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Innovative teaching of traditional bamboo weaving applied to modern bamboo fiber art creation

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Abstract

This study explores the potential development of using traditional bamboo weaving in modern bamboo fiber art teaching. It focuses on elementary school students, university students, and the general public in Taiwan as research subjects. Using purposive sampling, 200 questionnaires for the 'Traditional Bamboo Weaving Teaching Scale' and 'Bamboo Fiber Art Innovative Teaching Scale' were collected and analyzed. Statistical results reveal: 1) Significant differences in teaching perception between participants of different genders, ages, and occupations regarding traditional bamboo weaving and modern bamboo fiber art innovative teaching. 2) A wide variation in the correlation indices between traditional bamboo weaving teaching and modern bamboo fiber art innovative teaching. 3) Modern bamboo fiber art innovative teaching has a substantial impact on the future development of bamboo art. The study concludes that traditional bamboo weaving instructors can enhance students' learning outcomes and introduce new concepts through modern art creation teaching, making bamboo weaving education more diverse and innovative, leading to optimal learning effectiveness.

Keywords Traditional bamboo weaving, Contemporary bamboo fiber art, Innovative teaching

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1. Introduction

Long-standing, bamboo weaving has been considered a traditional craft due to its familiarity, leading to its predominantly traditional domain. Also, due to limitations in teaching resources and curriculum, it has received relatively less attention from students and art creators. However, in recent years, the public's demand for the 'meaning of materials' in artworks, this socially-driven phenomenon, highlights the individuality and distinctiveness of artworks in the globalized atmosphere. Moreover, it can gain recognition by emphasizing cultural characteristics, traditional features, and environmental issues through 'localization'(Julie and John, 2011). This study attempts to use design thinking to explore the deconstruction of traditional bamboo weaving materials and techniques, develop contemporary bamboo fiber art creation, and innovative teaching. It is hoped that this perspective on bamboo weaving craft and teaching research different from the past can inspire subsequent creators and researchers to rethink, define the innovative applications of material reconstruction and techniques, and the social interaction and significance between 'traditional bamboo weaving craft' and 'modern bamboo fiber art.' It also looks forward to seeing more creators and educators enhance their professional diversity or cross-border cooperation efforts to expand the public's horizons and build confidence in innovative bamboo fiber art teaching, so that the new form of bamboo fiber art not only highlights the trends of new materials and technology development in the contemporary art but also aligns with environmental and sustainable issues.

2. The lack of burden in preserving cultural skills

Under the active promotion of cultural asset preservation and community development strategies by the Taiwanese government, bamboo products with a rich history in everyday cultural life have become a promotional target. The government allocates relevant budgets through various agencies to pass down traditional craftsmanship. A representative government agency, the "Taiwan Provincial Handicraft Research Center," established in 1973, is today's "National Taiwan Craft Research and Development Center," which leverages the public sector's strength to promote handicrafts. It has been organizing bamboo weaving workshops throughout the province, investing more resources to support the bamboo weaving industry. Bamboo weaving craftsmanship involves using split bamboo stems to weave various objects. Woven items are further categorized into fine and coarse, with fine examples including items like fish traps and slightly coarser ones like dustpans. Since 2000, due to the government's promotion strategy, cultural asset departments at Taiwanese universities have started to offer bamboo

weaving courses and have hired bamboo artisans as instructors. Some related design departments have also employed industry professionals to assist in teaching bamboo weaving techniques. In recent years, thanks to local revitalization policies, government departments have shown considerable concern for and support of local community industries and the inheritance of traditional crafts. With changing times and technological advancements, traditional handmade craftsmanship has faced a decline, making the involvement of young people crucial. Therefore, through collaboration between industry, government, and academia, it is hoped that the power of design education, combined with teaching by industry professionals, will enable students to learn the art of "bamboo weaving"(Liu 2021). Bamboo weaving, as a local characteristic handicraft, has also been introduced into cultural and artistic courses in high schools, middle schools, and elementary schools. This not only enriches the curriculum but also enhances the continuity of traditional craftsmanship. It helps develop students' cognitive and manual skills while effectively promoting the dissemination of folk culture. Students not only learn traditional handicrafts but also raise awareness of preserving and protecting traditional culture. This is beneficial for bamboo weaving to reach beyond Taiwan and contribute to its global development (Liu 2022). Burdened by the preservation of cultural craftsmanship, it inadvertently affects the diversification of bamboo weaving teaching, leading to obstacles in innovative teaching and learning. Firstly, due to the weight of a rich cultural tradition, there may be pressure to preserve culture in teaching, which can hinder easy changes or innovations, limiting students' innovation and experimental learning in bamboo weaving techniques. Secondly, as bamboo weaving craftsmanship has a deep cultural background, educators and learners may lean towards conserving traditional skills and values, and may be reluctant to try new methods or ways of thinking. Thirdly, the teaching materials and resources for traditional bamboo weaving techniques are inherently limited, which may constrain diversity and innovation in teaching. Students may find it challenging to access new bamboo weaving materials or resources for innovative experiments(Cui 2008). Additionally, students and educators may feel cultural pressure to adhere to the norms and values of traditional craftsmanship, hesitating to attempt to go beyond or reinterpret these skills.

3. Emphasizing the application of product design

Since the promotion of the cultural and creative industry in 2008, the government has begun to aim at establishing local cultural and creative products as brands and entering the international market. Naturally, industry, government, and academia have devoted themselves to this goal.

The techniques of bamboo weaving and the unique characteristics of bamboo materials have also been applied in the design of cultural and creative products. At this time, the use of bamboo weaving and bamboo materials in product design has begun to show some creative variations. According to Wargnier (2014), contemporary Taiwanese designers no longer limit bamboo as a single material. Instead, they increasingly explore different ideas, combining bamboo weaving with various artificial or environmentally friendly materials using modern technology. Through diverse processing techniques, they present products with a diverse and innovative appearance, showcasing ingenious design ideas. To date, in academia, government, and industry, only a minority has conducted research on the application of bamboo weaving and bamboo materials in the field of product design. This research utilizes qualitative perspectives and focuses on innovative designs using contemporary bamboo multi-materials as the core concept. It involves systematically categorizing, dissecting, and reconstructing various creative aspects, techniques, types, philosophies, and the values reflected in existing products. This approach aims to explore and discover the inherent qualities of 'innovative design with bamboo multi-materials' and present a comprehensive, innovative, and systematic perspective for engaging in product design (Ma 2021; Sakundarini 2013). Past case studies have explored aspects such as creative materials, processing techniques, design functionalities, and have organized the external features and internal meanings of contemporary bamboo multi-material creative products, along with their developmental context (Ma 2021). These products are classified based on their functions, materials, and techniques, as shown in Table 1.

By referring to Table 1, it is found that the actual utilization of bamboo weaving techniques in product composite material design is not extensive. This is primarily due to the intricacy of bamboo weaving techniques. Learning these techniques to a mature level takes more than two years, and the time-consuming production process leads to costs far exceeding other bamboo material techniques. Therefore, bamboo weaving faces several challenges and drawbacks in product design: Bamboo's lower hardness and flexibility make it difficult to realize certain complex designs, especially for products that need to withstand heavy pressure or have unique shapes. Over prolonged use, bamboo is susceptible to damage, particularly in humid environments, where it can deform, crack, or rot, potentially affecting product durability. Bamboo weaving relies on experienced craftsmen and intricate manual processes, resulting in higher production costs and time requirements(Lin 2009). Market demand may fluctuate due to seasonality and trends, posing demand volatility risks. The bamboo weaving industry may face competition from other materials and technologies, necessitating continuous innovation and effective market positioning to maintain competitiveness.

Table 1. Application of bamboo composite material product design technology（This research summarizes）

	Function	Materials	Techniques
	Bag	Leather/bamboo	***Bamboo weaving***/stitching
	Bag	Fabric/bamboo	***Bamboo weaving***/stitching
	Bag	Leather/bamboo	Painting/bending
	Hanger	Iron/Bamboo	Painting/bending
	Chair	Bamboo	Painting/bending
	Mirror	Glass/bamboo	Painting/bending
	Chair	Fabric/wood/bamboo	***Bamboo weaving***/gluing
	Chair	Bamboo	Painting/bending
	Chair	Bamboo	Painting/bending
	Chair	Fabric/bamboo	Assembling/gluing
	Jewelry tray	Bamboo	Painting/gluing
	Composite potted plants	Glass/bamboo	Painting/gluing
	Pharmaceutical jar rack	Glass/bamboo	Painting/bending
	Video stand	Ceramic /glass/bamboo	***Bamboo weaving***/gluing
	Chair	Wood/bamboo	Painting/gluing

Even though there are some unavoidable defects when bamboo weaving is used in product design, in line with policy directions, some universities have formulated different strategies to make students aware of the cultural and economic significance of bamboo weaving(Yassir 2015). Design-related courses incorporate bamboo weaving material techniques into basic design courses, systematically constructing methods for learning bamboo weaving skills as a foundation for students' future creative practice and commercialization (Liu 2021). Bamboo weaving is generally included in product design teaching applications because bamboo as a material is abundant in Taiwan, and bamboo weaving products have extensive everyday applications.

Therefore, teaching focused on product design helps cultivate students to create practical bamboo weaving products that can be accepted and applied in the market, providing real value. The bamboo weaving industry in Taiwan has a certain future market, especially in household items and furniture. Teaching geared toward product design contributes to nurturing designers who meet industry needs, making it easier for such designers to find employment or start their businesses, promoting the development of the bamboo weaving industry. Additionally, product design teaching can combine traditional bamboo weaving techniques with modern design concepts to create bamboo weaving products with a modern style and practicality. This combination helps preserve traditional craftsmanship while adapting it to the modern market. Finally, bamboo weaving design teaching aligns with the requirements of design education as it provides a rich foundation of materials and techniques to develop students' design capabilities and creativity.

4. Bamboo weaving moving away from art education

In whichever era bamboo weaving developed, it has always been regarded as cost-effective craftsmanship. This perspective has shaped the focus of bamboo weaving technology and product design, primarily emphasizing practical household items driven by everyday needs rather than pure artistic expression. Of course, material utilization inherently reflects the societal demand for decoration and visual aesthetics, showcasing the delicate balance between craftsmanship and the functional aspects of these objects. This form of "aesthetic of objects," indirectly shaped by popular culture, has given rise to aesthetics intertwined with utility(Ma 2021). Bamboo weaving has been passed down from ancestors to the next generation within families and society, demonstrating the presence of cultural adaptation in the process. The craft of bamboo weaving is a form of art education rooted in society, and the mode of its inheritance is essentially an explicit manifestation of artistic education, often interpreted as the transfer of skills. Society attaches skill and cultural value to the bamboo weaving heritage (Eko 2017). Pöllänen (2009) argues that, for the general public, handicraft education is part of art education and should be integrated into the broader concepts and models of art education. In fact, Taiwan lacks knowledge and concepts in this regard, and compared to other materials in pure artistic creation, the use of bamboo is evidently rare. In the trend of international environmental awareness and interdisciplinary collaboration, the new generation of creators in Taiwan has been gradually attempting to showcase simple bamboo weaving techniques in landscape art. The Taiwan Craft Research and Development Center invited Japanese craftsperson Kazuyuki Nakashoji to Taiwan in 2017 to guide bamboo craft art creation, with the aim of allowing visitors

to understand that bamboo fiber art can originate from tradition and enter contemporary lifestyles(National Taiwan Craft Research and Development Institute, 2017). However, currently, most artists in Taiwan and art-related academic institutions lack understanding of bamboo weaving and the use of bamboo. Some even believe that bamboo's potential for artistic expression is challenging to harness. Bamboo weaving requires specific knowledge and skills, including bamboo processing and weaving techniques, which artists need to invest time in learning, creating a potential barrier for some. Bamboo is a unique material and may limit the creative possibilities of artists compared to traditional materials like canvas, oil paintings, or sculpting materials. Certain art styles or themes may not be easily realized through bamboo weaving. The art market generally favors traditional art forms such as paintings and sculptures, potentially affecting artists' choice of medium. Additionally, the general perception among the public is that bamboo weaving is a craft and practical item rather than purely art, influencing artists' willingness to apply bamboo weaving in their artistic endeavors. Nevertheless, art and art education cannot be separated from the cultural perspective. Karppinen (2008) defines culture as the entire range of human activities formed by ordered behavior and the results of learning and social rules. Bamboo weaving craftsmanship, as part of certain cultural products, undoubtedly influences both informal and formal craft education practices. Craft art education, in addition to cultivating technical skills in labor for each individual, also emphasizes artistic techniques and ideas. Hosang (2010) supports this point, stating that handicraft education is a part of the art education system and fundamentally distinct from skills cultivated in formal education settings.

5. Innovative bamboo fiber art education

Art education is an essential part of education, typically accommodating the capacities for creativity and cultural awareness (UNESCO 2006). Bamboo weaving is a cultural symbol and a medium for artistic creation. Bamboo weaving, explained as "竹" (bamboo) as the material and "編" (weaving) as the technique, involves processing bamboo strips split from bamboo poles according to the specifications required for the artwork. Bamboo strips are a natural fibrous material used in fiber art creation. In today's era emphasizing diversity and innovation, there is a wave of educational transformation emphasizing flipped classrooms and efforts to renew education at various stages, challenging teachers' existing thinking and moving toward nurturing deep knowledge and developing professional learning environments (Sawyer 2014). In an age dominated by innovation and creativity, businesses must innovate continually to maintain competitiveness. However, the key to business innovation lies in whether they have talent with

innovation capabilities. Therefore, promoting the cultivation of innovation capabilities has become an important educational issue (Ma 2021). How can bamboo weaving teachers learn innovative teaching? As scholars advocate, 'teacher education has evolved into a career of lifelong learning centered on in-service education' (Sato 2017, p. 35). The image of teachers in the new century should shift from 'experts in teaching' to 'experts in learning' because in the face of the arrival of a knowledge innovation and lifelong learning society, knowledge becomes highly specialized, complex, and fluid. Just as teachers need to focus on students' learning, teacher educators should also shift from being centered on professional techniques to being centered on designing and examining teacher learning. Designing ways and environments that can support teachers' learning of innovative teaching methods is an issue that bamboo weaving teacher education needs to explore. 'Teacher learning' should be regarded as a profession, yet it is easily overlooked or formalized, affecting students' access to high-quality learning experiences (Chen 2008). Reflection and a willingness to reform are the sources of innovative teaching. Innovative teaching activities may incorporate creative thinking techniques such as Mandala Thinking, SCAMPER, and TRIZ. However, it's easy for people to confuse creative teaching with creative thinking teaching, and the differences are as shown in Table 2. Furthermore, innovative teaching still needs its standards. As (Xu 2006) stated, novelty and value are the most important criteria for innovation. In other words, innovative teaching should have novelty, originality, and educational value.

Table 2. Comparison of creative teaching and creative thinking teaching (Wu 2002)

	Creative Teaching	**Creative Thinking Teaching**
Teacher's Role	Emphasizing teacher guidance and motivation	Emphasizing teacher guidance and motivation
Teaching Process	The process is diverse and dynamic, full of changes	Emphasize creative thinking strategies
Teaching Objectives	Encourage students to think actively and enjoy learning	Emphasizing the stimulation of students

In recent years, many educators have incorporated design thinking into their curricula, emphasizing "feel," "imagine," "do," and "share." They guide students to sense things in their environment or life that need change, further use their imagination to conceive solutions, take practical actions, and share their experiences (Lin 2011). Therefore, design thinking emphasizes seeking innovative solutions to various issues in a cross-disciplinary manner, creating more possibilities that can be effectively applied in teaching practices and settings. This study, through the interpretation of bamboo weaving terms, guided 200 students at different stages, including elementary, university students, and the general public, to understand and contemplate the

differences between bamboo weaving and bamboo fiber. It then enabled students to learn from each other through sharing, exploring the possibilities of bamboo fiber and artistic creation. This is a teaching strategy and approach that allows for step-by-step creative thinking, helping students clarify key contexts (Xiao 2011). The current teaching of design thinking often adopts the system developed by Stanford University's School of Design, which condenses design into five major steps: Empathize, Define, Ideate, Prototype, and Test. This process allows participants to navigate between two divergent and convergent modes of thinking, resembling two diamond-shaped "double diamonds" of design thinking models. It emphasizes that design should prioritize user needs. It starts by defining the problems faced by users, then utilizes brainstorming within teams to generate various ideas and create prototypes, leading to testing and solving real-world issues (Brown 2008). Just as students, through their teacher's examples of bamboo fiber art, explain that the essence of art creation lies in the ideas expressed by the creator, with the medium serving as a means to express those ideas. Gero (1998) advocate that material selection should occur concurrently with conceptual creation. At this moment, creators use various strategies to describe in detail the conditions of the creative problem by abstracting the problem domain. Therefore, integrating the steps of "design thinking" into the teaching process to explore teaching contexts centered on "human-centeredness" and "problem-solving abilities" is also a viable innovative teaching mechanism (Li 2021).

Innovation scholar Schumpeter (1934) defined five methods of corporate innovation, including:

a. Introducing a new product or offering a product with new qualities.

b. Adopting a new production method.

c. Pioneering a new market.

d. Obtaining a new source of supply for raw materials or semi-finished products.

e. Implementing a new organizational structure for the company.

Through a feasible innovative bamboo fiber art teaching mechanism, students can be encouraged to think, analyze, and evaluate art pieces. This helps them develop critical thinking, creativity, and problem-solving skills. Students can also gain insights into different cultural expressions of art during innovative learning, promoting cross-cultural communication and understanding. Importantly, innovative bamboo fiber art teaching can be more engaging, sparking students' interest in learning and increasing their participation.

6. Diversified applied culture and artistic creation

The theory and practice of multicultural arts education curriculum is an important topic. It

emphasizes that art education should transcend different cultural backgrounds, encouraging students to explore diverse artistic styles and expressions. It places cultural communities' life experiences at the center, encompassing various aspects such as artistic creation, art history, aesthetic attitudes, art criticism, and more. This educational approach promotes collaborative learning among students, where they share and appreciate artworks from different cultures. On the other hand, a spirituality-oriented holistic art creation teaching method emphasizes the spirituality of art creation, viewing art as a means of expressing emotions and thoughts through diverse art forms (Ballengee-Morris 2001). This study involved 200 students and various courses over time to conduct bamboo fiber art education. At the beginning of the course, the teacher-initiated discussions on bamboo weaving and bamboo fiber issues, encouraging students to reflect on and share their past experiences and perceptions. 99% of the students reflected that bamboo weaving was seen as a form of daily utensils and cultural products for them, and they were not familiar with bamboo fiber, associating it mainly with bamboo textile products. Subsequently, the teacher used bamboo weaving works and bamboo fiber art (Figure 1) to discuss the differences with students and what they observed as distinctive. 96% of the students expressed that bamboo fiber art works exhibited modernity in terms of form and color and could carry symbolic cultural meanings. In contrast, bamboo weaving was viewed as a traditional cultural product, initially used for agricultural and fishing utensils, later evolving into finely crafted decorative artworks that conveyed cultural characteristics but lacked the spiritual content of pure artistic creation.

Figure 1. Comparison of bamboo weaving and bamboo fiber artworks (Captured in this study**)**

This study found that by exploring cultural elements, students were guided to apply them in artistic creation. Students could understand the relationship between culture and artistic creation through this process. They gained rich theoretical and practical experience and expanded their

horizons through diverse artistic expressions, learning the importance of cultural diversity. Table 3 presents post-course feedback from students. The study collected students' learning responses to traditional bamboo weaving and bamboo fiber art teaching through purposive sampling. There was a significant difference in the number of votes between these two teaching methods. Especially, students strongly expressed that bamboo fiber art teaching was an innovative teaching method, while traditional bamboo weaving did not generate a strong desire for learning. Learning bamboo fiber art indeed provided them with significant benefits and made them realize that bamboo weaving elements could be applied to modern art forms.

Table 3. Application of cultural elements in artistic learning

	Traditional bamboo weaving teaching	**Bamboo fiber art teaching**
Application and creation of cultural elements	32	168
Guide artistic creation and application	**10**	**190**
Multi-faceted learning	15	185
Understanding of artistic creation concepts	**12**	**188**
Cultivate innovative thinking skills	35	165
Application of innovative teaching methods	**6**	**194**
Attract students' willingness to learn	43	157

In fact, cultural elements are often integrated into modern art design, including patterns, symbols, themes, and more. Artists, driven by their subjective consciousness and personal needs, reinterpret traditional patterns to create unique works of art. According to Duncum (2001), art and culture are not only objects to be preserved but also core guidelines for rebuilding sustainability. Artists and cultural artists play a crucial role in the sustainability movement by using art and culture to raise awareness about sustainable development. People's culture and subconscious influence their perception and evaluation of art. Cultural elements in the subconscious can come from ethnic culture, behavioral patterns, spiritual activities, and more, impacting the creation and understanding of art. Art and culture influence each other; art reflects culture and can also influence cultural evolution (Ballengee-Morris 2001). Various art forms, including literature and performing arts, are not only influenced by culture but can also impact cultural development. Taiwanese bamboo fiber artists incorporate local cultural elements into their visual imagery, reflecting the influence and evolution of local culture on artistic creation. Cultural elements have a profound impact on art, not only manifested in artworks but also playing a critical role in the thinking and creative process of artists. This interaction enriches the diversity of art and promotes the preservation and innovation of culture.

7. The application of reconstructing materials and techniques

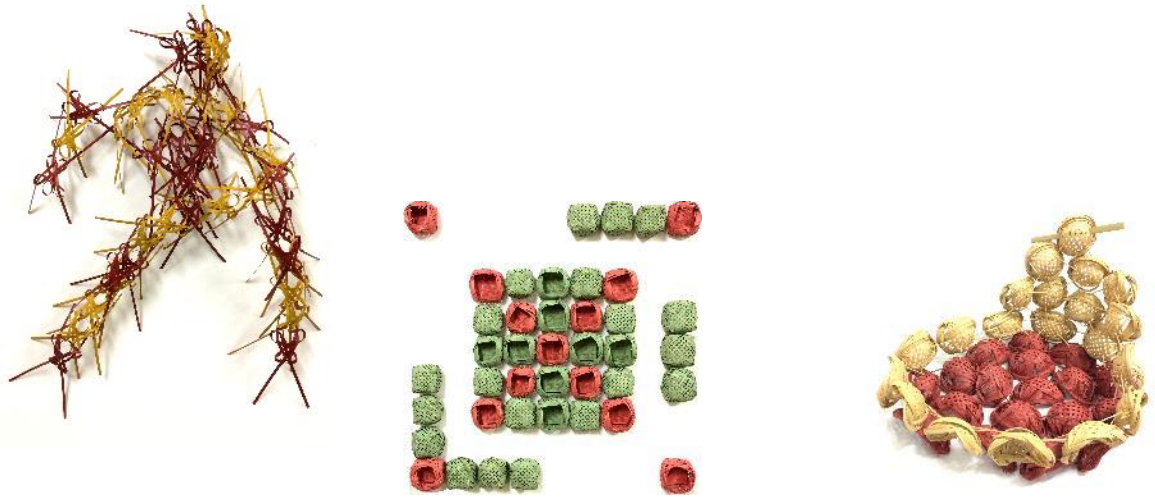
The rich cultural elements that enrich art indeed play a very important role in the creative process. Materials are the essential medium for expressing artistic creation, and techniques influence the texture and visual effects of the artwork. The significance of materials and techniques cannot be underestimated in artistic creation. This includes how to recognize and select appropriate media and apply techniques to convey the artist's perspective and creativity.

This research also involves the practical teaching of bamboo weaving techniques to students in the curriculum. Through learning these techniques, students gain an understanding of the characteristics of bamboo fibers (bamboo strips) (Figure 2). Bamboo fibers are exceptionally flexible, elastic, easy to bend and weave, lightweight yet strong and durable. They can withstand a certain degree of weight and pressure (Lin 2009). Bamboo fibers possess unique surface textures and colors, providing a natural texture. They are also a material with excellent physical properties and environmental characteristics, making them highly suitable for artistic creation. Bamboo fiber art can be created as individual pieces or compositions, emphasizing how artists use the basic elements of point, line, and surface to design and create visual effects. This can be seen as a technique that combines points and lines to form surfaces.

Figure 2. Students learning the correlation between point, line, and plane in bamboo weaving and the characteristics of bamboo strips (Captured in this study)

In the courses, teacher also explain the techniques and importance of using colors in art creation. Color is an extremely expressive tool, allowing artists to convey emotions, moods, and themes through different shades and combinations. Different colors may have varying symbolic meanings in different cultures and contexts, which can be used to enhance storytelling and depth (Jana 2010). The use of color helps artists create visual layers and a sense of depth. Through variations in color, artists can simulate distance, enabling the audience to feel changes in space and perspective. Vibrant colors can capture the viewer's attention, making the artwork more

appealing. Artists can use contrasting or accent colors to draw the viewer's focus, encouraging them to explore the artwork more deeply (Hanbury 2008). Through an understanding of the principles of composition using point, line, and plane, as well as the vocabulary of color elements, the course attempts to use point, line, and plane as the theme for student art creation. Students are grouped in teams of 4-6 people to collectively consider and discuss how to use compositional elements and color to create bamboo fiber artworks (Figure 3).



Transformers Seems square but not square Mother's love

Figure 3. Artwork created by students using the elements of point, line, plane, and color (Photographed in this study)

In the bamboo fiber art creation course, students indeed learn many things that cannot be learned in traditional bamboo weaving instruction. Stratified sampling reflects, as shown in Table 4, that these two courses significantly make students feel that the bamboo fiber art course can provide them with more opportunities to learn material reconstruction and innovative technique applications. At the same time, it is believed that this course can teach many different aspects and innovative thinking and problem-solving abilities. Anyfantis (2017) believe that "medium" can serve as a link between "what is in the mind" and "what is presented in the interface"; in fact, creators must specialize in the medium to a considerable extent in order to achieve the purpose of creation through this medium; research has shown that during the creative process, the medium changes the presentation of characteristics (Lim 2003); the medium reflects the possibilities of certain creations in terms of scope and stimulating thinking and imagination (Bilda 2006); different media will make creators change their ways of thinking and reasoning

(Bilda 2000). For example, in recent years, due to factors such as environmental awareness, regulations, and technological development, people have shown greater interest in "sustainable" materials (Abdul Rashid 2008). Therefore, bamboo has become a material chosen by artists for artistic creation.

Table 4. Material and technique innovation application

	Traditional bamboo weaving teaching	**Bamboo fiber art teaching**
Material and Technique Application in Creation	23	177
Guiding the Reconstruction and Use of Bamboo Materials	**5**	**195**
Multi-faceted learning	21	179
Understanding of artistic creation concepts	**3**	**197**
Cultivate innovative thinking skills	31	169
Application of innovative teaching methods	**6**	**194**
Attract students' willingness to learn	20	180

In the era of mass media, artists face constantly changing media and materials. The depth of material reconstruction implies that artists need to adapt to new media (Gantt 2001) while maintaining respect for traditional bamboo weaving techniques to create depth and diversity in their artworks. The choice of techniques and materials by artists is crucial in artistic creation (Gantt 1998). Students, by learning from bamboo fiber artists' experiences with different materials and techniques, can improve the quality of their artworks. Contemporary bamboo fiber artworks often use multiple media and techniques. This diversity enables artists to create more creative and expressive works, reflecting the cultural and historical backgrounds of different materials. Appreciators can also understand the diversity and complexity of art through different aspects of materials and techniques (Williams 1996). In summary, traditional bamboo weaving techniques can be applied to artistic creation to create unique shapes and structures. This fusion of techniques and materials helps shape a unique artistic style, enriching the forms of art expression and reflecting the creativity and contribution to culture by artists.

Conclusion

Since ancient times, bamboo has provided literati with inspiration for literature, art, and self-cultivation. As a creative medium, bamboo weaving techniques have a long history. Although bamboo weaving has unique cultural value, cultural preservation constraints may limit students' creativity and experimental learning in terms of innovative teaching. Bamboo fiber art education respects tradition while finding a balance, encouraging students to explore new creative methods. Bamboo weaving techniques offer a unique aesthetic and sustainability advantage in artistic

expression. However, they also face challenges such as material limitations, durability issues, complex craftsmanship, market demand fluctuations, and competition in the art world. Effective material and technological innovations can help address these issues, and leveraging bamboo weaving's texture and characteristics can bring a unique aesthetic to art, finding its special place in the art field.

Author declaration

It is hereby confirmed that the manuscript has been read and approved by all the named authors and there is no conflict of interest. All regulations of our institution/institute/company including intellectual property rights have been followed and there are no impediments to publication.

Conflict of interest

The authors declare there is no conflict of interest

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