

Research on Art Teaching in Border Ethnic Colleges and Universities from the Perspective of Cultural Creativity

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Abstract: Under the background of globalization and informatization, art education in border ethnic universities is facing the challenges of compatibility between tradition and modernity and cultural inheritance and innovation. In this context, the teaching reform of cultural creativity is an important way to improve students' educational quality and ability. The purpose of this study is to explore the present situation, challenges and reform strategies of art teaching in border ethnic universities. Specifically, this article described the existing problems of art education in colleges and universities, studied the strategies to improve the teaching content and teaching mode with the help of the characteristics of cultural and creative industries, and made an empirical analysis of the experimental research on the learning participation, learning effectiveness and learning advantages of art students in border ethnic universities before and after the reform. The results showed that the teaching reform of cultural creativity effectively improved students' learning participation, learning effect and learning efficiency. The reform of teaching pays more attention to students' initiative and innovation, and adopts a variety of teaching methods, as well as personalized teaching and diversified assessment system. The overall situation of students' participation in all courses reached the highest score of 9.9; the lowest test score was 121; the learning efficiency remained at 71.3%-90.7%. This study provides an empirical basis for art education in ethnic group and ethnic colleges, and also provides reference and enlightenment for the reform of education policy and practice.

1. Introduction

The vigorous development of cultural and creative industries has brought unprecedented opportunities and challenges to art education in border ethnic universities. Under the influence of globalization, how to combine national cultural characteristics with modern educational concepts, cultivate artistic talents with innovative spirit and practical ability, has become a focus of attention in the field of education. Due to its unique cultural resources and educational needs, art education in border ethnic universities has put forward higher requirements for innovative teaching content and methods.

This study conducts an in-depth analysis of the current situation of art education in border ethnic

universities from a cultural and creative perspective, identifies existing problems and challenges, and proposes strategies for innovative teaching methods. Through empirical research, this article evaluates the impact of cultural and creative teaching reform on student participation, learning effectiveness, and learning efficiency, providing scientific basis and practical guidance for the reform of art education in border ethnic universities.

The article first introduces the research background and significance, summarizes relevant work, explores the challenges faced by art education in universities, and explores the application of modern teaching methods. Next, this article elaborates on the research methodology, including experimental design, data collection, and analysis process. In the results and discussion section, this article demonstrates the specific impact of cultural and creative teaching reform on student learning participation, learning effectiveness, and learning efficiency. Finally, the article summarizes the main findings of the study and provides suggestions for future research directions.

2. Related Work

In today's education field, innovating teaching methods and improving education quality are common challenges faced by global universities. Based on Moore's theory of three types of interaction in distance education, Yang Weixin focused on three dimensions of interaction in college art remote teaching, namely interaction between learners and learning content, interaction between learners and teachers, and interaction between learners and learners [1]. Through analyzing the current situation of arts and crafts teaching in universities, Li Dong pointed out the problems of single teaching mode, lack of novelty in teaching content, and weak course practice in the process of arts and crafts teaching. He also proposed a reform path for arts and crafts teaching in universities under the background of multimedia technology [2]. Through art teaching activities, Yang Shuang effectively strengthened students' innovation, creativity, and imagination towards things, thereby gaining a deeper understanding of what happens in life, mastering art related knowledge more proficiently, and cultivating innovative and high-quality composite talents in the field of art [3]. Zhao Dongfeng explored innovative strategies for teaching art and painting in universities. At the same time, the student-centered new curriculum reform concept was integrated into the curriculum reform, allowing more and more new teaching methods to be applied to daily teaching, reflecting the importance that universities attach to cultivating and improving students' artistic literacy in the new stage of educational development, and enabling aesthetic education in universities to meet modern educational needs [4]. Starting from the connotation of art education in colleges and universities, Zhao Xia analyzed the art education and teaching in colleges and universities at this stage to promote the development of art education and teaching in colleges and universities [5].

In addition, Kakharovna A M combined general and specific (visual arts) teaching methods to study the performance of interactive learning and teaching methods in visual arts classrooms. The research findings contribute to establishing optimization models for the planning and performance of visual arts education, and provide guidance for the professional development and advanced professional education of planning teachers [6]. Holmes W reviewed the existing artificial intelligence systems, teaching methods, and educational assumptions in education, and described the different ways in which artificial intelligence is used in education and learning, demonstrating how these approaches are based on different interpretations of what artificial intelligence and education are or may be [7]. Li Q evaluated the impact of blended learning methods implemented by the Hong Kong Academy for Performing Arts in the second semester of the 2020-2021 academic year on students and teachers, and collected their experiences and feedback on online teaching models. In addition, his study also filled the research gap in existing literature on the application of

blended learning methods in the field of performing arts education [8]. Van Katwijk L explored the relationship between exploration quality, teaching quality, and pre service teacher perceptions of his study. The research results indicated that practitioners have a positive attitude towards research, and there is a positive correlation between exploration quality and teaching quality [9]. Graham S aimed to provide important new information on evidence-based writing practices to help educators teach writing skills more effectively. The research findings contributed to filling existing knowledge gaps, validating and promoting effective writing teaching methods, and providing scientifically tested teaching strategies for teachers [10]. Although the above research provides valuable insights and strategies for improving the quality of art education through the use of modern technological means and innovative teaching methods, the application and adaptability of teaching strategies and methods from the perspective of cultural and creative education in border ethnic universities have not been fully explored. This study focused on the current situation of art teaching in border ethnic universities, exploring how to combine the unique cultural resources and ethnic characteristics of border areas, innovate teaching methods, and improve teaching effectiveness from a cultural and creative perspective.

3. Methods

3.1 Current Situation of Art Education

From the perspective of cultural and creative education, art teaching in border ethnic universities has distinct characteristics [11-12]. Firstly, the art education of these universities usually integrates the rich ethnic culture of their respective regions, forming a teaching style with regional characteristics. The unique natural scenery and ethnic culture of border areas are widely applied in teaching and creation, which not only enhances students' sense of identification with local culture, but also stimulates their innovation ability. Student innovation ability can be expressed as:

$$I = f(E, C) \quad (1)$$

I is the innovation ability; E is educational resources; C is the degree of cultural integration.

In addition, practical teaching is highly valued in border ethnic universities, and students are encouraged to participate in the protection and innovative practice of ethnic cultural heritage. This teaching model helps students combine theoretical knowledge with practical operations, and enhance their artistic creation abilities [13-14]. The effectiveness of practical teaching can be represented by a vector V , which includes a combination of theoretical knowledge T and practical operation P :

$$V = T + P \quad (2)$$

However, due to its remote geographical location and relatively low level of economic development, there is an imbalance in the allocation of educational resources in border ethnic universities, and the facilities and teaching staff of art education are often relatively weak. In addition, how to balance cultural inheritance and innovation, effectively combining traditional culture with modern cultural and creative elements, is a challenge that needs to be overcome in the education process. The professional development of the teaching staff also faces challenges, and art teachers in border ethnic areas need to improve their professional abilities through continuous learning and practice. In the process of modernizing education, border ethnic areas still face problems such as lagging information construction and loss of high-quality teachers, which may affect the quality and effectiveness of art education. Therefore, art education in border ethnic

universities needs to continuously explore and solve these challenges while maintaining cultural characteristics, in order to achieve sustainable development and quality improvement of teaching [15-16].

3.2 Overview of the Cultural and Creative Industry

The cultural and creative industry is an emerging industry centered on creativity, which develops and markets intellectual property through individual or team creativity, technology, and industrialization. The characteristics of this industry include innovation, cultural, artistic, practical, economic, and contemporary. It emphasizes originality and innovative thinking, integrates art and design, pursues aesthetic value, and meets the daily life needs of consumers. It keeps up with the trend of the times, combines modern technology and popular culture, and creates products that conform to modern aesthetics and consumption habits.

According to the 2024 Cultural and Creative Industry Report released by Mob Research Institute, the market size of cultural and creative products continues to grow, and consumer demand for cultural and creative products continues to rise. The cultural and creative industry is transitioning from protecting traditional culture to commercialization, artistry, and digitization, reflecting new trends in socio-economic and technological development. The report points out that 95.5% of the surveyed population has an interest in purchasing cultural and creative products, demonstrating the widespread appeal of cultural and creative products among consumers. Women born in the 2000s have become the main force of cultural and creative consumption, and consumers in second - and third tier cities account for an important proportion, indicating that the market development space of the cultural and creative industry is huge.

In the art teaching of border ethnic colleges and universities, combined with the relevant characteristics of cultural and creative industries, it is possible to strengthen the connection with local culture, integrate national art and cultural characteristics into teaching and creation, and encourage students to enhance their innovation ability and market awareness. The digital technology is used to enhance their learning experience and design ability, and cooperate with cultural and creative enterprises to provide students with practical opportunities and help them understand the operation mode of cultural and creative industries. Through these measures, the art education in border ethnic universities can better meet the needs of industrial development and cultivate artistic talents with innovative spirit and practical ability.

3.3 Application of Cultural and Creative Concepts in Art Teaching

The innovation and reform of art teaching in border ethnic universities are multidimensional [17-18]. In terms of innovative teaching content, the first focus is on combining the unique ethnic culture of border areas. This not only allows students to deeply understand local culture, but also stimulates their sense of pride and protection of traditional culture. At the same time, modern design concepts are integrated into teaching to teach students how to combine traditional cultural elements with modern aesthetics to create cultural and creative products with a sense of the times. In addition, interdisciplinary teaching models encourage students to explore the intersection and integration of art and history, folklore, modern technology, and other fields, promoting their ability to apply comprehensive knowledge. Practical projects provide a platform for students to apply theory to solve practical problems. By participating in designing projects, students can exercise their innovative thinking and practical operation ability.

Interactive learning strategies such as group discussions and cooperative learning are widely used to improve student participation and communication and collaboration skills [19-20]. The reverse classroom mode allows students to independently learn basic knowledge through videos and

online resources before class, while more in-depth discussions and practical operations are conducted in the classroom. This mode improves classroom efficiency and promotes active learning among students. The application of modern educational technologies such as technology integration provides students with a brand new immersive learning experience, enhancing the fun and effectiveness of learning. Personalized teaching methods take into account the interests and strengths of each student, providing customized learning paths and guidance to help students develop their personal artistic style. Finally, the reform of the evaluation system adopts diversified evaluation standards, which not only evaluate students' mastery of knowledge and skills, but also include innovative thinking, teamwork spirit, and project practice ability, in order to comprehensively evaluate their learning outcomes. Table 1 shows the effects of implementing different teaching strategies:

Table 1: Implementation effect of teaching strategies

Teaching Reform Strategy	Pre-Reform Data	Post-Reform Data	Change
Flipped Classroom Model	Basic Knowledge Mastery: 65%	Basic Knowledge Mastery: 85%	+20%
Application of AR/VR Technology	Immersive Experience Satisfaction: 4.0	Immersive Experience Satisfaction: 4.5	+0.5
Application of 3D Printing Technology	Practical Operation Ability: 3.2	Practical Operation Ability: 4.2	+1.0
Individualized Teaching Methods	Student Satisfaction: 80%	Student Satisfaction: 92%	+12%
Diversified Evaluation System	Innovation Thinking Assessment: 3.5	Innovation Thinking Assessment: 4.3	+0.8
Teamwork Spirit Assessment	Teamwork Assessment: 3.7	Teamwork Assessment: 4.4	+0.7
Project Practice Ability Assessment	Project Completion Rate: 85%	Project Completion Rate: 95%	+10%

Table 1 covers multiple teaching reform strategies and their impact on student ability improvement, and these data also provide a basis for education policy makers in resource allocation and teaching guidance formulation. Through these innovations and reforms, art teaching in border ethnic universities can more effectively adapt to the development needs of the cultural and creative industry, cultivate artistic talents who not only understand local culture but also possess modern design concepts and practical abilities, and play a positive role in promoting the inheritance and development of ethnic culture in border areas.

4. Results and Discussion

This article realizes the reform of teaching content and teaching methods in the previous text, but its specific situation in practice is unclear. In order to gain a deeper understanding of the differences before and after the reform of cultural and creative education, this article uses student participation, learning effectiveness, and learning efficiency as comparative indicators to evaluate the teaching effectiveness before and after the reform. In the experiment, 25 students majoring in art from border ethnic universities are selected first. These students need to have similar basic knowledge and skill levels before the experiment. The purpose of doing so is to ensure the fairness of the experiment, so that any differences in teaching effectiveness can be more accurately attributed to changes in

teaching methods, rather than due to the imbalance of students' original abilities.

Students first adopt the traditional teaching mode, and then accept the teaching methods after the reform of cultural and creative education. During the implementation of teaching, the classroom participation of students under two teaching methods is regularly observed and recorded, including their level of participation and feedback on teaching activities. In order to evaluate the learning effectiveness, tests at the end of each teaching mode are conducted to obtain the learning outcomes of students under the changed teaching mode. Meanwhile, learning efficiency is evaluated based on students' learning progress, completion time and quality of assignments, as well as their speed of mastering new knowledge.

4.1 Student Participation

By comparing the performance and feedback of students in the classroom before and after the reform, not only can the effectiveness of cultural and creative teaching reform be quantified, but the potential contribution of increased student participation to learning motivation, learning outcomes, and innovation ability cultivation can also be deeply understood, as shown in Figure 1:

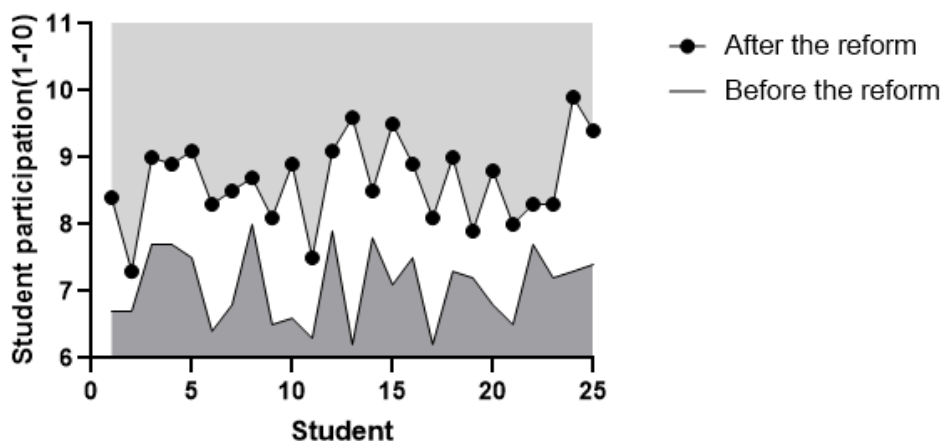


Figure 1: Comparison of student participation

According to data analysis in Figure 1, after the reform of cultural and creative teaching, the highest participation rate among students in the teaching process reaches 9.9. However, in the same situation, before the teaching reform, the highest participation rate among these students is only 8. This significant difference indicates that the reform of cultural and creative teaching has a positive impact on improving student participation. This improvement stems from the diversity and interactivity of cultural and creative teaching methods, which stimulate students' interest and enthusiasm for learning through activities such as case studies, role-playing, and simulation practice.

4.2 Learning Outcomes

The learning effect of students directly reflects the achievements of cultural and creative teaching reform, and the learning effect is measured by the test scores of students at the end of teaching. The specific comparison results are shown in Figure 2:

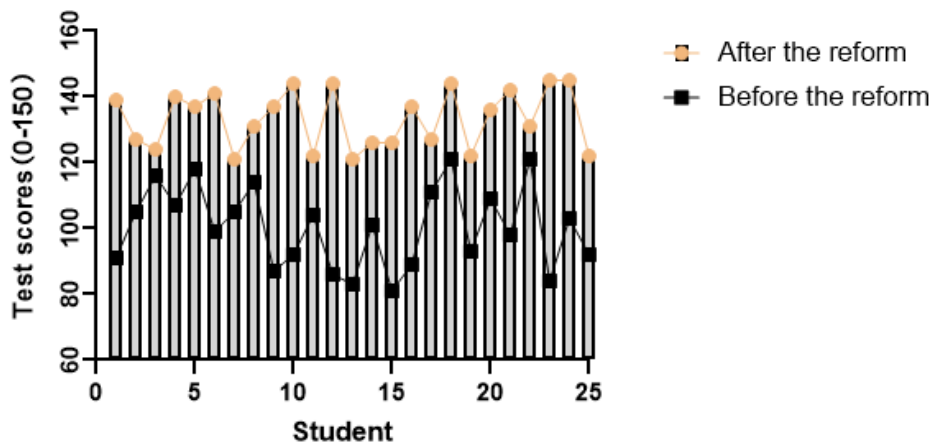


Figure 2: Comparison of learning outcomes

Through the analysis of Figure 2, it can be seen that the reform of cultural and creative teaching has a significant positive impact on student learning outcomes. Specifically, after the teaching reform, the minimum score for students in the post teaching test is 121, which is a significant improvement compared to 81 before the reform. This result intuitively reflects the advantages of cultural and creative teaching methods in promoting students' knowledge acquisition, skill application, and innovative thinking. The improvement of students' academic performance after teaching reform is related to the interactive, practical, and innovative teaching activities in cultural and creative teaching. These activities not only increase students' interest in learning content, but also enhance their opportunities for active exploration and deep thinking.

4.3 Learning Efficiency

The higher the learning efficiency, the more knowledge and skills students can master in a shorter period of time. Therefore, the comparative experiment on learning efficiency can provide a basis for educational policy makers to make wiser decisions and improve the overall quality of art education in border ethnic universities, as shown in Figure 3:

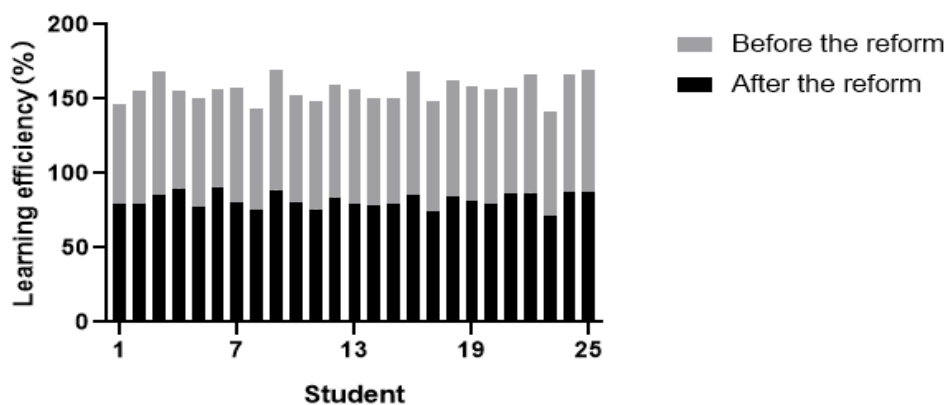


Figure 3: Comparison of learning efficiency

The data shown in Figure 3 shows that the reform of cultural and creative teaching has a positive impact on student learning efficiency. Before the reform, the learning efficiency of students remains at 65.6%-82.8%, but after the reform, the range of learning efficiency is 71.3%-90.7%. After the

reform, the learning efficiency has not only improved overall, but also increased in both upper and lower limits, indicating that students can absorb and apply knowledge more efficiently in different learning contexts.

5. Conclusions

This study explored the application and effectiveness of cultural and creative teaching reform in art education in border ethnic universities through empirical analysis. The research results clearly indicate that the reform of cultural and creative teaching has significantly improved students' learning participation, learning effectiveness, and learning efficiency, verifying the effectiveness of the reform strategy. Specifically, students have shown higher classroom participation and a more positive learning attitude in the reformed teaching environment, and their innovation ability and practical skills have also been enhanced. The successful implementation of cultural and creative teaching reform not only enriches the teaching content, but also introduces diverse teaching methods, such as interactive learning, reverse classroom, and the application of modern educational technology, all of which provide students with a more personalized and creative learning experience. In addition, the reform has strengthened students' understanding and comprehension of local culture, promoting the inheritance and innovation of ethnic culture.

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