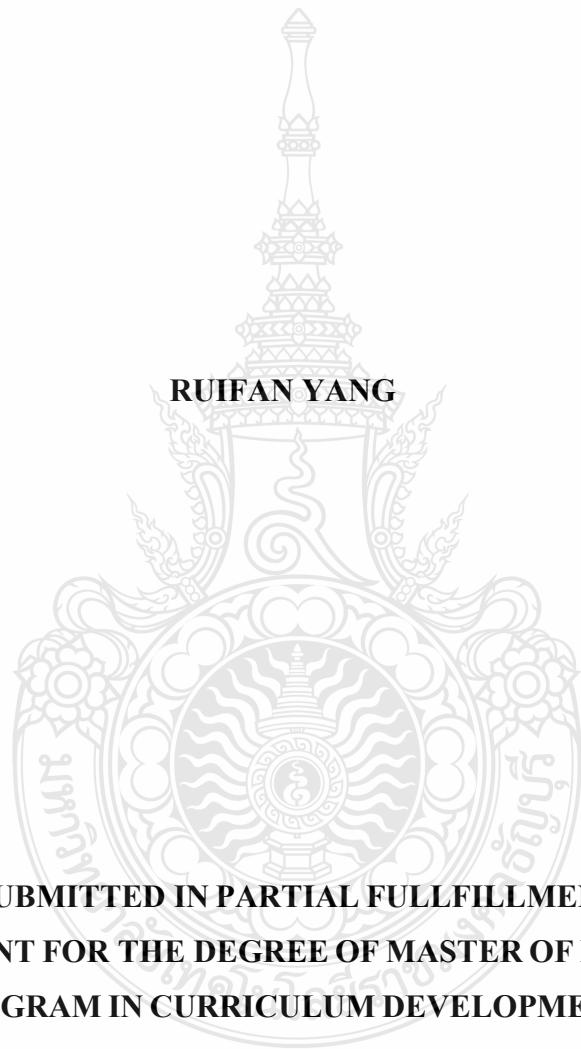
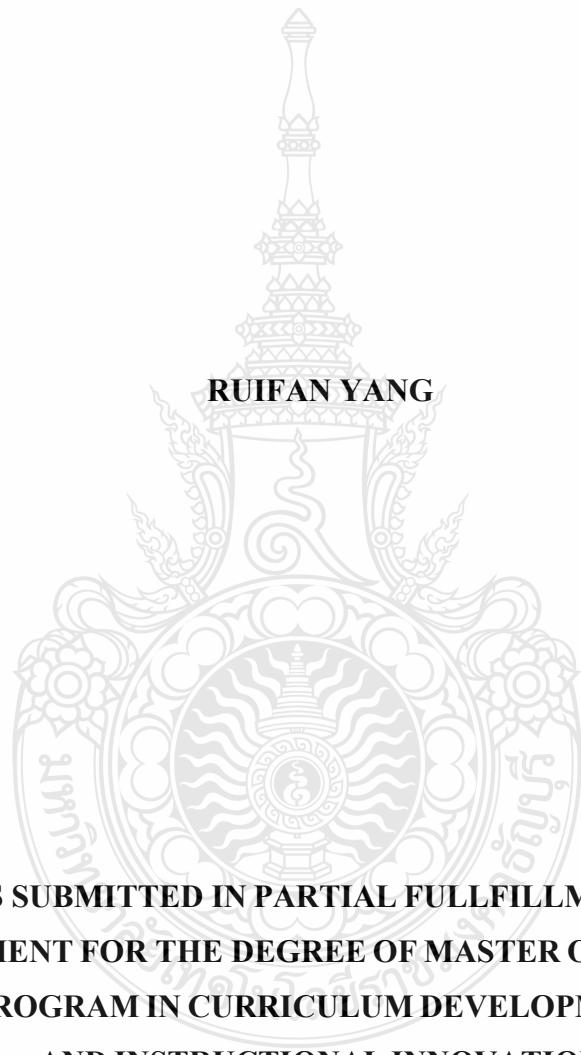


**CURRICULUM DEVELOPMENT COURSE OF TRADITIONAL AND
MODERN HANDICRAFT DESIGN AND PRODUCTION FOR
VOCATIONAL AND TECHNICAL STUDENTS**



**A THESIS SUBMITTED IN PARTIAL FULLFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION
PROGRAM IN CURRICULUM DEVELOPMENT
AND INSTRUCTIONAL INNOVATION
FACULTY OF TECHNICAL EDUCATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
ACADEMIC YEAR 2022
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Thesis Title	Curriculum Development Course of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students
Name – Surname	Ms. Ruifan Yang
Program	Curriculum Development and Instructional Innovation
Thesis Advisor	Assistant Professor Pranom pansawai, Ph.D.
Academic Year	2022

THESIS COMMITTEE

 Somchai Sinok Chairman

(Associate Professor Somchai Sinok, Ph.D.)

 Committee

(Assistant Professor Rossarin Jermtaisong, Ph.D.)

 Committee

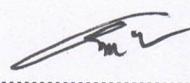
Pornpirom Lhongsap Committee

(Mr. Pornpirom Lhongsap, Ph.D.)

 Committee

(Assistant Professor Pranom Punsawai, Ph.D.)

Approved by the Faculty of Technical Education, Rajamangala University of Technology Thanyaburi in Partial Fulfillment of the Requirements for the Master's Degree

 Dean of Faculty of Technical Education

(Assistant Professor Arnon Niyomphol, M.S.Tech.Ed.)

4 April 2023

Thesis Title	Curriculum Development Course of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students
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ABSTRACT

The purposes of this study were to : 1) develop a curriculum course of learning design in modern handicrafts and production and 2) compare students' learning performance before and after teaching.

The randomly selected samples included 30 students studying art and design at a vocational-technical school in the second semester of academic year 2022. They were selected through a random sampling technique. The research instruments consisted of a learning management plan in traditional and modern handicraft design and production courses and students' learning performance tests in vocational-technical program.

The results of the study were as follows: 1) the curriculum course of learning design in modern handicrafts and production consisted of course structure, objectives, content, teaching methods, media and course evaluation, and 2) the students' learning performance of studying art and design at the vocational-technical school after using the teaching method was significantly higher than before learning at the statistical significance level of .05.

Keywords: curriculum development course, handicrafts, learning performance

Acknowledgments

Time flies, and the good time of study always flies. In these two years of postgraduate study, due to the epidemic, I was not able to start my postgraduate study in the beautiful Thailand, but had to choose to communicate with professors online via video conference to study.

After two years of study, what I have gained is not only richer knowledge, but more importantly, the way of thinking and expression that I have cultivated in reading and practicing. I am grateful to have met many mentors and friends. They gave me selfless help and care in my study, which made me grow in many aspects. It is difficult to measure my gratitude in words, so I would like to express my highest respect in the most simple words.

First of all, I would like to thank Dr. Pornpirom Lhongsap and Asst. Prof. Rossarin for guiding me in the final stage of my graduate study, the dissertation stage. From the initial identification of the topic, data collection, writing, revising to finalizing the dissertation, they have provided me with patient guidance and selfless assistance. Their selflessness and dedication are admirable. At the same time, I would like to thank all the professors who taught us and all the classmates who gave me guidance and help during these two years, thanks to them I can make progress in all aspects.

Finally, I would like to thank my parents for helping me with my studies and doing their best to give me the opportunity to receive a higher education. As the saying goes, "you learn as you live", the more you learn, the more you see. Thank you, my parents, I love you.

Ruifan Yang

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CHAPTER 1

INTRODUCTION

1.1 Background and Statement of Problems

In today's rapidly developing globalized economy, the integration of traditional handicrafts and modern design has become an important driving force for the development of cultural and creative industries. For vocational and technical education, it has become particularly urgent to cultivate talents who not only master the essence of traditional handicrafts but also possess modern design concepts and production techniques. This article aims to explore the development of a curriculum system for vocational and technical education students, which integrates traditional and modern handicraft design and production to provide society with compound talents capable of innovation and practical skills.

As an important part of intangible cultural heritage, traditional handicrafts have faced challenges such as difficulties in skill inheritance and shrinking market demand. Through curriculum development, the inheritance and development of traditional handicrafts can be effectively promoted. From the perspective of industrial development, as consumers' demand for personalized and customized products increases, along with the widespread promotion of the "craftsman spirit" across various industries, incorporating traditional handicraft elements into modern design and production has become an effective way to enhance product added value and strengthen market competitiveness. However, there has been a scarcity of talents in the current market who possess both traditional handicraft skills and modern design capabilities, which has severely restricted the innovation and development of related industries (Qiu, C., 2019, pp. 34-36). Therefore, developing a curriculum system that covers the essence of traditional handicrafts while integrating modern design concepts and production technologies has become highly significant for training high-quality skilled talents that meet market demands.

From the perspective of cultural heritage, traditional handicrafts, as a treasure of national culture, carry rich historical information and regional characteristics. However, with the acceleration of the modernization process, many traditional

handicrafts have faced the severe challenge of losing skills and shrinking markets. Therefore, incorporating traditional handicrafts into the vocational education system and implementing them through systematic curriculum design and teaching has not only helped preserve and protect skills but also stimulated the younger generation's interest in and identification with traditional culture, injecting new vitality into the living inheritance of cultural traditions (Hua, J., 2019, pp. 308-315).

With the improvement of people's living standards and changes in aesthetic concepts, modern design has increasingly focused on individuality, innovation, and cultural connotation. The integration of traditional handicrafts and modern design meets this demand (Han, X., 2018, pp. 45-46).

In today's globalized economic and cultural context, the integration of traditional handicrafts and modern design has become a key driver for cultural innovation and industrial upgrading. With the rapid development of technology and the increasing diversification of consumer demand, the market's need for talents who understand both traditional handicrafts and modern design techniques is becoming more urgent. However, there are still significant deficiencies in vocational and technical education in cultivating such compound talents, with the lag of the curriculum system and its disconnection from market demands acting as key bottlenecks to talent development (Li, Q., 2013, p. 65). Vocational and technical education focuses on training skilled talents with a focus on practical operation and innovation (Zhang, S., 2020, pp. 70-71). Developing courses that integrate traditional and modern handicraft design and production can enhance students' comprehensive quality and competitiveness.

From the perspective of educational reform, vocational education and technical education serve as a crucial bridge between education and industry. Their curriculum system should closely adhere to industrial development trends and market demands (Zhou, X., 2017, pp. 34-36). However, many vocational schools still use traditional teaching methods and curriculum content in teaching handicraft design and production, which lacks effective integration with modern design concepts and production technologies (Yuan, X., 2003, p. 7). This not only limits the cultivation of students' comprehensive abilities but also affects the social recognition and influence of vocational education. Therefore, promoting the reform and innovation of professional courses in

handicraft design and production and establishing a curriculum system that meets contemporary needs has become one of the key tasks of vocational education reform.

Making the development of handicraft technology education the legal responsibility and obligation of schools is essential. Secondary vocational education serves the local economic and social development and not only trains practical and skilled talents but also undertakes the task of cultural inheritance. It plays an important role in preserving local handicraft culture. Traditional handicrafts are an important part of our rich cultural heritage, created through actual production and daily life. They reflect the cultural values and ideas formed by the Chinese nation over thousands of years of history, embodying deep cultural traits and unique cultural creativity. Traditional handicrafts are some of the most representative forms of "intangible cultural heritage." They are not only precious scientific and cultural assets but also carriers of traditional technical knowledge.

Each traditional handicraft has distinctive regional cultural characteristics, reflecting the economy, culture, beliefs, customs, and history of different ethnic groups and regions, and embodying the thoughts, emotions, and aesthetic psychology of the craftsmen. These rich traditional handicrafts "intangible cultural heritage" resources are excellent for schools to use in historical and cultural education, skills training, and comprehensive quality education. They can easily be incorporated into school curricula (Wang, W., 2008, pp. 122). The development and use of these resources hold great educational, cultural, historical, economic, and social value.

Vocational education is a critical part of China's secondary education system and plays an essential role in cultivating skilled workers across various industries. The "Action Plan for the Reform and Innovation of Vocational Education" formulated by the Ministry of Education emphasizes the importance of supporting vocational schools with ethnic characteristics to reform and develop, promoting the professionalization of training ethnic cultural and artistic talents and folk craft skills, enhancing the vitality of ethnic cultural and artistic skills, and advancing the reform and development of vocational education in ethnic areas (Ministry of Education, 2020, p. 1). This presents a significant opportunity for both the development of vocational education and the preservation of traditional handicraft techniques. National policies offer a strong foundation and development direction for integrating handicraft courses into vocational schools.

Vocational schools provide an educational environment and skilled talent for the inheritance and development of traditional handicrafts. Furthermore, vocational education emphasizes the cultivation of the vocational knowledge, technology, and skills needed for students to participate in future labor, advocating a model that integrates "teaching, doing, and learning." Traditional handicrafts, produced through manual labor, align perfectly with the hands-on focus of vocational and technical education (Liu, C., 2013). Thus, there are clear advantages to developing traditional craft courses in vocational schools, both in terms of policy and the specific goals of vocational education.

In the long era of agricultural civilization, traditional handicrafts were often cultural symbols of specific regions and ethnic groups, representing precious cultural resources. In recent years, people have grown weary of the monotonous, standardized products of the industrial age and increasingly prefer delicate, simple, and humanized handicrafts. Handicraft products have seen a resurgence (Zhang, Y., 2016). Traditional handicrafts such as bamboo weaving, color painting, shell carving, New Year pictures, carving, and paper cutting all hold rich educational value and significance.

In summary, developing a curriculum system for the design and production of traditional and modern handicrafts for vocational education students not only helps preserve and protect traditional handicrafts but also meets the demand for compound talents in industrial development and supports the continued implementation of vocational education reform. This study aims to explore the construction of a scientifically sound, practical, and effective curriculum system through in-depth analysis of current market demands, educational status, and industrial trends, thereby providing strong support for training high-quality skilled talents with both traditional handicraft expertise and modern design concepts.

1.2 Research Questions

- 1.2.1 What were the components of the curriculum course on traditional and modern handicraft design and production for vocational and technical students?
- 1.2.2 Was there a statistically significant difference in vocational and technical students' learning performance before and after being taught using the curriculum course?

1.3 Purpose of the Study

1.3.1 Developed a curriculum course on traditional and modern handicraft design and production for vocational and technical students.

1.3.2 Compared vocational and technical students' learning performance before and after being taught using the curriculum course.

1.4 Research Hypothesis

The researcher tested the following hypotheses:

1.4.1 The vocational and technical students' learning performance after being taught using the curriculum course on traditional and modern handicraft design and production was significantly higher than before, with statistical significance at the .05 level.

1.5 Scopes of the Study

1.5.1 Population and Sample

1.5.1.1 The research population consisted of 60 students enrolled in the second semester of 2022 in the School of Art and Design at Hainan School of Economics and Technology.

1.5.1.2 The research sample consisted of 30 students enrolled in the second semester of 2022 in the School of Art and Design at Hainan School of Economics and Technology.

1.5.2 Variables

1.5.2.1 The independent variable: curriculum course on traditional and modern handicraft design and production for vocational and technical students.

1.5.2.2 The dependent variable: vocational and technical students' learning performance.

1.5.3 Scope of Contents

The curriculum course on traditional and modern handicraft design and production for vocational and technical students covered the following 3 units:

- 1) Introduction to traditional and modern handicrafts.
- 2) Materials.

3) Design and production.

1.5.4 Scope of Time

The duration of this research project was from September 2021 to 2022.

1.6 Definition of Terms

For clarity, the following terms were conceptually and operationally defined as follows:

1.6.1 Curriculum course referred to the structured learning experiences designed to provide students with knowledge, skills, and attitudes in a specific subject.

1.6.2 The curriculum course on traditional and modern handicraft design and production referred to the structured learning experiences designed to combine skill transmission and labor education. It helped students understand the concepts, values, and characteristics of both traditional and modern handicrafts, recognizing them as labor with both artistic and labor value. Through hands-on practice, students enhanced their abilities, mastered relevant labor skills, and cultivated correct labor values, fostering a passion for creative work. This course comprised five key components: objectives, content, teaching methods, media, and course evaluation.

1.6.3 Vocational and technical students' learning performance referred to the knowledge and understanding acquired through learning, which could be measured and assessed using tests.

1.6.4 Students referred to those enrolled in the second semester of 2022 in the School of Art and Design at Hainan School of Economics and Technology.

1.7 Conceptual Framework

The conceptual framework for the research can be summarized as depicted in Figure 1.1, which outlines the key elements and relationships central to the study. This framework serves as a foundation for understanding the underlying principles and guiding the research process.

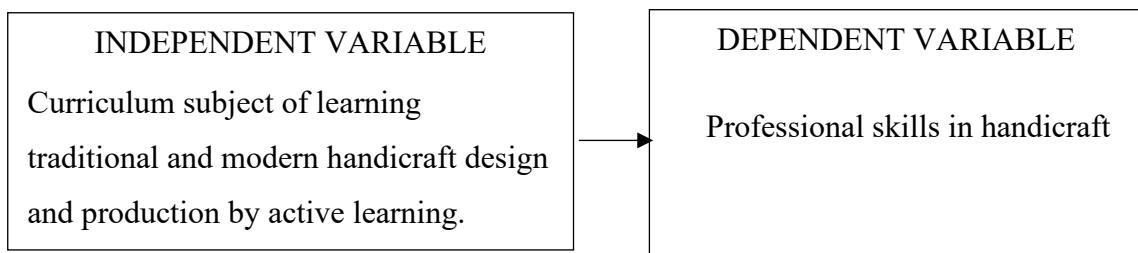


Figure 1.1 Conceptual Research Framework

1.8 Benefits

1.8.1 The innovative curriculum course explores the dual functions of traditional and modern handicrafts, serving both as a means of skill inheritance and labor education. It examines the unique advantages of schools in protecting and inheriting traditional handicrafts, while also demonstrating the role of traditional and modern handicraft resources in the educational process.

1.8.2 This curriculum course provides a framework for school education, promoting students' understanding of cultural lineage, helping them acquire cultural identity, inherit essential skills, cultivate their labor abilities, and develop a correct understanding of labor values.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter focuses on reviewing previous studies in the following fields related to this research.

2.1 Curriculum

2.1.1 Definition of Curriculum

2.1.2 Curriculum Development

2.2 The Educational Value of Traditional Handicrafts

2.2.1 The Cultural Value of Traditional Handicrafts

2.2.2 The Practical Value of Traditional Handicrafts

2.2.3 The Innovative Value of Traditional Handicrafts

2.2.4 The Social Value of Traditional Handicrafts

2.3 The Innovation and Integration of Modern Handicrafts and Education

2.3.1 The Evolution of Modern Handicrafts and Educational Value

2.3.2 Interdisciplinary Integration in Modern Handicraft Education

2.3.3 Sustainability in Modern Handicraft Education

2.3.4 Integration of Digital Tools in Modern Handicraft Education

2.3.5 The role of Educational Innovation in Promoting Modern Handicraft Development

2.4 Learning Performance

2.4.1 Definition of Learning Performance

2.4.2 Learning Performance Evaluation

2.5 Related research

2.5.1 Domestic Research

2.5.2 Foreign Research

2.1 Curriculum

2.1.1 Definition of Curriculum

The concept of "curriculum" was multifaceted and evolved over time, reflecting various educational perspectives. As Zhao Tingyang (2000, p. 7) stated, humanistic knowledge existed in a world of infinite possibilities, unlike the natural sciences, which could be empirically verified (Wang, X., 2005, pp. 46-47). Therefore, the definition of curriculum remained complex and varied. It was not merely a matter of content arrangement but the core of the educational process, reflecting both the multifaceted needs of society and the personal growth of students.

In ancient China, the concept of curriculum extended beyond the modern understanding of school education. For instance, Zhu Xi (2007, pp. 66-67) emphasized that the curriculum was not only about knowledge transmission but also about personal cultivation and societal responsibility. This idea aligned with modern curriculum theories, which highlighted the dynamic nature of learning and the integral role of curriculum in students' development.

Curriculum had been defined from various perspectives. Zhang Hua (1998, pp. 23-25), in his work Curriculum and Teaching Theory proposed three definitions: curriculum as a discipline, as a goal or plan, and as the experiences or encounters of learners. Shi Liangfang (1996, pp. 90-93) expanded upon this by defining curriculum as planned teaching activities, as a medium for reproducing social and cultural values, and as a tool for social transformation. These definitions underscored the diverse functions of curriculum, suggesting that it was not merely a means of transferring knowledge but also a vehicle for cultural preservation, societal values, and fostering innovation.

As society evolved, the definition of curriculum broadened. It came to include not only academic subjects but also various activity-based courses that promoted the overall development of students. Schools were expected to teach

traditional subjects such as Chinese and mathematics while incorporating extracurricular activities, such as "Lei Feng Month" or internships, to cultivate students' social responsibility, teamwork skills, and innovative spirit (Song, W., 2010, pp. 10-11). Although these activity-based courses were not as clearly defined as academic subjects, their impact on students' development was significant and needed to be integrated into curriculum planning.

When curriculum was viewed merely as a plan or goal, it often emphasized expected learning outcomes while neglecting the unexpected factors that played a crucial role in student development. Curriculum needed to be seen as a dynamic, adaptable process that could adjust to societal and learner needs (Zhang, L., 2015, p. 139). For example, in traditional handicraft education, curriculum design should not have focused solely on technical skills but also on helping students understand and transmit cultural values, fostering a deeper sense of cultural identity and innovation (Wang, X., & Liu, J., 2019, pp. 22-27).

In conclusion, the definition of curriculum should not have been confined to the transmission of academic knowledge. Instead, it should have been a comprehensive framework that nurtured cognitive, emotional, and social growth (Dewey, J., 1938, pp. 28-29). Curriculum needed to evolve to meet the changing demands of society and students. It should not only have helped students succeed academically but also have guided them in navigating the complexities of life. The true purpose of curriculum design was to cultivate students' critical thinking, creativity, and social responsibility, preparing them to face future challenges with confidence.

2.1.2 Curriculum Development

Curriculum development referred to the systematic process of planning, designing, implementing, and evaluating educational programs aimed at achieving specific learning outcomes. It was a central aspect of educational theory and practice, focusing on aligning teaching with the evolving needs of society, the demands of the

labor market, and the aspirations of learners. As the field of curriculum development advanced, the concept of curriculum shifted from a simple arrangement of subjects to a more dynamic and flexible design of educational activities, incorporating feedback from various stakeholders, including educators, students, parents, and the broader community.

The process of curriculum development typically involved several stages: needs analysis, goal setting, content selection, instructional strategy design, assessment planning, and continuous evaluation. Needs analysis was a critical phase in curriculum development, requiring educators to thoroughly understand the actual needs of learners and society. In this phase, Tyler (1949, pp. 11-12) proposed key questions for curriculum development: "What educational purposes should schools aim to achieve?" and "What educational experiences can be provided to accomplish these goals?" The answers to these questions guided the direction of curriculum content and instructional activities.

A fundamental theory in curriculum development was the "Tyler Rationale" (1949, pp. 13-15), which provided a systematic framework for curriculum planning. It emphasized clear goal setting, systematic selection of learning experiences, and a focus on evaluation to ensure the curriculum achieved its intended objectives. Tyler's approach had a profound influence on both traditional and modern curriculum frameworks, particularly in vocational and technical education programs focused on skill development.

In the context of vocational education, the development of traditional and modern handicraft courses, curriculum development had to balance the transmission of technical skills with the preservation of cultural knowledge. For instance, in developing a curriculum for traditional crafts like Hainan coconut carving, it was essential not only to focus on hands-on techniques but also on helping students understand and convey the cultural significance behind these crafts. As Bobbitt (1918,

pp. 45-46) pointed out, curriculum development should have addressed the relationship between the subject matter and the learner's engagement with it, ensuring that the content was not only relevant but also fostered innovation and cultural awareness.

Moreover, curriculum development was viewed as an ongoing, dynamic process rather than a closed one. Stakeholders such as teachers, students, local communities, and industry professionals collaborated in curriculum design to ensure that the program reflected both local cultural heritage and global trends. Pinar et al. (1995, pp. 115-117) emphasized the importance of contextualizing curriculum to the cultural and historical needs of the community while adapting it to the changing global context. This approach ensured that the curriculum was responsive to both local and global challenges.

One of the notable trends in modern curriculum development was the shift from a "top-down" model to a more flexible, learner-centered approach. This shift was particularly relevant when developing courses that integrated traditional and contemporary practices. For example, combining ancient techniques like coconut carving with modern design principles or digital tools provided students with a comprehensive learning experience that blended tradition with innovation. Fullan (2007, pp. 21-23) noted that curriculum development should not only be a technical endeavor but also a social one, aimed at fostering creativity, critical thinking, and collaboration to prepare students for an ever-changing world.

In conclusion, curriculum development was a dynamic and responsive process that adapted to the changing needs of education and society. It needed to be flexible, inclusive, and reflective of students' cognitive and emotional development, as well as their social and cultural growth. In the context of traditional handicraft education, curriculum development should not have focused solely on technical proficiency but also on cultivating a deeper connection to cultural heritage. Ultimately, a well-designed curriculum prepared students for future challenges in a globalized

world, ensuring that they were equipped with both practical skills and a strong sense of cultural identity.

2.2 The Educational Value of Traditional Handicrafts

2.2.1 The Cultural Value of Traditional Handicrafts

Traditional handicrafts were not only symbols of national culture but also witnesses to historical and social development. In the process of learning traditional handicrafts, students directly perceived and experienced the traces of history and the essence of culture. These handicrafts carried centuries, even millennia, of cultural heritage, representing the wisdom and spirit of the nation. Zhang (2019, pp. 34-37) pointed out that traditional handicraft education was an essential way to cultivate students' cultural identity and national pride. By learning these traditional skills, students not only mastered a handicraft but also gained a deeper understanding of their nation's historical background, traditional values, and aesthetic concepts.

In China, traditional handicrafts were often closely linked to regional cultures. Local handicrafts such as Jingdezhen porcelain, Suzhou embroidery, and Yunnan silverware embodied the unique characteristics of their respective regions. Through the education of these handicrafts, students experienced the distinctive charm and historical depth of regional cultures, thereby strengthening their cultural identity (Zhao & Li, 2017, pp. 18-21). Furthermore, traditional handicraft education helped foster students' awareness of cultural preservation and cross-cultural understanding. Wang (2017, pp. 66-70) argued that in the context of globalization, traditional handicraft education not only helped students build cultural confidence and preserve local culture but also promoted an understanding and respect for cultural diversity.

In summary, traditional handicrafts played a crucial role in cultural education by bridging historical heritage and modern learning. They provided students with direct engagement in cultural traditions, reinforcing their sense of identity and

appreciation for regional diversity. Moreover, in an era of globalization, such education contributed to both cultural preservation and the development of cross-cultural awareness, making it an invaluable component of holistic learning.

2.2.2 The Practical Value of Traditional Handicrafts

Traditional handicrafts are not only of great value in preserving cultural identity but also hold significant practical value in both education and modern society. Learning traditional handicrafts equips students with essential practical skills applicable in various industries, ranging from design and craftsmanship to entrepreneurship and tourism. As an educational tool, traditional handicraft education helps develop students' problem-solving abilities, creativity, and manual dexterity—skills that are increasingly important in today's rapidly changing job market (Gao, Y., 2018, pp. 55-56).

In the process of creating traditional handicrafts, students develop crucial technical skills, such as precision, attention to detail, and effective use of tools and materials. These skills are transferable to a wide range of professions, particularly in industries such as fashion, interior design, and manufacturing. For example, in the teaching of Hainan coconut carving, students not only learn the intricate carving techniques but also how to design and produce decorative items that meet market demands. As Gao (2018, pp. 57-58) pointed out, integrating traditional craftsmanship into vocational education enables students to acquire hands-on skills while preserving cultural techniques that might otherwise be lost.

Moreover, the practical value of traditional handicrafts extends beyond the technical skills gained. It fosters creativity and innovation by challenging students to engage in hands-on work and think outside the box. As students learn to adapt traditional methods to contemporary needs, they are encouraged to create unique, innovative products that cater to modern market demands. As Zhang (2020, pp. 112-115) noted, the fusion of traditional craftsmanship with modern design concepts not only

results in distinctive products but also opens new business opportunities, especially in emerging fields such as cultural tourism and sustainable fashion.

The economic benefits of traditional handicrafts should also not be overlooked. In many regions, handicrafts represent an important source of income, particularly in rural areas where the production of handcrafted goods serves as a livelihood. For instance, in countries like India, Morocco, and Mexico, traditional handicrafts are an integral part of the local economy, supporting small-scale industries and providing employment for artisans. As Kumar (2016, p. 78) pointed out, traditional crafts contribute to the local economy by fostering entrepreneurship and offering sustainable income opportunities to artisans, particularly in remote areas. By integrating traditional handicrafts into modern curricula, educational institutions can help students enter these industries, promoting economic development at both local and national levels.

Furthermore, the practice of traditional handicrafts is recognized for its therapeutic benefits, promoting mental well-being and mindfulness. Studies have shown that working with one's hands, whether through weaving, pottery, or carving, can effectively reduce stress and improve focus. In a world dominated by technology, traditional craftsmanship provides students with a rare opportunity to engage in a meditative, hands-on activity, which can improve both emotional and cognitive development. As Martin (2019, pp. 23-25) noted, the process of crafting can foster a sense of accomplishment and satisfaction, making it an important tool for promoting students' mental health and well-being.

In summary, the practical value of traditional handicrafts is multi-dimensional. It equips students with technical skills applicable to various industries, fosters creativity and innovation, contributes to local economic development, and promotes mental well-being. As an educational tool, the integration of traditional handicrafts into modern curricula provides a rich, hands-on learning experience that not

only prepares students for practical challenges in the modern world but also preserves cultural traditions and contributes to sustainable development.

2.2.3 The Innovative Value of Traditional Handicrafts

While traditional handicrafts carried rich historical and cultural backgrounds, their educational value went beyond mere heritage preservation. It also lay in their integration with modern society and technology. In contemporary education, traditional handicrafts were not only about imparting skills and knowledge but also about stimulating students' innovative consciousness and modern design thinking (Chen & Wang, 2020, pp. 112-113).

Liu (2016, pp. 22-25) argued that the innovation of traditional handicraft education was not just about refining and enhancing the techniques themselves but also about combining traditional skills with modern technologies and design concepts to create new craft products that reflected the contemporary era. This innovative inheritance and development helped traditional handicrafts find new applications in modern society, thus expanding their cultural value. For instance, many contemporary artists and designers innovated based on traditional handicrafts, applying them to modern fields such as home decor, fashion, and packaging design. They believed that the innovative value of traditional handicrafts was not only reflected in the innovation of their forms and materials but also in the modern expression of their cultural symbols.

In summary, traditional handicraft education played a vital role in both preserving cultural heritage and fostering innovation. By integrating historical craftsmanship with modern design and technology, students not only inherited valuable cultural traditions but also contributed to contemporary creative industries. This fusion of past and present ensured the continued relevance of traditional handicrafts in an ever-evolving society.

2.2.4 The Social Value of Traditional Handicrafts

Traditional handicraft education also had significant social value. It not only allowed students to learn and experience traditional techniques but also sparked an interest in social practice. In many regions, traditional handicraft education was closely tied to local economies and social development. By combining traditional handicraft courses with local economies, students not only acquired skills but also contributed to society. For example, after completing their works, students participated in the production and promotion of traditional crafts, helping to integrate local traditional culture with economic development.

Furthermore, traditional handicraft education fostered social harmony and an understanding of cultural diversity. In the context of globalization and modernization, many traditional handicrafts faced the risk of disappearing. By protecting and transmitting these skills through education, students gained an understanding of the value of cultural diversity and developed a sense of social responsibility and cultural preservation (Li & Zhang, 2018, pp. 56-60).

In summary, traditional handicraft education served as a bridge between cultural heritage and social progress. It not only equipped students with practical skills but also encouraged them to engage with their communities and contribute to economic and cultural sustainability. Through this process, students developed a deeper appreciation for cultural diversity and a stronger commitment to its preservation in an evolving global landscape.

2.3 The Innovation and Integration of Modern Handicrafts and Education

2.3.1 The Evolution of Modern Handicrafts and Educational Value

Modern handicrafts not only inherited the techniques of traditional craftsmanship but also gained new vitality through the introduction of modern materials, technologies, and design concepts. This transformation not only changed the appearance

and function of handicrafts but also drove innovations in teaching methods and content related to handicrafts in the education system. Modern handicraft education combined traditional craftsmanship with modern design concepts, emphasizing the cultivation of creative thinking and practical skills (Li, 2020, pp. 45-49).

For example, modern ceramics classes not only focused on traditional shaping techniques but also introduced digital tools, 3D printing, and laser cutting technologies, encouraging students to blend tradition with modern design to create works with contemporary aesthetics and practical value (Wang, 2019, pp. 22-25). They believed that the core of modern handicraft education lay in combining traditional craftsmanship skills with modern technology, cultivating students' innovative thinking and interdisciplinary design abilities. Students not only needed to master basic traditional handicraft techniques but also learned how to utilize modern technological tools to enhance the expressive power and market competitiveness of crafts. For instance, using computer-aided design (CAD) and virtual reality (VR) technologies provided students with more creative possibilities, breaking the limitations of traditional handicrafts and broadening their creative horizons.

Additionally, another important role of modern handicraft education was cultivating students' understanding and respect for cultural heritage. In learning modern crafts, students not only had to understand the roots of traditional culture but also grasp the innovative elements and development trends in contemporary culture (Zhao, 2021, pp. 12-15). This cross-temporal and cross-spatial educational approach enabled students to balance tradition and modernity more effectively, respecting and protecting traditional culture while promoting cultural innovation and development.

In summary, modern handicraft education served as a crucial link between tradition and innovation. By integrating traditional skills with modern technology, it not only preserved cultural heritage but also expanded creative possibilities. This approach ensured that students developed both technical expertise and

a deep appreciation for cultural evolution, preparing them to contribute meaningfully to the future of craftsmanship in an ever-changing world.

2.3.2 Interdisciplinary Integration in Modern Handicraft Education

Modern handicraft education featured significant interdisciplinary characteristics, extending beyond the realm of art to include design, engineering, and technology. Modern handicraft classes often required students to step across multiple disciplines, using knowledge and skills from various fields to solve practical problems in their creations. For example, in modern furniture design, students not only needed traditional woodworking skills but also had to understand ergonomics, the selection of eco-friendly materials, and modern production techniques (Zhang, 2019, pp. 15-18). This interdisciplinary integration not only expanded students' knowledge horizons but also helped them better adapt to the diverse demands of society for handicrafts.

The interdisciplinary fusion in modern craft education was also reflected in the combination of art and technology. With the widespread use of digital tools, modern handicraft education increasingly emphasized the integration of technology and creativity. In the creative process, students needed to use tools such as 3D modeling and virtual reality, which required them not only to possess practical skills in traditional handicrafts but also to acquire certain digital design skills (Sun, 2020, pp. 78-83). This combination of skills not only improved students' overall competence but also cultivated their ability to solve complex problems.

In summary, the interdisciplinary nature of modern handicraft education played a crucial role in expanding students' creative potential and practical problem-solving abilities. By integrating traditional craftsmanship with modern technology and design principles, students gained a well-rounded skill set that enabled them to adapt to real-world societal needs. This educational approach ensured that handicraft education remained relevant and dynamic in an era of rapid technological and artistic advancement.

2.3.3 Sustainability in Modern Handicraft Education

Another key direction in modern handicraft education was the incorporation of sustainable development principles. With the rise in global environmental awareness, the sustainability of handicrafts became a significant issue in the educational field. In this context, many modern handicraft courses focused on using eco-friendly materials, promoting green production methods, and innovating waste recycling (Li, 2021, pp. 32-35). By learning the concepts of sustainable design, students could not only reduce the negative environmental impacts in their creative processes but also integrate more eco-friendly elements into their designs, thus promoting society's focus on sustainable development. Zhao (2015, pp. 11-12) pointed out that introducing the concept of sustainable development into modern craft education not only helped students understand the importance of environmental protection but also inspired them to transform traditional materials and techniques in a modern context. For instance, by applying renewable materials (such as bamboo and recycled wood), students explored more environmentally friendly creation methods while respecting traditional craftsmanship. This approach not only had social value but also helped cultivate students' environmental awareness and sense of responsibility.

In summary, integrating sustainability into modern craft education served as an essential step in shaping environmentally conscious creators. By focusing on eco-friendly materials and processes, students gained the tools to balance creativity with environmental responsibility. This approach not only benefited the students but also contributed to broader societal efforts toward sustainability in craftsmanship.

2.3.4 Integration of Digital Tools in Modern Handicraft Education

Another prominent feature of modern handicraft education was the introduction of digital tools. With the development of 3D printing, laser cutting, and other technologies, the creative process in handicrafts was no longer solely dependent on traditional handcraft techniques. Modern handicraft courses, by integrating digital

tools, expanded the boundaries of creation, allowing students to complete complex designs and works in a shorter amount of time (Wang, 2021, pp. 101-104).

For example, the use of 3D printing technology enabled students to quickly produce finely crafted items based on computer-designed models, which not only increased production efficiency but also allowed students to explore more creative possibilities in practice. Digital tools also changed how students understood and evaluated craftworks. Traditional handicrafts typically depended on the mastery of handcraft skills, while the use of modern digital tools allowed for more precise and personalized designs and implementations. By using digital tools in the classroom, students could repeatedly modify and optimize their works through virtual models, thereby improving the precision of design and creation (Li, 2020, pp. 45-49).

In summary, the introduction of digital tools in modern handicraft education revolutionized the creative process. By enabling students to utilize advanced technologies such as 3D printing, the boundaries of craftsmanship were expanded, allowing for more complex and precise works. This integration not only enhanced efficiency but also provided students with a broader range of creative possibilities, making them better prepared for the future of craftsmanship in an increasingly digital world.

2.3.5 The role of Educational Innovation in Promoting Modern Handicraft Development

Educational innovation played a crucial role in advancing the development of modern handicrafts. With the updating of teaching concepts and the introduction of technological tools, modern handicraft education continually innovated in terms of curriculum content, teaching methods, and teaching models (Wang, 2020, pp. 98-102).

On one hand, the traditional teacher-centered teaching model was gradually replaced by a student-centered model, encouraging students to actively

participate in the design and creation of works. This shift not only enhanced students' practical abilities and creativity but also helped them cultivate teamwork and communication skills. On the other hand, educational innovation also promoted the integration of handicraft education with social practice. An increasing number of schools collaborated with local cultural industries to offer students internships, exchanges, and entrepreneurship opportunities. This "industry-academia-research" model not only allowed students to apply their knowledge to practical projects but also provided a platform for the innovation and market promotion of crafts (Zhao, 2021, pp. 12-15). Through this model, students were able to improve their professional skills through practice and gain a deeper understanding of the social value and cultural significance of handicrafts.

Moreover, the innovation in modern handicraft education was also reflected in the diversification of curriculum content. In addition to traditional handicraft techniques, educators incorporated modern design concepts, the development of the cultural creative industry, and other subjects into the curriculum, allowing students to approach problems from multiple perspectives and dimensions, thereby promoting the diversified development of handicraft education (Zhang, 2020, pp. 76-80). This innovation not only enriched the educational content but also provided students with more creative inspiration and practical opportunities.

In summary, educational innovation significantly advanced modern handicraft education by shifting to student-centered models, integrating social practice, and diversifying curriculum content. These changes not only enhanced students' creativity and practical skills but also helped them gain a deeper understanding of the societal and cultural importance of handicrafts. The integration of modern technologies and real-world applications ensured that students were better prepared to contribute to the future of the handicraft industry.

2.4 Learning Performance

2.4.1 Definition of Learning Performance

Learning performance referred to a comprehensive measure of a student's ability to acquire, process, and apply knowledge, skills, and competencies throughout the educational process. It reflected not only academic achievement but also growth in non-academic areas, such as emotional attitudes, social skills, and practical abilities. In the context of traditional and modern handicraft education, learning performance went beyond the technical mastery of skills and included creativity, problem-solving ability, cultural awareness, and the capacity to apply learned techniques in real-world contexts (Anderson & Krathwohl, 2001, p. 23).

In educational assessments, learning performance was typically divided into three domains: cognitive, affective, and psychomotor. Cognitive performance involved the ability to understand, analyze, and evaluate information, and was often the most visible indicator of learning. Affective performance related to emotional aspects, such as motivation, attitudes, and interest in the learning content. Psychomotor performance, on the other hand, focused on physical skills and the ability to manipulate tools and materials effectively. In traditional handicraft education, learning performance considered all these dimensions, as students not only acquired technical skills but also connected emotionally with the cultural and historical significance of the craft, fostering a deeper understanding of their heritage (Zhao & Li, 2017, pp. 18-21).

An important aspect of learning performance in handicraft education was the demonstration of creativity and innovation. As students learned traditional techniques, they were encouraged to integrate these methods with modern design concepts and experiment with them. For example, in the teaching of Hainan coconut carving, students were not only required to master basic carving techniques but also to learn how to fuse traditional handicrafts with contemporary aesthetics, creating products that met modern market demands while retaining traditional charm. As Dewey (1938, p. 45)

emphasized, learning was an active process, and student performance should have been evaluated not only based on knowledge acquisition but also on their ability to create and innovate.

Furthermore, learning performance should have also reflected students' ability to apply their skills in real-life settings. In traditional handicraft education, students demonstrated their ability to not only master techniques but also apply them in practical environments such as workshops, exhibitions, and entrepreneurial ventures. Such practical assessments helped educators gauge student performance in real-world contexts, allowing for adjustments to teaching strategies (Biggs, J., 1996, p. 35). For example, through participation in handicraft exhibitions or entrepreneurial activities, educators assessed students' ability to apply their skills and design thinking in the marketplace, reinforcing practical skills and innovation.

Learning performance assessment should not have been limited to traditional exams or assignments. It should have also considered students' active participation, innovative thinking, and ability to collaborate with others. Modern education emphasizes student-centered learning, and the evaluation of learning performance encompasses the full range of students' capabilities, including critical thinking, teamwork, and social responsibility (Martin, L., 2019, pp. 23-25). Therefore, the assessment of learning performance was a dynamic and holistic process that reflected students' overall growth and academic achievement.

In summary, learning performance was a multi-dimensional concept that extended beyond academic success. In the context of traditional and modern handicraft education, it included cognitive, affective, and psychomotor dimensions. It emphasized not only technical skill acquisition but also creativity, cultural understanding, practical application, and emotional development. As a key indicator of educational success, learning performance provided a valuable tool for assessing the

effectiveness of educational programs, ensuring that students were equipped to meet the challenges of the modern world.

2.4.2 Learning Performance Evaluation

The assessment of learning performance was a comprehensive evaluation of students' abilities throughout the learning process, focusing on their final outcomes, thinking, emotions, teamwork, and innovation (Wang & Chen, 2019). In traditional handicraft education, the assessment emphasized not just technical skills but also understanding cultural meanings, innovation, and personal expression. Key components of this evaluation include:

- 1) Process-Oriented Assessment: This method focused on students' growth during the learning process, highlighting their innovation, problem-solving, and engagement in collaboration and feedback (Zhao, 2021).
- 2) Creativity and Innovation: Creativity was essential in assessing students' ability to merge traditional techniques with modern elements, showcasing both technical proficiency and innovative thinking (Wang, 2017).
- 3) Technical Skills and Precision: Mastery of techniques and attention to detail were crucial in traditional handicraft education, influencing the overall quality of the work (Li, 2020).
- 4) Personal Expression: Personal expression reflected students' creativity, emotional connection, and cultural understanding, with a focus on how they conveyed meaning through their work (Wang & Chen, 2019).
- 5) Feedback and Reflection: Teacher feedback guided students' development, while self-reflection helped them identify areas for improvement and strengthen their skills (Wang, 2021).
- 6) Social Responsibility and Cultural Value: Students were encouraged to integrate social responsibility and cultural preservation into their work, contributing to both modern craftsmanship and the sustainability of traditional practices.

This holistic assessment supported the development of students' technical, creative, and reflective abilities while encouraging a deeper cultural understanding. In summary, the assessment of learning performance was not limited to students' final products but encompassed a holistic approach to their overall development during the learning process. In traditional handicraft education, the assessment included technical skills, creativity, cultural understanding, and social responsibility. Through comprehensive learning performance evaluation, teachers could better understand students' learning progress and potential, helping them grow in multiple dimensions. This type of assessment not only fostered students' overall competence but also promoted the innovation and development of traditional handicraft education.

2.5 Related Research

2.5.1 Domestic research

In recent years, domestic scholars have expanded their research on traditional handicraft education, particularly focusing on curriculum design, teaching methods, and practical instruction. Research in China indicates that traditional handicraft education should not only prioritize skill acquisition but also help students understand the cultural significance of craftsmanship while fostering innovative thinking through modern teaching methods and tools. Traditional handicraft education should combine technique transmission with modern teaching tools to inspire students' creativity (Wang, X., 2017, pp. 34-38).

The study of traditional techniques should integrate modern design concepts and technical tools to help students explore innovative works that address contemporary needs while preserving the craft's essence. For example, Wang suggested that modern handicraft courses should incorporate digital design tools, such as CAD and 3D printing, to expand students' creative horizons. These tools enable students to transform traditional craftsmanship into contemporary design language. This

combination allows students to inherit traditional handicraft techniques while developing forward-thinking design skills and innovation.

Curriculum development for traditional handicraft education should emphasize the integration of Chinese traditional culture with modern design concepts (Xu, Y., 2020, pp. 78-80). Xu argued that courses should not only teach technical skills but also help students understand and respect the cultural roots of Chinese traditions, while encouraging them to engage in innovative thinking through modern design. Xu's research further highlighted that creating a handicraft education system with Chinese characteristics encourages students to produce works that represent Chinese culture while exploring the global context of Chinese handicrafts within the international arts and design landscape (Xu, Y., 2020, pp. 81-82).

Traditional handicraft curriculum design plays a significant role in developing students' innovative abilities and critical thinking. Through practical teaching, students not only master the basic skills of traditional handicrafts but also engage in reflective and creative processes that express unique artistic perspectives. For example, introducing innovative elements and modern materials into course design encourages students to combine traditional techniques with modern artistic language, breaking the limitations of traditional handicrafts and creating works that reflect both artistic value and a sense of the times. This interdisciplinary approach offers students broader creative space and cultivates problem-solving abilities.

2.5.2 Foreign studies

Research abroad has also significantly influenced both the theory and practice of traditional handicraft education in China. Scholars in Europe and the United States generally agree that traditional handicraft education helps students develop not only fine craftsmanship skills but also enhances their cross-cultural communication abilities (Keller & Peters, 2016, pp. 112-119). For instance, Smith investigated the inclusion of Chinese traditional handicraft courses in universities across Europe and the

United States. He noted that these courses deepen students' understanding of Chinese culture while promoting cultural exchange between China and the West. Smith emphasized that these courses serve as a cultural bridge, enabling students to experience the value of traditional crafts through artistic creation and fostering global dialogues in art education.

Moreover, cross-cultural learning experiences allow students to view traditional handicrafts from a broader perspective. These experiences broaden students' artistic vision, helping them understand and evaluate craftsmanship across different cultures, thereby promoting innovation (Jones & Taylor, 2020, pp. 80-82). By participating in global handicraft creation and exchanges, students are exposed to diverse craft techniques and can incorporate multicultural elements into their work, fostering art innovation and cross-cultural collaboration. Jones and Taylor further pointed out that such global learning experiences help students appreciate and assimilate different design philosophies, nurturing cross-cultural artistic thinking and design capabilities (Jones & Taylor, 2020, pp. 83-85).

More importantly, cross-cultural learning extends beyond technical exchanges, primarily enhancing cultural interaction. It allows students to understand how traditional handicrafts are preserved and innovated in various cultural contexts worldwide. By comparing and analyzing design methods and practices from different regions, students can incorporate these diverse cultural elements into their creations, contributing to the global development of handicraft education. For example, the collaboration between European and American art education systems and traditional handicraft courses from countries like China, India, and Africa promotes global knowledge-sharing and cultural exchange in art education. Smith further noted that such international collaboration not only allows students to learn the essence of different traditional handicrafts but also broadens their creative space by approaching artistic creation from diverse cultural perspectives, infusing vitality into the global art and design field.

CHAPTER 3

RESEARCH METHODOLOGY

The approach utilized to conduct research was discussed in this chapter. It highlighted the research design, target population, sampling techniques and sample size, research instruments, validity and reliability of the research instrument, data collection procedures, and data analysis techniques.

- 3.1 Research Design
- 3.2 Population and Sample
- 3.3 Research Instrument
- 3.4 Instrument Development
- 3.5 Data Collection
- 3.6 Data Analysis
- 3.7 Statistics Used in Research

3.1 Research Design

The research adopted a quasi-experimental approach, specifically employing a one-group pretest-posttest design. This design involved measuring participants' performance before and after the intervention to assess its effectiveness. By comparing the pretest and posttest results, the study aimed to determine any significant changes attributable to the instructional method. The absence of a control group limited the ability to establish causality definitively, but the approach provided valuable insights into the intervention's impact. This method was particularly useful in educational research, where ethical or practical constraints made randomized controlled trials challenging.

3.2 Population and Sample

3.2.1 Population

The research population consisted of 60 students enrolled in the second semester of 2022 in the School of Art and Design at Hainan School of Economics and Technology.

3.2.2 Sample

The research sample consisted of 30 students enrolled in the second semester of 2022 in the School of Art and Design at Hainan School of Economics and Technology.

3.3 Research Instrument

3.3.1 The Curriculum Course on Traditional and Modern Handicraft Design and Production.

The curriculum was structured around five core components: Objectives: clearly defined learning goals that aligned with vocational and technical education requirements. Content: essential knowledge and skills related to traditional and modern handicraft techniques, materials, and production processes. Teaching Methods: a combination of hands-on workshops, demonstrations, case studies, and interactive activities to enhance learning. Media and Resources: instructional materials, digital tools, videos, and practical exercises designed to support student engagement. Course Evaluation: assessment methods, including formative and summative evaluations, to measure student progress and curriculum effectiveness.

3.3.2 Evaluation form of vocational and technical Students' learning performance in traditional and modern handicraft design and production.

3.4 Instrument Development

3.4.1 Development of the Curriculum Course on Traditional and Modern Handicraft Design and Production.

The curriculum course on traditional and modern handicraft design and production for vocational and technical students was systematically developed through the following steps:

3.4.1.1 Review of theoretical foundations

A comprehensive review of relevant theories, concepts, and best practices related to traditional and modern handicraft design and production was conducted. This step involved analyzing academic literature, industry standards, and

educational frameworks to ensure the curriculum was well-grounded in both theoretical and practical aspects.

3.4.1.2 Curriculum course creation

Based on the theoretical foundation, the curriculum course on traditional and modern handicraft design and production was developed. The curriculum was structured around five core components:

- 1) Objectives: Clearly defined learning goals that aligned with vocational and technical education requirements.
- 2) Content: Essential knowledge and skills related to traditional and modern handicraft techniques, materials, and production processes.
- 3) Teaching Methods: A combination of hands-on workshops, demonstrations, case studies, and interactive activities to enhance learning.
- 4) Media and Resources: Instructional materials, digital tools, videos, and practical exercises designed to support student engagement.
- 5) Course Evaluation: Assessment methods, including formative and summative evaluations, to measure student progress and curriculum effectiveness.

3.4.1.3 Initial curriculum review by advisor

After the initial draft of the curriculum was completed, it was submitted to the academic advisor for evaluation. The advisor provided feedback on the validity, coherence, and comprehensiveness of the content. Necessary revisions were made based on the recommendations to enhance clarity, structure, and instructional effectiveness.

3.4.1.4 Expert validation and content consistency check

The revised curriculum was then presented to three subject matter experts specializing in vocational education and handicraft design. These experts reviewed the curriculum's structure and ensured its alignment with educational standards. The Item-Objective Congruence (IOC) index was used to assess content validity, ensuring each component met a consistency threshold of ≥ 0.50 . Additionally, five qualified evaluators assessed the overall appropriateness, feasibility, and effectiveness of the curriculum. Their feedback was incorporated to refine the course further.

3.4.1.5 Pilot implementation with students

To assess the curriculum's practical effectiveness, a trial run was conducted with 30 students enrolled in the School of Art and Design at Hainan School of Economics and Technology during the second semester of 2022. The students participated in the course activities, allowing researchers to observe the learning process, engagement levels, and effectiveness of instructional strategies.

3.4.1.6 Final refinement and data collection

Based on the trial implementation, final modifications were made to improve course content, teaching methods, and assessment tools. Once the revisions were completed, the finalized curriculum was officially documented, and data collection procedures were implemented to evaluate its impact on student learning and skill development.

3.4.2 Evaluation form of vocational and technical students' learning performance in traditional and modern handicraft design and production.

The assessment of vocational and technical students' learning performance in traditional and modern handicraft design and production was conducted through a structured process to ensure accuracy, validity, and reliability. The following steps outline the development, validation, and implementation of the assessment:

3.4.2.1 Review of assessment theories and best practices

A thorough examination of existing theories and models related to the assessment of vocational and technical students' learning performance was conducted. This included studying frameworks that emphasize competency-based evaluation, formative and summative assessment strategies, and performance-based assessments relevant to traditional and modern handicraft design. Additionally, best practices from educational research and case studies were analyzed to guide the assessment design.

3.4.2.2 Development of the assessment framework

Building upon the theoretical foundation, an assessment framework was designed to evaluate students' knowledge, practical skills, creativity, and application of handicraft design concepts.

3.4.2.3 Initial validation by academic advisor

The preliminary assessment framework was submitted to an academic advisor for validation. The advisor reviewed the content to ensure alignment with course objectives, relevance to vocational education, and clarity of evaluation criteria. Constructive feedback and recommendations were provided, leading to necessary refinements to enhance accuracy and effectiveness.

3.4.2.4 Expert review and content validity testing

The revised assessment framework was then presented to three subject matter experts specializing in vocational education and handicraft production. These experts conducted a detailed evaluation to verify the accuracy, coherence, and practical applicability of the assessment. To ensure content validity, the Item-Objective Congruence (IOC) index was applied, with a required consistency value of ≥ 0.50 . Additionally, five experienced professionals in the field provided further evaluations on the appropriateness and feasibility of the assessment approach.

3.4.2.5 Pilot testing with student

To evaluate the practical effectiveness of the assessment, a trial implementation was conducted with 30 students enrolled in the School of Art and Design at Hainan School of Economics and Technology during the second semester of 2022. The students participated in the assessment process, allowing researchers to observe its clarity, efficiency, and ability to measure intended learning outcomes. Data were collected from both student performance results and feedback on the assessment experience.

3.4.2.6 Final refinement and data collection

Based on insights gained from the pilot test, the assessment framework was further refined to improve clarity, consistency, and usability. Adjustments were made to enhance scoring criteria, streamline evaluation procedures, and address any difficulties encountered during the trial phase. Once finalized, the assessment was officially implemented, and data collection was conducted to analyze student performance and measure the effectiveness of the instructional approach.

3.5 Data Collection

The data collection process was carried out in the following steps:

3.5.1 The researcher contacted and coordinated with the school selected for data collection in this study, namely the Hainan Provincial School of Economics and Technology Thanyaburi. Formal permission was requested to collect data from the selected sample group.

3.5.2 The experiment was conducted during the second semester of the 2021 school year. The intervention took place over a period of seven weeks, with one class session per week, each lasting 45 minutes.

3.5.3 The experimental group of students was defined based on predetermined criteria. The learning objectives and content were carefully outlined, ensuring alignment with the course curriculum. Additionally, the methods for assessing student learning outcomes were established to measure the effectiveness of the instructional approach.

3.5.4 Before the experiment, all students, including both the experimental and control groups, took a pre-study test to assess their initial knowledge. The experimental group received instruction based on the proposed pedagogical model, while the control group followed the traditional teaching method. At the end of each instructional session, students from both groups were given a post-learning quiz to evaluate their progress.

3.5.5 After completing the intervention, students in the experimental group were asked to complete a satisfaction questionnaire. This feedback was used to assess their perceptions of the model teaching method and their overall learning experience.

3.6 Data Analysis

In data analysis, the researchers conducted the following data analysis steps:

3.6.1 Analysis of study instrument quality

3.6.2 Analysis used in hypothesis testing

3.6.2.1 The curriculum course on traditional and modern handicraft design and production for vocational and technical students was analyzed using the mean and standard deviation.

3.6.2.2 The study compared the learning performance of vocational and technical students before and after receiving instruction through the curriculum course.

To evaluate the effectiveness of the curriculum, the collected data were statistically analyzed using the mean and standard deviation to measure central tendency and variability. Additionally, a dependent sample t-test was conducted to determine whether there was a significant difference between the pre-test and post-test scores, providing insight into the impact of the instructional approach on student learning outcomes.

3.7 Statistics Used in Research

3.7.1 Basic Statistics

3.7.1.1 Mean

3.7.1.2 Standard Deviation

3.7.2 Statistics Used in Quality Inspection of Instruments

3.7.2.1 Index of Item Objective Congruence (IOC)

3.7.3 Statistics Used in Hypothesis Testing

3.7.3.1 The dependent samples t-test

CHAPTER 4

RESEARCH RESULT

The study examined the curriculum development course on traditional and modern handicraft design and production for vocational and technical students. The objectives of the study were to: 1) develop a curriculum course on traditional and modern handicraft design and production for vocational and technical students, and 2) vocational and technical students' learning performance before and after being taught using the curriculum course. The following analyses will be presented in this section:

- 4.1 An analysis of the effectiveness of the developed curriculum course on traditional and modern handicraft design and production for vocational and technical students.
- 4.2 A comparison of vocational and technical students' learning performance before and after being taught using the curriculum course.

4.1 An analysis of the effectiveness of the developed curriculum course on traditional and modern handicraft design and production for vocational and technical students

The analysis of the effectiveness of the developed curriculum on traditional and modern handicraft design and production for vocational and technical students was presented in Table 4.1.

Table 4.1 The Effectiveness Analysis of the Curriculum on Traditional and Modern Handicraft Design and Production

	Curriculum course	Level
1	Course structure	high
2	Objectives, content	high
3	Content	high
4	Teaching methods	high
5	Course evaluation	high

Table 4.1 presented the curriculum course for learning design in modern handicrafts and production, which consisted of course structure, objectives, content, teaching methods, media, and course evaluation.

4.2 A comparison of vocational and technical students' learning performance before and after being taught using the curriculum course

The analysis compared vocational and technical students' learning performance before and after being taught using the curriculum course. A comparison of vocational and technical students' learning performance before and after being taught using the curriculum course was presented in Table 4.2 and Figure 4.2.

Table 4.2 Comparison of average score before and after students' learning performance

Learning Management	(Number of Units)	Mean (x̄)	Standard Deviation (s)	Compute d t-value (t)	Degrees of Freedom (df)	Sig. (p-value)
Before	30	8.70	1.70	29	-23.44**	0.00
After	30	13.90	2.14			

*p<.05

Table 4.2 presented a comparison of the mean scores of second-year vocational-technical students before and after taught using the curriculum course, considering individual differences in students' academic performance in manual classes. The mean score of the pre-test was 8.70, with a standard deviation (S.D.) of 1.70, while the mean score of the post-test was 13.90, with a standard deviation (S.D.) of 2.14. The post-test mean score was higher than the pre-test and was statistically significant at the 0.05 level.

In summary, there were significant differences in the test results of the 30 students before and after taught using the curriculum course. The students performed better after instruction compared to their performance before taught using the curriculum course.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

The study examined the curriculum development course on traditional and modern handicraft design and production for vocational and technical students. The objectives of the study were to: 1) develop a curriculum course on traditional and modern handicraft design and production for vocational and technical students, and 2) vocational and technical students' learning performance before and after being taught using the curriculum course. The sample for this study consisted of 30 vocational and technical students enrolled in the second semester of the 2021–2022 academic year at the School of Art and Design, Hainan Provincial School of Economics and Technology. The participants were selected through random sampling. The study instruments included: 1) the curriculum course on traditional and modern handicraft design and production, 2) an evaluation form assessing vocational and technical students' learning performance in traditional and modern handicraft design and production. The conclusions were as follows:

- 5.1 Conclusion
- 5.2 Discussion
- 5.3 Recommendation and Suggestion

5.1 Conclusion

The analysis results addressed the research objectives as follows:

5.2.1 The Curriculum Course on Learning Design in Modern Handicrafts and Production. The developed curriculum course for modern handicrafts and production encompassed several key components to enhance students' learning experiences. These components included:

- 1) Course Structure: The framework outlining the organization and sequence of topics.
- 2) Objectives: The intended learning outcomes, ensuring students gain theoretical knowledge and practical skills in modern handicraft design and production.

3) Content: The subject matter covered, including traditional and contemporary techniques, materials, and industry applications.

4) Teaching Methods: Instructional approaches such as active learning, project-based learning, and hands-on workshops to engage students effectively.

5) Media: Various teaching aids, including digital resources, instructional videos, and physical models, to support learning.

6) Course Evaluation: Assessment methods, including quizzes, assignments, and project evaluations, to measure students' progress and course effectiveness.

5.2.1.1 A comparison of the mean scores of second-year vocational-technical students before and after taught using the curriculum course, considering individual differences in students' academic performance in manual classes. The mean score of the pre-test was 8.70, with a standard deviation (S.D.) of 1.70, while the mean score of the post-test was 13.90, with a standard deviation (S.D.) of 2.14. The post-test mean score was higher than the pre-test and was statistically significant at the 0.05 level.

In summary, there were significant differences in the test results of the 30 students before and after taught using the curriculum course. The students performed better after instruction compared to their performance before taught using the curriculum course.

5.2 Discussion

5.2.1 The students' learning performance after using the Course on Learning Design in Modern Handicrafts and Production was significantly higher than before the course, with a statistical significance level of .05. In summary, the significant improvement in students' learning performance after using the Course on Learning Design in Modern Handicrafts and Production can be attributed to several interconnected factors. First, the active learning strategies used in the course fostered a more engaging and participatory learning environment. By involving students in hands-on activities, they were able to actively apply theoretical knowledge, which has been shown to improve learning outcomes. According to Hattie (2009), experiential learning, where students engage with real-world applications, significantly enhances academic achievement by making learning more relevant and memorable.

Additionally, the practical nature of the handicrafts course played a key role in reinforcing students' understanding of the concepts. As students engaged in the design and production process, they not only applied what they had learned but also received immediate feedback on their work. This hands-on approach helps students grasp abstract concepts more effectively and keeps them motivated to improve, as they can see tangible results from their efforts.

These factors, supported by research on effective teaching strategies, create a dynamic learning environment that promotes higher levels of academic achievement. The combination of active learning, hands-on experience, personalized instruction, and timely feedback provided a comprehensive framework for improving student performance in the course.

5.3 Recommendation and Suggestion

5.3.1 Recommendation

5.3.1.1 Diversification of Handicraft Courses: Handicraft courses should be designed in a more diverse and flexible manner to accommodate various learning environments and different types of students. This includes considering factors such as students' learning preferences, skill levels, cultural backgrounds, and available resources. By incorporating a variety of instructional strategies-such as blended learning, project-based activities, and hands-on workshops-students can engage with the course in ways that best suit their learning styles.

5.3.1.2 Application of the Curriculum Course on Learning Design in Modern Handicrafts and Production to Other Subjects. The results of this study demonstrated that the Curriculum Course on Learning Design in Modern Handicrafts and Production significantly enhanced students' academic performance. The structured integration of active learning strategies, hands-on activities, and innovative instructional techniques contributed to improved engagement, creativity, and problem-solving skills among students. Given these positive outcomes, it is recommended that similar curriculum designs be applied to other courses and subject areas to maximize learning effectiveness.

1) Expansion to Other Vocational and Technical Education Courses

2) Integration into General Education and Cross-Disciplinary Learning

3) Institutional Implementation and Faculty Development

By expanding this curriculum model to other courses and disciplines, educational institutions can foster a more engaging, skills-based learning experience that prepares students for the evolving demands of the modern workforce.

5.3.2 Suggestions for Future Research

5.3.2.1 Further research into the development of courses on the design and production of traditional and modern handicrafts for vocational and technical students should explore the integration of additional teaching methods. In particular, combining the active learning approach with strategies aimed at enhancing cognitive skills, innovative and creative skills, and critical thinking abilities will create a more well-rounded learning experience.

5.3.2.2 The development of a curriculum for traditional and modern handicraft design and production is guided by various educational theories. While this study primarily focused on curriculum development through the active learning method, there is a need to incorporate additional theories to enhance its depth and effectiveness.

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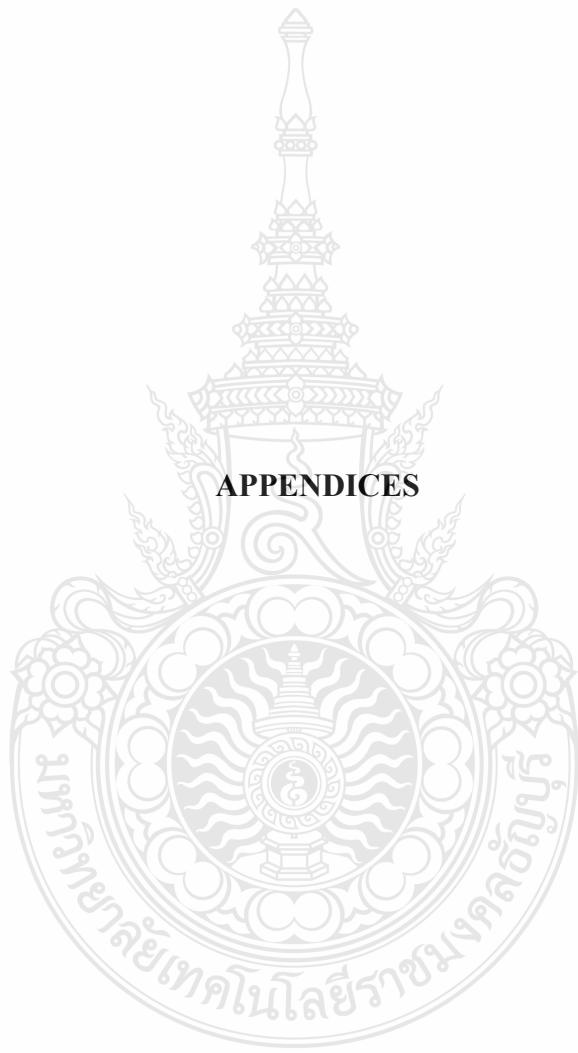
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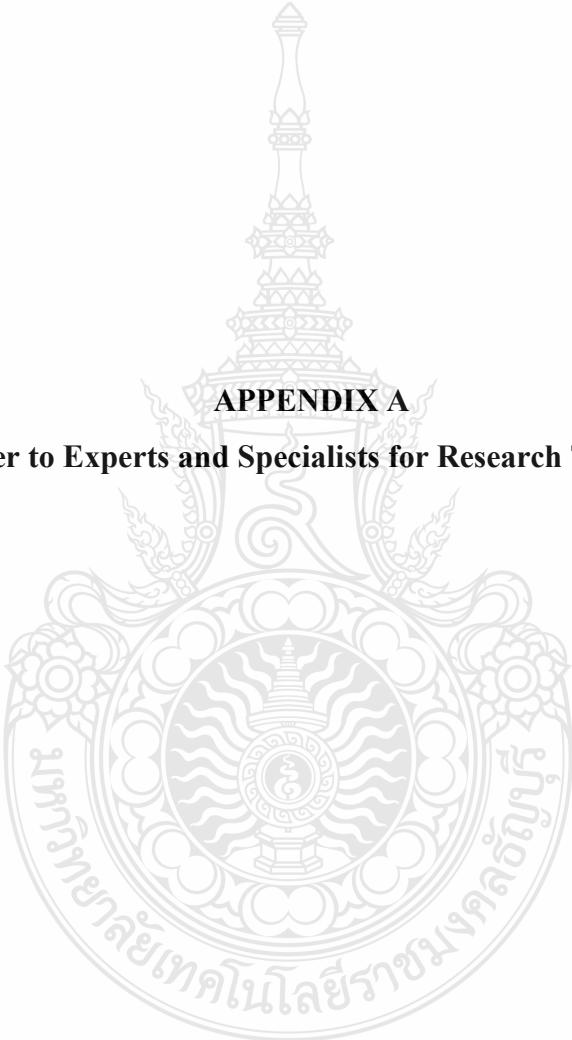
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APPENDICES





APPENDIX A

Sample Letter to Experts and Specialists for Research Tools Validation



No. 0649.02/0225.2

Faculty of Technical Education
Rajamangala University of Technology
Thanyaburi
39 Moo 1, Rangsit-Nakhon Nayok Road,
Klong Hok, Khlong Luang, Pathum Thani
Postal Code 12110, Thailand

20 February 2023

Subject: Invitation letter inviting experts to validate research instruments

Dear Associate Professor Leona Yang

Due to Ms.Ruifan Yang, a student who is taking up Master of Education Program in Curriculum Development and Instructional Innovation, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi (RMUTT), is currently processing a thesis for this semester entitled " Curriculum Development Course of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students " with Asst. Prof. Dr. Pranom Punsawai, a research advisor.

In relation to this, the researcher has a strong desire to be assisted with regard to the validation of the instruments required studies. The curriculum administration committee consider that you are the most qualified professional with knowledge and capabilities to provide such, the researcher has chosen and would like to ask approval from your good office to be the evaluator. I would like to invite you to be an expert to the validation research instruments for Ms.Ruifan Yang for the benefit of further education. I am highly anticipating your kind approval regarding this matter.

Thank you for your kind consideration.

Sincerely Yours,

(Asst. Prof. Arnon Niyomphol)

Dean, Faculty of Technical Education

Department of Education
Tel: +66-2549-3207
Fax: +66-2577-3207

No. 0649.02/0225.2



Faculty of Technical Education
Rajamangala University of Technology
Thanyaburi
39 Moo 1, Rangsit-Nakhon Nayok Road,
Klong Hok, Khlong Luang, Pathum Thani
Postal Code 12110, Thailand

20 February 2023

Subject Invitation letter inviting experts to validate research instruments

Dear Associate Professor Chuang Liu

Due to Ms.Ruifan Yang, a student who is taking up Master of Education Program in Curriculum Development and Instructional Innovation, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi (RMUTT), is currently processing a thesis for this semester entitled "Curriculum Development Course of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students" with Asst. Prof. Dr. Pranom Punswai, a research advisor.

In relation to this, the researcher has a strong desire to be assisted with regard to the validation of the instruments required studies. The curriculum administration committee consider that you are the most qualified professional with knowledge and capabilities to provide such, the researcher has chosen and would like to ask approval from your good office to be the evaluator. I would like to invite you to be an expert to the validation research instruments for Ms.Ruifan Yang for the benefit of further education. I am highly anticipating your kind approval regarding this matter.

Thank you for your kind consideration.

Sincerely Yours,

A handwritten signature in blue ink, appearing to read "amon".

(Asst. Prof. Amon Niyomphol)
Dean, Faculty of Technical Education

Department of Education
Tel: +66-2549-3207
Fax: +66-2577-3207



No. 0649.02/0225.2

Faculty of Technical Education
Rajamangala University of Technology
Thanyaburi
39 Moo 1, Rangsit-Nakhon Nayok Road,
Klong Hok, Khlong Luang, Pathum Thani
Postal Code 12110, Thailand

20 February 2023

Subject Invitation letter inviting experts to validate research instruments

Dear Dr. Monchai Pongsakornnaruwong

Due to Ms. Ruifan Yang, a student who is taking up Master of Education Program in Curriculum Development and Instructional Innovation, Faculty of Technical Education, Rajamangala University of Technology Thanyaburi (RMUTT), is currently processing a thesis for this semester entitled "Curriculum Development Course of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students" with Asst. Prof. Dr. Pranom Punsawal, a research advisor.

In relation to this, the researcher has a strong desire to be assisted with regard to the validation of the instruments required studies. The curriculum administration committee consider that you are the most qualified professional with knowledge and capabilities to provide such, the researcher has chosen and would like to ask approval from your good office to be the evaluator. I would like to invite you to be an expert to the validation research instruments for Ms. Ruifan Yang for the benefit of further education. I am highly anticipating your kind approval regarding this matter.

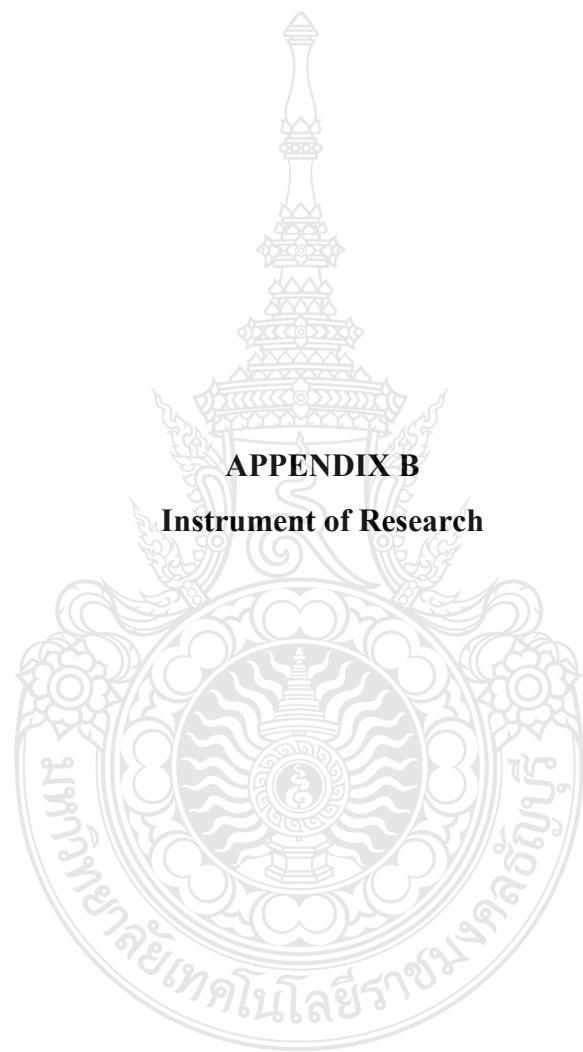
Thank you for your kind consideration.

Sincerely Yours,

(Asst. Prof. Arnon Niyomphol)

Dean, Faculty of Technical Education

Department of Education
Tel: +66-2549-3207
Fax: +66-2577-3207



APPENDIX B

Instrument of Research

The Curriculum Course on Learning Design in Modern Handicrafts and Production

.....

- 1) Course Structure: The framework outlining the organization and sequence of topics about Modern Handicrafts and Production.
- 2) Objectives: The intended learning outcomes, ensuring students gain theoretical knowledge and practical skills in learning content of this course for heritage and innovative handicrafts.
- 3) Content: The subject matter covered, including traditional and contemporary techniques, materials, and industry applications in heritage and innovative handicrafts.
- 4) Teaching Methods: Instructional approaches such as active learning, project-based learning, and hands-on workshops to engage students effectively.
- 5) Media: Various teaching aids, including digital resources, instructional videos, and physical models, to support learning about heritage and innovative handicrafts.
- 6) Course Evaluation: Assessment methods, including quizzes, assignments, and project evaluations, to measure students' progress and course effectiveness about 1 heritage and innovative handicrafts.

Learning Management Plan

Subject: Unit 1 Introduction to traditional and modern handicrafts.

Topic: Background of traditional handicrafts and modern handicrafts

Grade Vocational and technical second year students.

Time 1 hours

Learning Objective

1. Students understand the basic handicraft knowledge and lay the foundation for subsequent study. (K)
2. Students can create a variety of innovative works when they find the type of handicraft they like in their studies. (P)
3. Students' interest in learning and to make them love the subject from their heart.

(A)

Learning content

1. Meaning of handicraft
2. The importance of handicrafts
3. The role and responsibility of traditional handicrafts
4. Design elements of modern handicrafts
5. Benefits of innovative handicrafts
6. Classification by historical categories
7. Classification by product

Learning Management (Active Learning)

1. Prepare Step :

- 1.1 Prepare a course training management plan.
- 1.2 Teachers prepare basic knowledge materials related to each type of handicraft.
- 1.3 Let students know about their favorite handicraft in advance.
- 1.4 Tell students that each learning content is given out as a task to be completed by students alone.

1.5 Basic knowledge test questions for this lesson

2. Arouse interest Step:

- 2.1 Students choose the handicraft they want to learn or are interested in on their own.
- 2.2 Use the teacher's related materials or look up and collect information about the handicraft they are interested in on their own.
- 2.3 Students will learn and explore on their own without the teacher's instruction.

3. Practice Step:

- 3.1 Students will have studied the basics of handicrafts in advance.
- 3.2 Find a handicraft they like or are interested in.
- 3.3 Use the teacher's materials for self-study or collect and find materials for their own study.
- 3.4 The results of the study will be submitted to the teacher for correction.

4. Summary Step:

- 4.1 Students' learning outcomes are better without the teacher's unified teaching.
- 4.4 Students improve the depth of their memory in the learning process.
- 4.5 Students can arrange their own learning content and learning style, and they can be mentally aware of the whole process and can devote themselves to learning with great enthusiasm.

Material

1. Teaching materials for handicraft-related contents
2. Course training management plan
3. Basic knowledge test questions

Measurement and Evaluation

Objective	Measurement method	measuring instrument	measurement criteria
1. Students understand the basic handicraft knowledge and lay the foundation for subsequent study. (K)	Test	Achievement Test	Pass fair enough criteria upwards.
2. Students can create a variety of innovative works when they find the type of handicraft they like in their studies. (P)	Practice Assessment	Practice assessment form	Pass fair enough criteria upwards.
3. Students' interest in learning and to make them love the subject from their heart. (A)	Observation	Observations Form	Pass fair enough criteria upwards.

Learning Management Plan

Subject: Unit 2 Materials

Topic: Materials used in the production of different handicrafts.

Grade Vocational and technical second year students.

Time 6 hours

Learning Objective

1. Students understand the different types of crafts and related materials used to make them and broaden their knowledge. (K)
2. Students have a deeper knowledge and understanding of different types of crafts and different materials, and can master and use them skillfully and innovatively. (K)
3. Students can use different materials and explore the impact of new materials on different types of crafts in the learning process. (P)
4. Students' interest in learning and to make them love the subject from their heart.

(A)

Learning content

1. Printing and dyeing
2. Embroidery
3. Knitting
4. Ceramics

Learning Management (Active Learning)

1. Prepare Step :

- 1.1 Teachers prepare learning materials.
- 1.2 Prepare relevant handicraft exhibits for classroom display.
- 1.3 Prepare relevant knowledge test questions.
- 1.4 Prepare relevant handicraft production materials.

2. Arouse interest Step:

2.1 There are five major types of traditional handicrafts, combining a variety of traditional and modern materials, and students have a variety of choices.

2.2 After learning on their own, students can feel more deeply the relationship between different production materials and related handicrafts.

2.3 deepen their learning impressions and watch and touch the teacher's handicraft exhibits, with tactile and visual sensations, which can better help them learn to create later.

3. Practice Step:

3.1 Students learn on their own through the learning materials prepared by the teacher or by looking up and collecting them on their own.

3.2 Students will think independently about the relationship between materials and crafts by viewing and touching craft exhibits.

3.3 Complete the theory test questions for this lesson.

4. Summary Step:

4.1 Students and the teacher summarize what they have learned in this lesson together.

4.2 Encourage and help students.

4.3 Complete the test questions after completing the learning content.

Material

1. Learning materials related to various types of handicrafts and different kinds of production materials.

2. related handicraft exhibits.

3. Knowledge test questions.

Measurement and Evaluation

Objective	Measurement method	measuring instrument	measurement criteria
1. Students understand the different types of crafts and related materials used to make them and broaden their knowledge. (K) 2. Students have a deeper knowledge and understanding of different types of crafts and different materials, and can master and use them skillfully and innovatively. (K)	Test	Achievement Test	Pass fair enough criteria upwards.
3. Students can use different materials and explore the impact of new materials on different types of crafts in the learning process. (P)	Practice Assessment	Practice assessment form	Pass fair enough criteria upwards.
4. Students' interest in learning and to make them love the subject from their heart. (A)	Observation	Observations Form	Pass fair enough criteria upwards.

Learning Management Plan

Subject: Unit 3 Innovative design and production

Topic: Innovative design and production of traditional and modern handicrafts.

Grade Vocational and technical second year students.

Time 8 hours

Learning Objective

1. Students begin to choose a craft to design and make. (K)
2. Students can determine their own style and production type well and form their own unique aesthetic creation after learning from the previous courses. (P)
3. Students use their knowledge and creativity to be able to innovate new works that are different from the old traditional handicrafts. (A)

Learning content

1. Innovative designs combining traditional and modern handicrafts.
2. Production process.

Learning Management (Active Learning)

1. Prepare Step :

- 1.1 Teachers prepare production tools and production materials.
- 1.2 The teacher prepares a PowerPoint or video of the production process and production steps.

2. Arouse interest Step:

- 2.1 After deep understanding through the previous basic courses, students are free to choose a traditional handicraft they like.
- 2.2 Students are free to determine the design style and design direction of their own handicraft.

3. Practice Step:

- 3.1 Students choose at least one modern handicraft technique in making.
- 3.2 Select traditional and new materials used in making handicrafts.
- 3.3 Draw out design drawings.
- 3.4 Choose the production process.
- 3.5 Make the finished product.

4. Summary Step:

- 4.1 Students learn the basic knowledge and content of the theoretical course on their own, and are able to understand deeply and have a spirit of continuous exploration to produce innovative works.
- 4.2 Teachers help and encourage students in their free choice of production and design.
- 4.3 There is no hard and fast rule of beauty or ugliness in the production and style of handicrafts, students create through their own understanding.
- 4.4 The finished product is submitted to the teacher for evaluation and comments and suggestions.

Material

1. Production Tools
2. Production materials
3. Student work evaluation form

Measurement and Evaluation

Objective	Measurement method	measuring instrument	measurement criteria
1. Students begin to choose a craft 1 to s design and make. (K)	Knowledge Test	Test	Pass fair enough criteria upwards.
2. Students can determine their own style and production type well and form their own unique aesthetic creation after learning from the previous courses. (P)	Practice and product Assessment	Practice and product assessment form	Pass fair enough criteria upwards.
3. Students use their knowledge and creativity to be able to innovate new works that are different from the old traditional handicrafts. (A)	Observation	Observations Form	Pass fair enough criteria upwards.

Practice and product assessment

Assessment Rubric: production of traditional and modern handicrafts

Evaluation Criteria	20 points	15 points	10 points	5 points	0 points
Creativity	The work was highly original, novel in its intent, distinctive in its personality, highlighted its strengths, explored a number of different options, and took many risks.	The work was highly original, had a distinctive personality, highlighted its strengths, explored a number of different options, and took some risks.	The work was somewhat original, showed some ideas, but was not new and did not highlight its own strengths.	The work was occasionally creative, interesting, or unique, showed minimal risk, and was similar to the showpiece.	The work was not unique, not interesting, lacked details, and did not show original ideas or risks.
Use of Elements and Principles	Demonstrated excellent understanding and application of the artistic elements and design principles of relevant handicrafts.	Demonstrated good understanding and application of the artistic elements and design principles of relevant handicrafts.	Demonstrated a basic understanding and application of the artistic elements and design principles of relevant handicrafts.	Demonstrated minimal understanding or application of the artistic elements or design principles of relevant handicrafts.	Showed no understanding or application of the artistic elements or design principles of relevant handicrafts.

Evaluation Criteria	20 points	15 points	10 points	5 points	0 points
Handicraftmanship	The overall design of the work was beautiful, delicate, and vivid, with outstanding overall visuals and well-balanced color matching.	The overall design of the work was beautiful, delicate, and vivid, with good overall visuals and reasonable color matching.	The overall design of the work was beautiful, delicate, and vivid, with basic overall visuals and reasonable color matching.	The overall design of the work was either beautiful or vivid, with a minimalist overall vision or reasonable color matching.	The overall design of the work was aesthetically pleasing but lacked overall vision or general color matching.
Understanding, Achievement & Completion	Demonstrated an exceptional understanding of project requirements. The assignment was followed, and the work was complete and consistent.	Demonstrated a good understanding of project requirements. The assignment was followed, and the work was complete and consistent.	Demonstrated a basic understanding of project requirements. The assignment was followed, and the work was complete and consistent.	Demonstrated minimal understanding of project requirements. The assignment was generally followed, but the work was incomplete or inconsistent.	Showed a lack of understanding of project requirements. The assignment was not followed, and the work was incomplete or inconsistent.
Effort and Participation	The work showed exceptional effort, planning, and pride. Participated in all class studies.	The work showed good effort, planning, and pride. Participated in all class studies.	The work showed basic effort, planning, and pride. Participated in all class studies.	The work showed minimal effort, planning, or pride. Participated in a few class studies.	The work showed a lack of effort, planning, and pride. Did not participate in class studies.

APPENDIX C
IOC (Index of Item Objective Congruence)

IOC (Index of Item Objective Congruence)
Learning Management Plan through traditional and modern handicraft design
and production

Instructions:

Experts are urged to consider the curriculum development of Curriculum Development of Traditional and Modern Handicraft Design and Production for Vocational and Technical Students, and please rate the appropriateness of each project and write suggestions for further improvement. Level of appropriateness

+1 means appropriate

0 means not sure

-1 means inappropriate

Topic	Experts			Total	Evaluation
	1	2	3		
Background of traditional handicrafts and modern handicrafts	1	1	1	3	Yes
Design elements of modern handicrafts	1	1	1	3	Yes
Materials used in the production of different handicrafts.	1	1	1	3	Yes
Innovative designs combining traditional and modern handicrafts.	1	1	1	3	Yes
Production process	1	1	1	3	Yes

Biography

Name – Surname	Ms. Ruifan Yang
Date of Birth	July 3, 1998
Address	CMEC Apartment Building, No.22 Guomao North Road, Longhua District, Haikou City, Hainan Province, China
Education	M.Ed. (Curriculum Development and Instructional Innovation) Rajamangala University of Technology Thanyaburi Thailand
Telephone Number	13299077503
Email Address	rufan_y@mail.rmutt.ac.th

