. You are confident in the integration of ethnic skills	+1	0	+1	0.67

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education		Expert 1	Expert 2	Expert 3	IOC Index
Design with Ethnic Skills Integration	into the teaching of the curriculum				
	14. Students are interested in integrating ethnic skills into related courses	+1	+1	+1	1
	15. Professional teachers are willing to teach ethnic skills in relevant courses	+1	+1	+1	1
	16. Legacy experiences shared by inheritors have valuable implications for instructional design	+1	+1	0	0.67
	17. Current policies encourage the integration of national cultural heritage into relevant curricula	0	+1	+1	0.67
	18. Pedagogical reforms have promoted the integration of ethnic skills into the instructional design of relevant courses	+1	0	+1	0.67
	19. Teaching practices with the integration of ethnic skills contribute to the innovation in teaching and learning activities	+1	+1	+1	1
	20. Students enjoy hands-on teaching activities with the integration of ethnic skills	+1	+1	+1	+1
4. Teaching Practices with the Integration of Ethnic Skills	21. Specialized teachers see the need to incorporate ethnic skills in the teaching practices of relevant courses	+1	0	+1	0.67
	22. Inheritors believe that teaching practice is an inevitable path to pass on national skills.	+1	+1	0	0.67
	23. Current policies support the translation of teaching practice outcomes	+1	0	+1	0.67
	24. Integration of Ethnic Skills into Teaching Practice Enhances Students' Hands-on	+1	+1	+1	1

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education		Expert 1	Expert 2	Expert 3	IOC Index
5. Evaluation of Teaching and Learning with the Integration of Ethnic Skills	Skills				
	25. Teaching and learning outcomes with the integration of ethnic skills increase the visualization of teaching and learning assessment	+1	+1	+1	1
	26. The traditional way of evaluating teaching is not conducive to the generation and continuation of students' motivation	+1	+1	+1	1
	27. Teachers perceive developmental assessment as more contingent and authentic in the integration of ethnic skills into the teaching of the lower curriculum	+1	+1	0	0.67
	28. Inheritors pay more attention to the evaluation of results under the integration of ethnic skills	+1	+1	+1	1
	29. Current policies favor diverse teaching evaluations	+1	+1	0	0.67
	30. Adding a presentation of results in the course evaluation session can stimulate student interest	+1	0	+1	0.67

Interview Guide IOC Assessment Form

A Practical Study on the Integration of Ethnic Skills into the Teaching and Learning of Vocational Art Education	Expert 1	Expert2	Expert3	IOC Index
1. Do you think that current policies emphasize ethnic culture? What do you think about cultural heritage under the integration of ethnic skills?	+1	+1	+1	1
2. What do you think is the biggest challenge facing ethnic arts?	+1	+1	+1	1
3. What do you think is the direction to solve the puzzle?	+1	+1	+1	1
4. What do you think is the current situation of Guizhou's vocational colleges in integrating ethnic skills in art education?	+1	+1	+1	+1
5. What do you see as the challenges and opportunities of this convergence?	+1	+1	+1	1
6. What do you think are the advantages of colleges for the transmission of ethnic skills?	+1	+1	+1	1
7. What do you think is the most important aspect of good instructional design with the integration of ethnic skills?	+1	0	+1	0.67
8. Please share some of your experiences in passing on the practice of teaching ethnic skills.	+1	+1	+1	1
9. What are your suggestions for evaluating teaching and learning with the integration of ethnic skills?	0	+1	+1	0.67
10. As an inheritor, what do you think are your responsibilities, and what will you do to promote and transmit national skills in the future?	+1	+1	+1	1

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