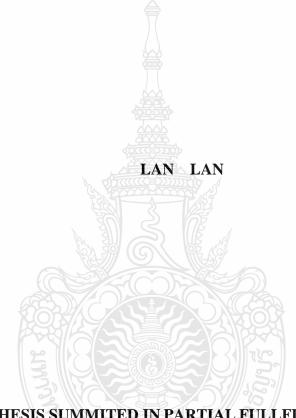# THE IMPACT OF PICTURE BOOK TO ENHANCE LEARNING ACHIEVEMENT ON THE CHINESE TRADITIONAL CULTURE COURSE

LAN   LAN

**A THESIS SUMMITED IN PARTIAL FULLFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTER OF
LEARNING TECHNOLOGY AND INNOVATION
FACULTY OF TECHNICAL EDUCATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
ACADEMIC YEAR 2023
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OF TECHNOLOGY THAYANBURI**

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Thesis Title   The Impact of Picture Book to Enhance Learning Achievement on The Chinese Traditional Culture Course

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Program   Learning Technology and Innovation

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Academic Year   2023

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ABSTRACT

In recent years, with the advancement of globalization and the rapid development of information technology, China's education industry has shown a rapid development trend. However, it is still facing with new opportunities and challenges. Therefore, educational contents and teaching methods need to be reformed. At the same time, due to the development of science and technology, the way of information dissemination and people's access to information are expanding. The visual culture of easier and faster access to information has become an important way for people to perceive the world. This research discusses the difficulties encountered by students in learning Chinese traditional culture course. In order to solve these problems, this study puts forward the application of picture books in teaching.

The purposes of this research were to: 1) compare students' achievements before and after using picture books to learn Chinese traditional culture, 2) study the effectiveness index after learning Chinese traditional culture from picture books, and 3) study students' satisfaction after learning Chinese traditional culture. The populations of the research were 5 classes of students in Sichuan Vocational College of Health and Rehabilitation. Only 1 class with the lowest pre-test score was selected by the purposive sampling method. The research instruments included: 1) picture book, 2) achievement evaluation papers, and 3) students' satisfaction evaluation form. The statistics used in this study included: 1) mean $\bar{x}$, 2) standard deviation SD, 3) dependent t-test, and 4) effectiveness index.

The research results revealed that the achievement scores of the students before and after use the picture book were different at the statistical significance level of .05 (t = -23.85, p =.000). The results also revealed that the effectiveness index was .3652; in other words, the students had higher post-test scores of 36.52 percent of cognitive score improvement. Lastly, the satisfaction level of the students is very satisfied ($\bar{x} = 4.58$, $SD = 0.67$).

Keywords: picture book, Chinese traditional culture, learning achievement, effectiveness index

ACKNOWLEDGEMENT

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Chapter 1
INTRODUCTION

1.1   Background of Statement

In recent years, with the advancement of globalization and the rapid development of information technology, China's education industry has shown a rapid development trend, but it is still faced with new opportunities and challenges, and educational content and teaching methods need to be reformed. The traditional teaching method emphasizes the inculcation of knowledge and rote memorization, but lacks the link of cultivating students' innovation ability and practical application ability. Students lack opportunities for interaction and participation in the classroom, and lack the development of critical thinking and problem solving skills.At the same time, with the development of science and technology, the way of information dissemination and people's access to information have been expanded, and the visual culture of easier and faster access to information has risen, and the "era of picture reading" has come, and beauty has become an important way for people to perceive the world. However, we should not simply put pictures and words in opposition, excessive contempt or excessive favor of pictures, pictures and words should be complementary symbiosis in order to co instantly optimize the dissemination of information. Picture book -- a visual form of organic combination of text and text, with the aesthetic characteristics of utilitarianism, intuition, creativity, transcendence and pleasure, can show the beauty of words and pictures.(LI Shijuan, LI Donglai, 2017)On September 15, 2015, The General Office of the State Council issued Opinions on Comprehensively Strengthening and Improving aesthetic education in Schools (Document No. 71 issued by the State Office of the People's Republic of China (2015)), pointing out that the construction of aesthetic education course should be "mutually permeated and integrated by various disciplines", and aesthetic education and teaching should be greatly improved. General Secretary Xi Jinping emphasized in his speech at the 2018 National Education Conference that "promoting comprehensive human development and social progress has put forward new and higher requirements for education and learning", and that "we must adhere to educating people with aesthetics and culture, and improve the aesthetic and cultural literacy of higher vocational education students".(Wu Jing, Hu Hao,2018)In order to further strengthen the function of aesthetic education in traditional culture course, the General Office of the CPC Central Committee and The General Office of the State Council issued Opinions on Comprehensively Strengthening and Improving Aesthetic Education in Schools in the New Era in October 2020(China Moral Education,2015),which added that aesthetic education is also "education that enriches imagination and cultivates innovative consciousness"(Yu

Kailiang,2019)and emphasized the need to "establish the concept of disciplinary integration". Fully excavate and apply aesthetic education resources in disciplines, "the stage of higher vocational education enriches aesthetic experience, broadens humanistic vision, and guides higher vocational education students to establish correct aesthetic and cultural views." (Li Peng,2016)It can be seen that the rapid development of today's society has put forward new requirements for the education in the new era. It is necessary to effectively stimulate the observation and appreciation of higher vocational education students (Hereinafter referred to as vocational students) on things, and then stimulate the aesthetic interest of higher vocational students, promote the development of students' aesthetic ability, and enrich students' aesthetic feelings.(People's Daily,2020)In the face of such new opportunities and challenges, picture book education plays an important role in national education.

Through talking with vocational students, it is found that some vocational students think that the existing course of Chinese traditional culture are boring and boring, and the course learning is not interesting. They mainly focus on rote memorization and so on. They cannot really understand the connotation and are difficult to apply. Even don't like to read Chinese traditional culture course study books, don't like to learn traditional culture course, thus forming a vicious circle. Compared with textbooks, vocational college students prefer to read anime, comics, picture books, and so on. Visual media has penetrated into almost every aspect of vocational college students' life. Vocational college students not only read picture books, comics, etc., but also hand-draw some pictures in textbooks and notes. (Flood J,1995)Why is that? It turns out that processing highly condensed words requires more brain power than processing simple images. Therefore, if picture books are combined with the teaching of Chinese traditional culture, is it helpful to enhance the interest of vocational students in learning Chinese traditional culture course? Based on this, the researcher conducted a large number of literature surveys and found that picture books are widely used in teaching and rarely used in higher vocational education, which has great research space.Based on this, the researcher has carried out preliminary investigations, the results showed that 92.0% people of higher vocational students believe in learning tired when using picture books teaching effect may be the best, hope students in the course of Chinese traditional culture, the use of picture books teaching 64.0% people of higher vocational students in Chinese traditional culture in the inset picture books teaching the use of this painting expectations are high, In particular, I have the highest expectation for funny picture books. (Flack J,1995)However, there are no picture books in the market that are fully compatible with Chinese traditional culture course, so it is urgent to independently develop picture picture books suitable for Chinese traditional culture course.

1.2 Research of Objectives

        1.2.1 To compare of achievement scores before and after using a picture book for Chinese traditional culture learning.

        1.2.2 To study the effectiveness index after using a picture book for Chinese traditional culture learning.

        1.2.3 To study of the student's satisfaction after using a picture book for Chinese traditional culture learning.

1.3 Conceptual Framework

The impact of picture books to enhance learning achievement on the Chinese traditional culture course

Students' learning achievements after using picture books	The effectiveness index after using picture books	Students' satisfaction after learning picture books

Figure 1.1 Conceptual framework

1.4 Definition of Key Terms

        1.4.1 Picture book

        A picture book is a book that focuses on drawings, usually with a small amount of text attached. Its definition can be understood as a special kind of picture storybook in which words and pictures complement each other and work together to tell a story or convey specific emotions and themes. Picture books do not simply place pictures on paper, but tell stories by interweaving and interacting in different dimensions through the two mediums of painting and text. This form of books is not limited to children's books, but also includes readers of all ages, such as educational books and popular science content. The purpose of picture books is to inspire children's imagination and interest through the combination of pictures and images, while cultivating their language skills and taste for beautiful things. Although picture books are considered "books with pictures" in many cases, as an independent book form, they emphasi

the internal relationship between pictures and texts, and both play an important role in storytelling, and sometimes pictures may play a leading role.

1.4.2 Chinese Traditional culture

Chinese traditional culture includes philosophy, literature, folklore, Chinese traditional art (calligraphy, painting, music, dance, architecture, etc.), tea ceremony, food culture, etc., which refers to the unique Chinese culture that has evolved and developed on the basis of the Central Plains culture. After more than a thousand years of historical evolution of Chinese culture, it is said that there were Chao, Cheren, Fuxi, Shennong (Yan Emperor), Huang Emperor (Xuanyuan), Yao, Shun, Yu and other eras, to the establishment and development of the first country in China, Xia Dynasty, a China with a splendid culture, with rich and colorful cultural elements standing in the East of the world. At present,Chinese traditional culture is spreading to all parts of the world through the Internet and other ways.

1.4.3 Learning achievement

Learning achievement refers to the learner's outcome after the learning process by using relevant test tools to measure factors such as cognitive, emotional and practical ability.

1.4.4 Effectiveness index

Effectiveness index is the degree to which the information obtained in the assessment can effectively represent the assessment object. The degree to which the Effectiveness index, content, evaluation criteria and evaluation methods of the index reflect the accuracy and stability of the evaluation results. That is, the degree to which the information obtained in the assessment can effectively represent the assessment object.

1.5 Significance of the Study

1.5.1 Stimulate vocational students' interest in learning traditional culture course

In the stage of higher vocational education, the learning difficulty of traditional culture course is increasing, and the students of higher vocational education gradually have the resistance to traditional culture course.Traditional culture course picture books are intuitive and interesting, can attract the attention of vocational students, easy to understand, can stimulate students' interest in learning.The enhancement of interest can make students' perception of traditional culture curriculum knowledge become active and their thinking become keen. Therefore,picture books are a very good choice in the teaching process.

1.5.2 Help vocational college students form deep understanding and lasting memory of knowledge

The teaching of picture books for traditional culture course enables vocational college students to connect with their own life experiences while learning, narrow the distance between traditional culture course and life, and reduce the difficulty of understanding knowledge.The creation of picture books for traditional culture course is the process of visualizing the knowledge of traditional culture course. In the process of independent creation, students constantly assimilate knowledge to achieve a deep understanding of the knowledge of traditional culture course and form a lasting memory of the knowledge of traditional culture course.

1.5.3 Promote the development of aesthetic education of traditional culture course for higher vocational students

Aesthetic education plays an important role in people's growth. Aesthetic education in traditional culture curriculum not only has a positive significance for students' learning of traditional culture curriculum, but also has an important significance for students' growth.Vocational college students are between 17 to 22 years old, not only the physical development tends to mature, but also gradually mature psychology, philosophy of life, values gradually established, is also an important period to enrich students' aesthetic experience, improve students' correct aesthetic perception.Traditional culture curriculum picture books are rich in aesthetic factors, and the teaching of traditional culture curriculum picture books integrates the teachers' aesthetic views. Vocational students present their own aesthetic views in their self-created works, which has positive significance for the development of students' aesthetic education in traditional culture curriculum.

1.5.4 The teaching of picture books is beneficial to the development of aesthetic education in traditional culture course

The teaching of picture books in traditional culture course can promote the development of aesthetic education in traditional culture course of higher vocational students and help students to become well-developed people. After the traditional culture course picture book teaching, vocational college students have a certain self-understanding and experience of "beauty", and can find and feel beauty in the study of traditional culture course. (Ding Yan, 2016) Some students not only appreciate beauty in the study of traditional culture course, but also take the initiative to appreciate beauty in life. Most of the students can try to create stories, make models by hand, and independently create picture books for traditional culture course.The teaching of picture books in traditional culture course has been effective in the aesthetic education of higher vocational students, but there is still a lot of room for improvement.

Chapter 2
REVIEW OF THE LITERATURE

This chapter mainly reviews the previous researches in this field and the related fields of this study.

2.1 Picture book

2.2 Chinese Traditional culture course

2.3 Inheritance and embodiment of Chinese traditional culture in picture books

2.4 Learning Achievement

2.5 Effectiveness index

2.6 Relevant researches

2.1 Picture book

The English equivalent of picture book is picture book.The Oxford Dictionary defines it as "a book with a lot of pictures, especially one for children", meaning a book containing a large number of pictures, especially for children.Although there is no unified definition of picture book in the academic world, many scholars point to the relationship between picture and text when defining picture book.Nodelman(1988), a famous Canadian scholar, defined picture books as "books intended for young children which communicate information or tell stories through a series of many pictures combined with relatively slight texts or no texts at all" , i.e. A picture book is a children's book that uses a large series of pictures combined with little or no text to communicate information or tell a story.Japan's "father of picture books", Naoshi Matsuki pointed out that picture books "refer to the unique relationship between text and picture, and express content that is difficult to be expressed only by articles or pictures in a leaping and rich way", and explained the relationship between pictures and pictures in a mathematical formula, that is, "text + picture = picture book, text × picture = illustrated book".(Xie Qingfeng,2000)Chinese writer Peng Yi(2011) believes that "picture books use pictures and words to tell a complete story, which is an ensemble of pictures and texts." Taiwan's Fang Suzhen(2013) pointed out that "picture books use a set of pictures to tell the story, relying on page turning to advance the plot, even illiterate people can guess the general idea through the pictures." It can be seen that although scholars from different countries

(regions) have different definitions of picture books, they all emphasize the graphic relationship of picture books and believe that pictures in picture books often complement each other with words and jointly assume the function of narrative.

2.1.1 Foreign research status

2.1.1.1 The research value of curriculum picture books

As for the study of the value of curriculum picture books, there are many viewpoints of foreign researchers, but a relatively unified view has not been formed yet. Through reading related literature, this paper will briefly summarize and summarize the viewpoints of researchers, specifically from the four aspects of understanding value, the value of attracting students' attention, cognitive value and aesthetic value.

1) Understanding value

The first thing to mention is the understanding value of picture books. The understanding value refers to that illustrations can help students understand the text content, and convey the text content graphically in the form of visual images, so as to help students understand the course text content more easily. To be specific, picture books transform abstract Chinese text contents into concrete pictures through lines, colors and other elements, and there is a close internal connection between illustrations and text contents. Especially when multiple elements in the illustrations, such as characters, plots, colors and other elements tend to be consistent with the text content, there will be a high consistency between the pictures and texts. The higher the consistency, the easier for students to understand the text content. In short, the presentation of course picture books can help learners clarify the content of the text, and help students to understand the text with the help of the interpretation of the illustrated pictures.

2) The value of attracting students' attention

For college students, their cognitive ability is relatively mature and they can perceive external things more accurately, but at the same time their attention is more scattered. At this time, their most direct way of perception is to directly observe through the eyes, and directly communicate with the outside world. Course picture books can quickly attract students' attention and arouse students' attention. The attractive colors and interesting images displayed in picture books can arouse students' interest and help them concentrate quickly. For the study on the function of picture books, Lewine and other

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researchers proposed "using functional analysis", which is also a research method highly recognized by the academic circle. They believe that textbook illustrations have the following functions: guiding function, attention function and cognitive function. The attention function refers to that the course illustration books can quickly stimulate students' interest in learning and help students gather energy and devote themselves to text learning. Oriented value means that when the illustration content is something that students are interested in, the students will be guided to the learning goal by the illustration. Therefore, picture books in the course can attract students' attention and stimulate their learning interest.

3) Cognitive value

As an important part of the course, picture books are the works drawn by the illustrator according to the text content, which can help students quickly understand the text content, deepen the perception of the text content, promote their own emotional experience, improve the cognitive ability of external things, and have certain cognitive value. In order to study the cognitive value of illustrations, some researchers selected students with different learning abilities in the same school to participate in the experiment to investigate the learning effect and cognitive situation of students. The researchers provided students with stories with the same content but different styles, which were divided into three categories: plain text without illustrations, color illustrations next to the text, and black and white illustrations next to the text. The study found that students liked the colored illustrations most and had the highest understanding of the text content. Therefore, graphic illustrations can help students to better understand the text.

4) Aesthetic value

As a type of "painting", course picture books are a kind of plastic arts. They are also artistic works, which can decorate and beautify texts and teaching materials. The decorative function of illustration is also called embellishment function, which means that illustration can play a beautifying role. Other researchers point out that compared with pure text textbooks, picture textbooks are more beautiful, have certain aesthetic and ornamental value, and can bring students good emotional experience and pleasure. In the process of learning, when students observe the colorful illustrations in the textbook, they

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can directly get a good visual experience, quickly arouse their learning enthusiasm, better enter the state of learning, and improve the learning effect.(Shatzer Joyce,2008)

2.1.1.2 Study on the application of curriculum picture books

According to the relevant literature, there are many researches on the reasons and strategies of using curriculum picture books in foreign countries, which will be summarized.

1) Reasons for the use of illustrations in teaching

Because of the value and benefits of course picture books, the researchers also explored the reason of illustrating in teaching from the root. First, the use of illustrations in teaching can effectively improve students' memory level. The brain memory system includes the verbal system and the non-verbal system. When the two systems process the received information at the same time, the students' memory effect can reach the best level. Therefore, the use of illustrations in teaching, combining pictures and texts, students' memory effect will be better. Levin and other researchers also say that illustrations help students retain memories better than simple repetition like "rote memorization." Other researchers have studied the correlation between the position of illustrations in the text and students' learning effect, and found that the closer the pictures are, the better students' understanding of the text will be. Secondly, the use of illustrations in teaching can strengthen students' interest in the text content. Illustrations can play a certain role in guiding the reading content of students in their study. Levie and Lentz investigated the effects of illustrations. They reviewed several studies and found that picture course texts were much more effective than text-only course. Therefore, picture course are more likely to attract students' attention and stimulate their interest in learning.

2) Illustration application strategy

In order to effectively use illustrations in the teaching process, the researcher studies the application strategies of the course picture books and puts forward some practical and effective suggestions. First, appreciate the illustrations in a certain order of observation. Walter studied the effective methods of illustration application, and he believed that illustrations should be appreciated according to a certain order of observation, so as to improve the learning effect. To be specific: learners should first read the questions and perceive the illustrations as a whole; Then, take illustration as the study

focus to observe carefully, compare text and text; Finally, the content of the illustration is described. (Defauw Danielle-L,2014)Second, the higher the degree of relevance, the better the effect of illustration. It is found that the application effect of illustration is closely related to the correlation degree of text and text. Peak compared the drawing of illustrations in sixth-graders' study with the simple text study, and found that the drawings were helpful to students' study only when they were related to the text. Bartram and other researchers conducted research on non-physical pictures. They asked students to learn geographical spatial information from maps related with pictures and pictures, which had a much better learning effect than purely using text narration.

To sum up, studies on the application of picture books have been carried out in foreign countries since the last century. Researchers have paid attention to the reasons for the application of illustrations and put forward countermeasures and suggestions for the effective use of illustrations. Overall, studies on the application of picture books are relatively comprehensive, but studies on the problems in the application of illustrations are still not rich enough.

2.1.2 Status quo of domestic research

2.1.2.1 Study on the value of curriculum picture books

The value and function of picture books in the classroom is the concern of many researchers. In order to further study the relationship between illustration and teaching, it is necessary to understand the function and value of course picture books.

1)Intuitively present the text to promote understanding. Illustration is an objective presentation of the text content composed of lines, pictures, colors, characters and other elements, which is "the second language of Chinese textbooks". The illustrations in the textbook can show the text directly, which is helpful to deepen the students' understanding of the text. In other words, the text is the text content. When students study the text, they need to first perceive the connotation behind the text with the help of their subjective feelings. Illustrations are completely inconsistent with the content of the text. As a visual art, illustrations can express the characters, plots and other internal relationships described in the text with intuitive pictures. Students do not need to think individually like reading text, but can grasp the content of the text immediately when looking at pictures. Therefore, illustrations can enrich students' in-depth understanding of the text.

2) Stimulate students' interest in learning. Students prefer to read books with vivid illustrations, and colorful picture books can attract students' attention. Students want to be close to the colorful painting kingdom. When students observe interesting illustrations in books, they can be motivated to study. With vivid pictures and brilliant colors, illustrations bring visual experience to students that pure text cannot get at all, and stimulate strong interest in learning.(Lantz K,2005)

Some researchers believe that illustrations in textbooks can reproduce the text content, highlight the key contents of the text, and stimulate students' curiosity about the content of the text, which is an indispensable teaching resource in teaching. Therefore, making good use of textbook illustrations can enhance students' interest in learning Chinese traditional culture and cultivate students' comprehensive qualities of observation, thinking and imagination.

3) Divergent thinking to cultivate students' imagination. Illustration is a kind of plastic art painting, which has a variety of artistic expression forms such as color, line, light and shade, and can carry out diversified expression of text content in textbooks. In the teaching of specific traditional culture course, teachers should lead students to find the similarities and differences between illustrations and texts, give full play to students' subjective imagination, and enrich the characters in the texts. To be specific, teachers can guide students to express the things they think of in complete language while observing them, and clearly require them to use specific words and sentences. They can describe the feelings of the subject by means of description, metaphor, explanation and other language expressions, so as to develop expression ability and cultivate imagination in the process of divergent thinking.

4) Aesthetic ability cultivation. There are also many illustrations with artistic appreciation value in the textbook. These illustrations are carefully created by the illustrator. Appreciate illustrations, can play a role in cultivating students' aesthetic ability, can experience the vitality of the natural world, understand the colorful real world. Observing illustrations is also a process of aesthetic appreciation. The use of picture books in traditional culture course, on the one hand, cultivates students' aesthetic sense, on the other hand, edifies aesthetic sentiment.(Yang Dazhong,2024)

To sum up, textbook illustrations have the value of promoting understanding, stimulating learning interest, stimulating imagination and cultivating aesthetic ability. The researches on the value of textbook illustration mainly focus on cognitive value and aesthetic value.

2.1.2.2 Study on the application of curriculum picture books

As for the research on the application of curriculum picture books, according to the relevant literature, the relevant research will be summarized from the two aspects of application problems and application strategies.According to the research of researchers, it can be found that there are still many problems in the application process of curriculum picture books, and it is necessary to explore improved strategies to solve the existing problems, so as to give full play to the function and value of picture books in teaching.

1) Study on the application of illustration. It mainly includes the limitations of textbook illustrations and the problems existing in the application of illustrations in teaching. On the one hand, picture books exist in the current Chinese traditional culture curriculum: lack of standardization; Functional stenosis; The expression technique is monotonous; Inconsistency of text and text, imbalance of gender roles in illustrations and other problems. This is the time to correct inappropriate illustrations in the textbook. On the other hand, some researchers have investigated the use of illustrations by teachers and found that some teachers pay little attention to illustrations, use frequency of illustrations is too low, combination of illustrations with teaching content is low, and understanding of illustrations is not enough.

2) Research on the application strategy of picture books. Some researchers believe that before the specific use of illustrations, the role of illustrations should be defined first. According to the specific functions of illustrations, necessary imagination space should be set aside accordingly for diversified and personalized thinking. Secondly, teachers of Chinese traditional culture course should form their own fluent plans and methods when using illustrations in teaching, and consciously guide students to use and analyze illustrations in learning. For example, according to the content of the text, teachers can first create relevant situations in teaching to assist teaching. Next, make good use of the memory anchor function of illustrations, and gradually let students solve the important and difficult points one by one to improve the learning effect of illustrations.

In addition, multimedia means can also be used to combine all kinds of resources related to course illustration books, so as to maximize the role of illustration in teaching.(Yang Hanxu,2023)

To sum up, it is necessary to find targeted countermeasures for the problems existing in the application of curriculum picture books. On the one hand, teachers need to improve the awareness of illustration teaching and determine a more appropriate illustration teaching method. On the other hand, they also need to adjust the application of picture books according to the characteristics of the course and combined with the characteristics of the course.

2.2 Chinese traditional culture course

2.2.1 Research on the teaching methods of Chinese traditional culture course

For course learning, Chinese traditional culture curriculum undertakes the task of classical inheritance. Many researchers realize the importance of learning Chinese traditional culture curriculum and study the teaching methods of traditional culture curriculum.

2.2.1.1 The method of reading. Recitation is a traditional cultural teaching method that teachers often adopt in practical teaching. Most teachers believe that reading can help students experience the emotional implications of Chinese traditional culture, appreciate the rhythmical beauty of words and poems, make students immersive and imagine the whole vivid picture in their minds, which is an efficient and commonly used teaching method of Chinese traditional culture course. Therefore, teaching should be based on the text, mainly reading, appropriate expansion, at the same time around the theme of ancient poetry, imagination expansion; Finally focus on the image, appropriate extension.

2.2.1.2 The method of emotional experience. The majority of Chinese traditional culture course mainly focus on experiencing the emotion of the text. Students should read the text independently as the main way to create the specific situation of the birth of traditional culture and deeply experience the emotional implication behind the culture. Therefore, the teaching and learning of Chinese traditional culture should not only stay on the surface, but also need to deeply appreciate the emotion of traditional

culture and feel the deep implication behind it. Therefore, teachers can use picture books and other teaching resources to expand the teaching methods of Chinese traditional culture and improve the teaching effect.

2.2.2 Research on teaching strategies of Chinese traditional culture course Many researchers have put forward teaching strategies for Chinese traditional culture course, such as establishing teaching concepts that point to core literacy and individualized teaching ideas. By putting forward various teaching strategies, this paper aims to improve the education of Chinese traditional culture course and create a good traditional culture teaching atmosphere.

2.2.2.1 To the core literacy, the use of other teaching resources. Chinese traditional culture contains rich literary quality, which can improve students' Chinese quality. Traditional culture course teaching should combine a variety of teaching methods to improve students' quality in the learning atmosphere. In the teaching of traditional culture course, teachers should not only guide students to read, understand and feel the cultural edification, but also actively develop moral and aesthetic education. Teachers should learn to use picture books and other teaching resources in the teaching of Chinese traditional culture based on the concept of core accomplishment.

2.2.2.2 Follow the text to create interest, stimulate interest and realize beauty. Some researchers have put forward the teaching idea of "follow the text to be interesting". In the teaching of traditional culture course, students' learning should not be rigid and boring, but should be active. Students' subjectivified experience should not be the teaching focus of cultural learning and understanding at the level of subject knowledge. Instead, students should be guided to learn actively, experience the fun of learning Chinese traditional culture, and obtain their own unique understanding. "Fun with the text" is exactly the experience of teachers in the teaching of Chinese traditional culture. Traditional culture course teaching is a process of beauty perception. Teachers need to guide students to gradually feel the beauty of cultural rhyme, start with various materials conducive to beauty perception and interest stimulation, and stimulate their interest in learning ancient poetry with illustrations and audio. To sum up, in view of the problems existing in the teaching of Chinese traditional culture, researchers put forward corresponding improvement countermeasures, so as to promote the teaching of Chinese

traditional culture from the knowledge level to the perception of fun, beauty and other aspects. However, few researchers put forward improvement measures from the perspective of picture books, ignoring the important value of picture books in improving the teaching effect of Chinese traditional culture course.

2.3 Inheritance and embodiment of Chinese traditional culture in picture book

2.3.1 The implication and expression elements of Chinese traditional culture

2.3.1.1 Notable cultural features of agricultural production

Distinctive characteristics of agricultural culture traditional festivals are the companion of agricultural civilization. The choice of festival itself is a special manifestation of the law of production and life in agricultural society. With the change of seasons and arrangement of farming needs, gradually formed a series of colorful folk activities, with distinct agricultural cultural characteristics. On the one hand, there is the traditional folk culture of praying for a good harvest. For example, in February, during the Awakening of Insects, some areas in southern China start to sow corn and rice, which is a great time for spring ploughing. March Qingming, grain rain before and after rain is a good season for crop fertilization. On the other hand, there are related festivals and culture, such as April "start of summer" has "start of summer to see the summer" farming proverb, this season to always pay attention to pests and diseases harm the growth of crops. Most of these traditional folk activities are carried out around the characteristics of agricultural production in various regions, with strong regional characteristics. They are the resource base of modern illustration creation, and these traditional cultures about agriculture can be skillfully applied in illustration.

2.3.1.2 The combination of custom and custom

China is a country that values human relations and family ties. Many traditional cultures embody the combination of custom and custom. People in the custom of activities can show concern for each other, contact interpersonal relations, exchange life information. Ancestor worship is almost an indispensable part of all festivals. In order to express the later generation's remembrance of their ancestors, people will hold ancestor worship activities. And this continuous, recurring custom of the year, strengthen and consolidate people's family etiquette, blood affection, such as Qingming Festival sweeping is

originally a folk custom evolved into etiquette customs. After the ruling class of the past dynasties brought many festivals into the track of feudal ethics, the festival custom rose to ritual and custom, which accelerated the spread and development of festivals. Expressing the connotation and evolution process of these traditional customs and etiquette is an important way for modern illustrations to enhance the cultural connotation and value.

2.3.1.3 Common ideals and beliefs for life

In the Chinese traditional festivals, most of them have a common ideal and purpose that can be recognized by people. It is the way people adjust the pace of life, a philosophy of life gradually formed. Traditional festival activities are an indispensable part of people's life and a cultural heritage created by people collectively. Like the expectation of a family reunion; Pray for good health; The desire to exorcise evil and avoid harm is the common ideal belief of people in traditional culture for good things. In emotional expression, modern illustration should fully understand the spiritual world pursued and yearned for in these traditional cultural activities and express the central idea of looking forward to a better future.

2.3.2 Embodiments of Chinese traditional culture in picture books

2.3.2.1 Traditional patterns pray for good luck

Chinese traditional culture has a long history, with numerous types and colorful contents, including folk rituals, cultural connotations, folk activities, myths and legends. The corresponding visual patterns are also rich and colorful, and most of the patterns on the presentation of rich and colorful, profound meaning, mainly contains the folk auspicious culture of avoiding disaster and seeking good luck, praying for peace, happy and auspicious. With national characteristics, it symbolizes people's pursuit of peace, peace and peace. It is a kind of culture that people like to hear and see. It not only reflects the unique humanistic spirit, but also plays a positive role in people's life.

Folk festival patterns use symbolic techniques to express connotation and concrete things to express abstract concepts. In terms of subject matter, they usually include characters, animals and plants, characters, geometric figures and so on. When the traditional culture is deeply rooted in the hearts of the people, the corresponding visual patterns should also be reflected, and the two interact and are inseparable. These Chinese

traditional graphics have distinct symbolism, involving different aspects such as religious belief, totem worship, philosophical thinking and so on, showing the unique charm of Chinese culture. These graphics with auspicious connotations are still widely used in modern illustration art.(Sun Hao,2023)

2.3.2.2 The legend of history is beautiful

Folklore is a collective oral creation of the working people of all ethnic groups, and related to certain historical figures, historical events, local monuments, natural scenery and social customs. It reflects the social life and historical appearance of people of all ethnic groups and embodies the rich spirit of The Times and cultural connotation.

Most historical legends about traditional culture are produced to explain its origin and related customs. Compared to the origin of the Dragon Boat Festival, there are three ways to say, one is to commemorate the Spring and Autumn period Chu patriotic poet Qu Yuan, so also known as the poet's Day; Two is a very widely spread in Jiangsu and Zhejiang area is to commemorate the Spring and Autumn period to help the state of Wu against the state of Chu and the state of Yue but by slander framed body dead and the body was put into the river of Wu Zixu; Third, it is to commemorate the filial daughter Cao E who saved her father and threw herself into the river in Eastern Han Dynasty. The three theories about the origin of the Dragon Boat Festival all have one thing in common, that is to commemorate the famous people who are loved and admired but died in the river. In addition, there are legends about the Mid-Autumn Festival, Lantern Festival, Tanabata and so on.

Figure 2.1 The legend of Nian

Figure 2.1(Lu Mingshan,Website)Legend has it that at midnight at the end of every year in ancient times, Nian would attack the village. People seized the weakness of the beast, set off firecrackers to frighten the beast, and posted couplets on the door to prevent them from attacking. These legends are unique cultural resources in China. Through the artistic processing of the creators, the fierce and powerful image of Nian in the stories and legends can be shown through the form of illustration, satisfying people's curiosity and great interest. A few children set off firecrackers to drive away the Nian beast, which is a good wish in the historical legend of people "playing the Nian beast".

When transforming the history and legends associated with traditional culture into visual creative illustrations, creators need to have a deep knowledge and understanding of them, and then transform the abstract culture into graphics and incorporate modern elements. Visual pleasure can also increase appeal to curious young people. Sensible images often inspire people to spontaneously learn and understand the history and culture of the work. Excellent modern illustration can not only play its aesthetic role, but also have great value to the dissemination of traditional culture.(Maggie Cheung,2023)

2.3.2.3 Folk activities build feelings

With the formation of traditional cultural festivals, people exchange feelings and spread information in a variety of traditional folk activities. According to the needs of the people formed farming, celebration, sacrifice, entertainment and other activities.

In the long history of development, the fine Chinese traditional culture has helped people to form the common feelings of the nation, the country and the family. For example, on Tomb-sweeping Day, spring outing, burning paper, tomb sweeping, ancestor worship, etc., these customs throughout the country. The vivid visual representation of these folk festival activities is essential to interpret and extract these elements. As shown in Figure 2.2(Zhang Ke,Xinhua News Agency), the whole shape of the object is summarized and abstract symbolized, and the flat pattern design clearly and effectively shows the unique folk activities of dragon boat racing, eating zongzi, tying five-color lines and flying paper kites during the Dragon Boat Festival in a short time. The People's Daily life activities, emotions, aesthetic taste skillfully integrated, intuitively express people's feelings for the festival. However, most of the pictures are a simple list of things related to the festival, which lacks the injection of emotion and is too simple and blunt.

Figure 2.2 Folk activities of the Dragon Boat Festival

The folk festival in traditional culture is not only the real life scene that changes at any time, but also contains the natural concept of "harmony between man and nature" between man and nature. Thoughts and feelings about social relations between people. For modern illustration, it means that it can not only focus on the simple accumulation of

figurative things, but also need to sublimate the emotional level of human, nature and society.

2.3.3 Heritage significance of Chinese traditional culture in picture books

Under the background of digital information age, the social life style of various countries has undergone great changes. The development of Chinese traditional culture, like the traditional festivals of many countries in the world, is facing great challenges of survival. Many traditional cultures with great spiritual value and cultural value are difficult to adapt to contemporary social life and gradually lose their cultural identity function. picture books, as a visual art form that is widely concerned and applied, can be diversified, beautiful and directly integrated into Chinese traditional culture to realize the integration and development of traditional culture and illustration art.

2.3.3.1 Promoting the protection of cultural heritage

Heritage is a holistic and rich expression of human culture. Chinese traditional festivals are the epitome of Chinese civilization, with rich cultural content and spiritual connotation, and are an important intangible cultural heritage. And high-quality modern illustrations can make the tradition walk into people's life with an elegant attitude, strengthen the concept of inheritance, create a kind of "oral" atmosphere, so that people better understand and understand the folk cultural heritage, and further increase people's participation. In recent years, the state has issued a series of policies to protect such cultural heritage. In early 2017, the General Office of the CPC Central Committee and The General Office of the State Council issued Opinions on Implementing the Project of Inheriting and Developing Excellent Chinese traditional Culture, which clearly pointed out that traditional culture should be integrated into production and life. "Pay attention to the combination of time and development, demand and supply, form and content, to better integrate the connotation of China's fine traditional culture into all aspects of production and life". Strengthen the use of historical and cultural heritage "so that its beneficial cultural value deeply embedded in people's lives". Illustrators should also respond positively and contribute to better protection of outstanding cultural heritage.

2.3.3.2 Single form of expression

Cultural industry takes economy and social culture as the concept of dual objectives, it contains rich cultural content, but also has diversified forms, in the cultural industry to achieve the same form and content. China has a long history and its traditional culture is extensive and profound. It is a huge treasure house of cultural resources with high economic and cultural value. In recent years, with the rapid rise and development of the cultural industry, modern illustration has become more commercial and practical. The traditional culture is integrated into the illustration creation, and the traditional culture is transformed into cultural commodities in the tide of the development of the cultural industry and circulated in all aspects of social life. At the same time, it also provides inexhaustible creative power for modern illustration creation. Both supplement each other, promote each other, and develop our country's cultural industry together. Traditional culture is the accumulation of thousands of years of people's life experience and is the precious cultural wealth of mankind. The prosperity and development of modern cultural industry cannot be separated from the strong support of traditional culture. Modern illustration industry will have a bright development prospect for a long time in the future, so it needs the traditional foundation to provide nutrients for its growth, so as to use the Internet + platform to promote the spiritual connotation and implication of traditional culture and add impetus to the development of China's cultural industry.(Zhu Wenqian, Song Fangyuan,2023)

2.3.3.3 Enriching people's cultural life

The creation and presentation of culture and art is not to express itself, but to express the emotional expression of life ideal and spiritual pursuit embodied in human communication. When a country's culture is infused with aesthetics and emotions and becomes an appreciable and appreciated part of life, it will enrich people's spiritual and cultural life through visual communication. picture books have endowed Chinese traditional culture with unique visual characteristics. Through the transformation and processing of creators, picture books have become a cultural form that can be seen everywhere in People's Daily life. When some obscure traditional culture appears in a way that keeps pace with The Times, people's festival folk customs are not only about holidays and meals. The integration of traditional folk customs into modern life not only

satisfies people's actual life needs, but also makes the influence of traditional culture wider and deeper.

2.4 Learning Achievement

According to learning achievement is the "degree of student success in learning the subject matter in schools, as indicated in the form of scores received from the results of tests on a certain subject matter." Meanwhile, Tu'u Sincere,states that "learning achievement is the acquisition of knowledge or abilities created by subject matter, commonly shown by test scores or numerical value awarded by teachers." Based on this understanding, it can be concluded that learning achievement is the percentage of pupils who succeed in school and is expressed as a numerical figure.

It refers to how far a student has progressed toward their short- or long-term educational objectives. Individual disparities in academic achievement are significantly linked to personality and IQ differences. Students' levels of self-efficacy, self-control, and drive also impact their academic performance.

Achievement motivation is considered to be a significant factor of academic success since it energizes and focuses behavior toward achievement. Achievement motivation is a broad term that encompasses a number of concepts such as motivational beliefs, task values, objectives, and achievement motives. However, there are only a few studies that looked at (1) several motivational factors in relation to students' academic accomplishment in a single sample and (2) also considered students' cognitive ability and prior achievement. Because students' cognitive abilities and their prior achievement are among the best single predictors of academic success it is necessary to include them in the analyses when evaluating the importance of motivational factors for students' achievement.(Wu Zhiquan, 2019)

2.5 Effectiveness index

The index of effectiveness evaluation mainly includes reliability, validity, standardized score and differentiation degree.

1) Reliability: reliability refers to the stability and consistency of the measurement tool. An effective evaluation indicator needs to have a high degree of

reliability to ensure that similar results are obtained at different times and in different situations. The commonly used reliability test methods include retest method, internal consistency test and so on.

2) Validity: Validity refers to whether the evaluation tool can accurately reflect the concept or feature to be measured. An effective evaluation indicator needs to have high validity to ensure that the measured results are consistent with the actual situation. The types of validity include content validity, construct validity, criterion validity and conditional validity.

3) Standardized scores: If the assessment indicators are used in psychological tests or questionnaires, etc., then the raw data is usually converted into a standardized score for easy comparison and interpretation. Standardized scoring can be achieved by different methods, such as Z-scores, T-scores, standard scores, etc.

4)Differentiation: Differentiation refers to the ability of an assessment indicator to distinguish between different groups or characteristics. An assessment index with a high degree of differentiation can help us better identify differences between different groups.

2.6   Relevant researches

2.6.1 American educational psychologist Richard Meyer proposed a cognitive theory of multimedia learning based on dual coding theory, working memory model and generative learning theory. This theory is not only content to reveal the cognitive mechanism of multimedia learning. As a more practical scientific system, its ultimate goal is to try to solve the problem of how to organize multimedia teaching and apply more effective teaching strategies to help learners learn effectively. The cognitive theory of multimedia learning points out that students should actively process information during learning, and reveals five cognitive processes in sensory memory, working memory and long-term memory of learners: choosing relevant words in texts or explanations; Select related images from the illustrations presented; The selected words will be organized to form coherent language representation, and the selected images will be organized to form coherent visual representation; Integrate language representation and visual representation with learners' existing knowledge and experience.

The five cognitive processing processes include three important steps: first, the selection of relevant materials. When multimedia representations such as words and images are presented in front of the sensory organs of learners, learners will select the representations that attract their attention and input them into the corresponding processing center; Secondly, the selected materials are organized. Learners transform words into speech models and images into image models through working memory and organization. Third, integration, combining organized material with existing knowledge, where knowledge can be entered into long-term memory.

In addition, Richard Meyer also put forward four principles:

1) Multimedia cognition principle: from the perspective of students' learning effect, the content composed by text and picture is better than that presented by text alone.

2) The principle of time and space proximity means that the learning effect is better when the illustration and the corresponding text are near, and the effect is better when the illustration and the corresponding text are presented in front of readers at the same time than when they are presented in the following time.

3) The principle of consistency: students learn better when only the words and images related to the learning topic are presented.

4) Principle of individual differences. Because of individual differences, the cognitive effects of multimedia learning are more obvious in students with strong spatial perception ability.(Wang Jian-Zhong, Zeng Na, & Zheng Xudong,2013)

2.6.2 Intersymbolic complementarity refers to the multi-modal discourse text mode and visual mode proposed by Royce(Royce,T.1998), which cooperate and complement each other to complete the construction of meaning together. This theory is mostly used to interpret the relationship between text and image in multi-modal discourse, which is of great value and significance for the study of second language classroom teaching and multi-modal textbook construction.

Royce's existing multi-modal theory often only focused on the meaning represented by images, and did little research on the complementarity between images and texts in discourse. Therefore, he proposed the intersymbolic complementarity theory based on the theory of systemic functional linguistics created by Halliday. The

intersymbolic complementarity theory analyzes the complementarity between text mode and visual mode from three aspects: pure rational feature, interpersonal feature and constituent feature.(Royce,T.2007)

The analysis of pure logic features uses the lexical cohesion theory of Halliday &Hasan and the analysis of the meaning relationship expressed by text and image, and then determines the inter-symbolic complementary relationship between them. First of all, the visual information signals presented in the image are observed to know what the participants in the image are doing and what information is conveyed. Secondly, after identifying the visual information symbols, the corresponding text is analyzed to obtain the corresponding vocabulary. Finally, from the perspective of lexical cohesion theory, this paper analyzes the visual information symbols and their associated texts to determine the inter-symbolic complementary relationship between them. The analysis of interpersonal features mainly explores how textual and visual modes cooperate and complement the representation and the relationship between readers. Halliday divides interpersonal communication activities into four verbal functions, which are providing, commanding, questioning and stating. The analysis of component features mainly focuses on how text and image present consistent and coherent information through coordination and complementarity, and mainly focuses on the presentation features of text and image redistribution and salience.(Yang Shu,2012)

2.6.3 Gardner proposed the theory of multiple intelligences. He believed that intelligence is the ability to solve problems displayed in a particular cultural situation or community. Gardner pointed out that there are at least eight kinds of human intelligence, including verbal intelligence, logic-mathematical intelligence, spatial intelligence, musical intelligence, physical-kinesthetic intelligence, interpersonal intelligence, introspective intelligence, and natural observation intelligence.

1) Linguistic intelligence: sensitivity to sound, rhythm, meaning of words, and the different functions of language, as shown by an individual's ability to use language smoothly and efficiently to describe events, express ideas, and communicate with others. This kind of intelligence can be found in journalists, editors, writers, public speakers and political leaders.

2) LLogical-mathematical intelligence: the ability to use numbers, reasoning and assumptions effectively. This intelligence is particularly prominent in detectives, lawyers, engineers, scientists, and mathematicians.

3) Spatial intelligence: it refers to the ability to feel, identify, remember, change the spatial relationship of objects and thus express thoughts and emotions, which is manifested by the sensitivity of lines, shapes, structures, colors and spatial relationships, and the ability to express them through plane graphics and three-dimensional modeling. This intelligence is more prominent in the painter, sculptor, architect, navigator body.

4) Musical intelligence: the ability to feel, distinguish, remember, change and express music. This intelligence is particularly evident in composers, conductors, singers, performers, instrument makers, and tuners.

5) Body-kinesthetic intelligence: the ability to use the limbs and trunk, as shown by the ability to control one's body, to respond appropriately to events, and to express one's thoughts and emotions through body language. This kind of intelligence can be found prominently in athletes, dancers, surgeons, race car drivers and inventors.

6) Interpersonal intelligence: the ability to live in harmony with and interact with others. It is manifested in the ability to detect and experience others' emotions, emotions and intentions, and make appropriate responses accordingly.It is also the best manifestation of emotional intelligence.This kind of intelligence can be found prominently in teachers, lawyers, salesmen, publicists, talk show hosts, etc.

7) Introspective intelligence: it refers to the ability to know, see and reflect on oneself, which is manifested as the ability to correctly realize and evaluate one's own emotions, motives, desires, personality and will, and form self-esteem, self-discipline and self-control on the basis of correct self-awareness and self-evaluation. This kind of intelligence is more prominent in philosophers, thinkers and other people.

8) Natural observation intelligence: refers to the ability to understand and adapt to the world, is a kind of ability to distinguish differences in the natural world, including the ability to distinguish biological observation and keen attention to natural scenery. This intelligence is more prominent among natural scientists.

The different combinations of these eight kinds of intelligence in the human body make each person's intelligence have its unique ways of expression and

characteristics. Therefore, it is difficult to find a unified evaluation standard applicable to anyone to evaluate a person's intelligence degree and intelligence level.

Gardner broke through the traditional category of intelligence and put forward the concept of multiple intelligences, which caused people to think about education, intelligence development and teaching evaluation. The theory of multiple intelligences guides teachers to improve students' understanding of subject content from various intelligent ways, cultivate students' multiple intelligences, and cultivate students' special intelligence at the same time.(Howard Gardner,1999)

Chapter 3

RESEARCH METHODOLOGY

The researchers discuss the methods used in this chapter. It is devoted to the study of methods for conducting this research. The method consists of the following components.

3.1 Research Design

3.2 Population and sample

3.3 Data instrument

3.4 Data Collection

3.5 Data and statistical analysis

3.1 Research Design

In terms of research objectives, the research design follows the following structure: It always flows with the footsteps:

The researchers used a quantitative approach in the experimental design for this study. Data was collected in test-derived quantitative or numerical form, and the researchers used a set of pretest-posttest designs. The design includes pre-testing, treatment, and post-testing of individual groups. The design diagram is as follows:

Group : O_1 X O_2

O_1 = Measurement of score before test

X = picture book

Improve students' interest in learning

O_2 = Achievement in measuring post-test scores

In terms of research objectives, the research design follows the following structure: It always flows with the footsteps:

The researchers used a quantitative approach in the experimental design for this study. Data was collected in test-derived quantitative or numerical form, and the researchers used a set of pretest-posttest designs. The design includes pre-testing, treatment, and post-testing of individual groups.

This study takes students learning Chinese traditional culture course in Sichuan Health Rehabilitation Vocational College as the main objects of investigation, and studies whether students learning picture books can improve their academic performance of Chinese traditional culture course by designing picture book test papers. The test paper item design is Single choice question (15 questions),True or false questions(10 questions), Gap filling (10 blanks), Multiple choice question(5 questions).

3.2 Population and sample

3.2.1 Population: The research objects of this study include about 200 students from 5 classes of Sichuan Vocational College of Health and Rehabilitation in the first semester of 2023.

3.2.2 The sample of this study is 40 students in one of 5 classes. They were students of researchers working at the Sichuan Vocational College of Health and Rehabilitation in China. Secondly, they learn Chinese, history and politics in middle school, especially those who are liberal arts students. They have a certain traditional cultural foundation and can learn and read traditional cultural courses, which is conducive to the development of picture book teaching and independent reading. Based on the above content, this study adopts a purposeful sampling method for selection, which is considered by researchers to be more representative.

3.3 Research instrument

3.3.1 Picture books

Select the content related to calligraphy, painting, architecture and sculpture from the textbook of Traditional Chinese Culture, find out the corresponding pictures from the Internet, and put the corresponding text introduction.

3.3.2 Procedure

Step 1:The researchers formulated the questions in the pre-test, post-test and questionnaire according to the content of the picture book.

Step 2: The researcher's advisor and other experts in the field conducted a review of the pre-test, post-test and questionnaire.

Step 3: The pre-test was conducted on 40 selected students, and the test time was about one hour.

Step 4: The researchers used picture book teaching in the course of Chinese traditional culture to develop a course plan. This course plan was designed over a period of six weeks and was approved by the advisors of the researchers and experts in the field.

Step 5: The researcher arranges the class according to the teaching plan. A six-week traditional Chinese culture course was taught to students through picture book teaching to understand their learning outcomes. After that, they were assigned to complete post-test and questionnaire surveys. The test lasts about one hour.

3.3.3 Content Quality evaluation form

3.3.3.1 Evaluation of the application of picture books to Chinese traditional culture course by three content experts to improve students' academic performance. Content experts working in the field of traditional Chinese culture are asked to check whether the content used in picture books is suitable for teaching Chinese traditional culture course.

3.3.3.2 The researcher has completed the following steps:

Step 1: The assessments in this study were developed to conform to the research hypothesis. It is therefore developed on the basis of the two theories used in this study. Studies have shown that using picture books in Chinese traditional culture course can improve students' academic performance. The questionnaire aims to measure experts' opinions on the teaching of Chinese traditional culture course through the use of picture books, so as to improve students' academic performance. This

part is a closed questionnaire based on a five (5) point Likert type scale. Participants were asked to rate how much they agreed with each statement on a scale of numbers 1-5. The explanation for each number is as follows:

$$5 = \text{Excellent}$$

$$4 = \text{Good}$$

$$3 = \text{Average}$$

$$2 = \text{Poor}$$

$$1 = \text{Very Poor}$$

Table 3.1 Range of mean and verbal interpretation

Range Value	Verbal Interpretation
4.50-5.00	Excellent
3.50-4.49	Good
2.50-3.49	Average
1.50-2.49	Poor
1.00-1.49	Very Poor

Step 2: Before attempting the assessment, three measurement and evaluation experts working in the field of measurement and evaluation or education were asked to check the appropriateness of the language used in the questionnaire. The resulting data were used to calculate the project Objective conformance Index (IOC).

The measurement and evaluation expert's assessment of the quality of the project's Conformity to Objectives Index (IOC) content found a project Conformity to Objectives Index (IOC) value of 0.93, which was then submitted to the content expert for further evaluation, and the overall average score of the project Conformity to Objectives Index (IOC) should be higher than 0.5 for acceptable data.

The evaluation criteria are used to check consistency between test objectives and projects, as follows:

Table 3.2 Value of item objective congruence index (IOC) and verbal interpretation

+1	item is considered congruent with the objectives.
0	Item is considered neutral in terms of whether it was congruent with the objectives.
-1	item is considered not congruent with the objectives.

For acceptable data, the overall average score of the project Consistency of Objectives (IOC) index should be higher than 0.5.

Step 3: The assessment will be used by experts. Evaluate the content quality of picture books used in Chinese traditional culture course for content experts to improve students' academic performance.

3.3.4 Performance assessment (pre - and post-test)

Pre-test and post-test questions are the same. The test includes traditional Chinese arts, including calligraphy, painting, music, dance, architecture and so on. Students were asked to take a pre-test before learning through the picture book and a post-test after learning through the picture book.

Step 1: Three measurement and evaluation specialists working in the field of measurement and evaluation or education were asked to check for consistency between goals and items in the test. The resulting data were used to calculate the project Objective conformance Index (IOC). The evaluation criteria are used to check consistency between test objectives and projects, as follows:

Table 3.3 Value of item objective congruence index (IOC) and verbal interpretation of achievement assessment

+1	item is considered congruent with the objectives.
0	Item is considered neutral in terms of whether it was congruent with the objectives.
-1	item is considered not congruent with the objectives.

For acceptable data, the overall average score of the project Consistency of Objectives (IOC) index should be higher than 0.5.

Step 2:40 students in the first grade of Sichuan Vocational College of Health and Rehabilitation were tested by the method of pre-test and post-test. A tested attempt to find the difficulty index, the discrimination index, and the reliability index of the achievement test. Using Kuder Richardson's K-R#20 formula, we found that the difficulty index should be between 0.2 and 0.8, the discrimination index should be 0.2 or higher, and the reliability should be 0.8 or higher.

Step 3: Through the application of picture books in the teaching of Chinese traditional culture course, we will use pre-test and post-test together with participants to explore their knowledge reserve before and after learning picture books.

3.3.5 Satisfaction survey on the application of picture books in Chinese traditional culture course

This study adopts the method of questionnaire survey to understand students' learning situation through the application of picture books in Chinese traditional culture course, so as to improve students' academic performance. The researchers completed the following steps:

Step 1: The questionnaires in this study were prepared to conform to the research hypothesis. It is therefore developed on the basis of the two theories used in this study. Studies have shown that applying picture books to Chinese traditional culture course can improve students' academic performance.

The questionnaire was designed to measure students' satisfaction with picture books. This part is a closed questionnaire based on a five (5) point Likert type scale. Participants were asked to rate how much they agreed with each statement on a scale of numbers 1-5.

Table 3.4 Range of students' satisfaction

Range Value	Verbal Interpretation
4.50-5.00	Highest satisfaction
3.50-4.49	High satisfaction
2.50-3.49	Moderate
1.50-2.49	Low satisfaction
1.00-1.49	Very low satisfaction

Step 2: Before trying out the questionnaire, three measurement and evaluation experts working in the field of measurement and evaluation or education were asked to check the appropriateness of the language used in the questionnaire. The resulting data were used to calculate the project Objective conformance Index (IOC).

The evaluation criteria are used to check consistency between test objectives and projects, as follows:

Table 3.5 Value of item objective congruence index (IOC) and verbal interpretation of questionnaire on students' satisfaction

+1	item is considered congruent with the objectives.
0	Item is considered neutral in terms of whether it was congruent with the objectives.
-1	item is considered not congruent with the objectives.

For acceptable data, the overall average score of the project Consistency of Objectives (IOC) index should be higher than 0.5.

Step 3: Participants will use a questionnaire survey to explore their satisfaction with the learning of Chinese traditional culture course through the use of picture books.

3.4 Data Collection

The data collection mainly comes from the examination papers and questionnaires designed by students in the Chinese traditional culture course. The purpose is to understand that when students learn Chinese traditional culture courses, the use of picture books is more conducive to the improvement of students' academic performance and the satisfaction of picture books.

Step 1: introduce picture books to students, improve students' interest in learning, and improve teachers' teaching level.

Step 2: predict the students and get the grades.

Step 3: Teachers use picture books to teach in class, and students use picture books to learn.

Step 4: In order to improve the utilization rate of picture books by students and teachers, after teachers use picture books for teaching and students learn through picture books for 6 weeks, they are post-tested and their scores are analyzed by statistical method.

3.5 Data and statistical analysis

3.5.1 The steps for researchers to conduct data analysis are as follows:

3.5.1.1 Evaluation of micro-lessons by sample students.

3.5.1.2 Use t test dependence to compare the situation test before and after using picture books for classroom teaching.

3.5.1.3 Students' enthusiasm for using picture books for learning is studied by means of mean and standard deviation to improve students' interest in learning.

3.5.2 Basic statistics of data analysis are as follows:

3.5.2.1 The formula ($\bar{X}$) for calculating the arithmetic mean value is:

$$\overline{X} = \frac{\sum X}{N}$$

while $\overline{X}$ = The mean or arithmetic mean

$\sum X$ = The sum of all score results

N = Number of students

3.5.2.2 The formula for calculating standard deviation (S.D.) is:

$$S.D. = \sqrt{\frac{\sum (x - \overline{x})^2}{N}}$$

While S.D. = Standard derivation

N = Number of students

$\overline{X}$ = Average value

X = Student scores

3.5.2.3 The formula used to determine the quality of the instruments were: In finding content validity of the achievement test, we conducted the IOC formula (Item Objectives Congruence) by following the formula below:

$$IOC = \frac{\sum R}{N}$$

Whereas IOC = Index of correspondence between the test and the objective

$\sum R$ = Sum of individual expert's value

R = Expert's rating

N = Number of experts

3.5.2.4 The formula used in finding the difficulty index of the achievement test were

$$P = \frac{R_{H+}R_L}{N_H + N_L}$$

Whereas P   = difficulty level

RH   = the number of people who chose the highest option rate

RL   = the number of people who chose the lowest option rate

NH   = the total number of people in the high group

NL   = the total number of people in the low group

Table 3.6 Range of difficulty index and verbal interpretation

Difficulty Index	Verbal Interpretation
0.00-0.20	Very Difficult
0.21-0.40	Difficult
0.41-0.60	Average / Moderately Difficult
0.61-0.80	Easy
0.81-1.00	Very Easy

3.5.2.5 The formula for calculating the item discrimination of the achievement test is:

$$r = \frac{R_H - R_L}{N_H \, or \, N_L}$$

Whereas r =   Discrimination index

R_H =   Number of correct responses in the high group

R_L =   Number of correct responses in the low group

N_H =   Total number of students in the high group

N_L =   Total number of students in the low group

Table3.7 Range of discrimination index and verbal interpretation

Discrimination Index	Verbal Interpretation
0.40 and above	Very Discriminating / Very Good Item
0.30 to 0.39	Discriminating / Good Item
0.20 to 0.29	Moderately Discriminating Item
0.10 to 0.19	Not Discriminating / Marginal Item
Below 0.10	Poor / Questionable Item

3.5.2.6 The formula for calculating the reliability of the achievement test K-R#20 by Kuder-Richardson is:

$$rtt = \frac{k}{k-1}\left[1 - \frac{\sum pq}{S^2}\right]$$

Whereas rtt $=$ Reliability index

k $=$ Number of test items

p $=$ The proportion of the correct answer

q $=$ The proportion of the incorrect answer

S_2 $=$ The variation of the entire test

3.5.2.7 The formula for calculating the variability of the achievement test is:

$$S_2 = \frac{n\sum fx^2 - \left(\sum fx^2\right)}{n(n-1)}$$

Whereas S_2 $=$ Variance

n $=$ Number of students

x $=$ Achievement test score

f $=$ Data of frequency

3.5.2.8 The formula used to verify the hypothesis were: The formula used in analyzing the differences in achievement scores using the dependent t-test was:

$$t = \dfrac{\sum D}{\sqrt{\dfrac{n\sum D^2 - \left(\sum D\right)^2}{n-1}}}$$

Whereas $\sum D$ = Sum of variance score of achievement test

$\sum D^2$ = Sum of different squares of achievement test scores

$\left(\sum D\right)^2$ =   Sum of variance score of the square test

n =   Number of students

D   =   Difference between pre-test and post-test scores

3.5.2.9 Effectiveness index (E.I.) $= \dfrac{P2 - P1}{(Total) - p1}$

Chapter 4

RESEARCH RESULT

This chapter describes the use of picture books in the course of learning Chinese traditional culture in Sichuan Health Rehabilitation Vocational College to improve students' academic performance. The findings are as follows:

4.1 Descriptive data statistics

4.2 Analysis Results

4.1   Descriptive data statistics

The research object of this paper is to study picture books, test and survey the satisfaction of 40 students from a class in the first grade of Sichuan Vocational College of Health and Rehabilitation.

The first is the comparison of test results of Chinese traditional culture course using picture books. Two data files were established. One was to define two variables: test scores of Chinese traditional culture course (using picture books) and test scores of applied tests of Chinese traditional culture course (not using picture books). Four variables were defined: Single choice question,True or false questions, Gap filling, Multiple choice question, and the score data of 40 students were input. The other is defined as the score of the satisfaction questionnaire, and the satisfaction scores of 40 students are entered. Then according to the problem to be analyzed through SPSS software statistics. In this paper, SPSS Chinese version was used for statistical analysis of all the collected data. Statistical description of mean + standard deviation and paired sample T-test were used.

4.1.1 The use of picture books by students of Sichuan Vocational College of Health and Rehabilitation is conducive to improving the T-test of individual differences in students' academic performance, and comparing students' academic performance before and after the test.

4.1.2 To study the effectiveness of learning picture books in Sichuan Vocational College of Health and Rehabilitation to improve students' performance in learning Chinese traditional culture course.

4.1.3 The mean and standard deviation methods were used to study the satisfaction of students in Sichuan Vocational College of Health and Rehabilitation who use picture books to learn Chinese traditional culture course.

4.2 Analysis Results

4.2.1 The use of picture books by students of Sichuan Vocational College of Health and Rehabilitation is conducive to improving the T-test of individual differences in students' academic performance, and comparing students' academic performance before and after the test.

Table 4.1 Comparison of average scores before and after individual differences of students in Sichuan Vocational College of Health and Rehabilitation using picture books to learn Chinese traditional culture course

	n	$\overline{X}$	S.D	T-test	Df	Sig. (2-tailed)
pretest	40	62.63	6.44	-23.85	39	.000
posttest	40	76.28	8.02			

$*p < .05$

As can be seen from Table 4.1, the average score of students who did not use picture books for teaching traditional culture course was 62.63 points, and the average score of the post-test was 76.28 points, The average scores of the two groups were different (t=-23.85,p=.000), indicating that the use of picture books for teaching Chinese traditional culture course in Sichuan Vocational College of Health and Rehabilitation had substantial optimization and improvement in improving students' academic performance.

4.2.2 To study the effectiveness of learning picture books in Sichuan Vocational College of Health and Rehabilitation to improve students' performance in learning Chinese traditional culture course as shown as Table 4.2

Table 4.2 The effectiveness of learning picture books in Sichuan Vocational College of Health and Rehabilitation

Number of questions	100
Number of students	40
P1 (Summation score of pre-tests)	2505
P2 (Summation score of posttests)	3051
Total (Number of questions x Number of students)	4000
Effectiveness of cognitive score	0.3652
Cognitive improvement (%)	36.52

Table 4.2 shows that, the students had a 36.52 percent of cognitive score improvement.

4.2.2.1 Evaluation by three content experts on the effectiveness of learning results in the use of picture books in Chinese traditional culture course

The evaluation of the 10 projects consists of a table published by three content experts, and this section uses a 5-point rating to represent the opinions of the content experts. Each standard rating is shown in Table 4.3 below.

Table 4.3 Evaluation results of three content experts on the learning performance of picture books in Chinese traditional culture course

Assessment	$\overline{X}$	S.D	Result
1. Picture book is good for stimulating interest in learning	4.83	0.59	Excellent
2. Using picture book is easy to understand	4.73	0.59	Excellent
3. Picture book has clear pictures	4.73	0.58	Excellent
4. The content of the picture book is suitable for the cultural curriculum	4.68	0.58	Excellent
5. The picture content of the picture book is consistent with the course	4.57	0.58	Good
6. Picture book looks good, not complicated	4.53	0.58	Good
7. Picture book enable everyone to understand the cultural content more deeply	4.53	0.57	Good
8. The picture book is clear and easy to understand	4.53	0.57	Good
9. Use picture book teaching to promote development and innovation	4.37	0.58	Good
10. Picture book is related to the course content	3.02	1.73	Normal
Total	4.33	0.66	Good

As can be seen from Table 4.3, three content experts evaluated the learning performance of using picture books in Chinese traditional culture course. Overall quality is good ($\overline{X}$=4.33, S.D=0.66). The use of picture books in Chinese traditional   culture

course is conducive to the output of cultural course, easy to understand, and stimulate students' interest in learning. At the same time, the pictures are clear and beautiful, and the experience is good. ($\overline{X}$=4.33, S.D=0.66).

The difficulty of each question in the test paper is reflected by the difficulty coefficient. The difficulty coefficient is one of the indexes to measure the rationality of the test paper setting. This paper uses the average method P= average score/full mark to calculate the difficulty of the test. The specific statistical results are shown in Table 4.4.

The difficulty value is between 0 and 1, the closer to 1, the easier the test; The closer it is to 0, the more difficult the quiz is. The difficulty coefficient should be large and small, the difficulty coefficient is small to test the students' mastery of basic knowledge, and the difficulty coefficient is large to increase the degree of differentiation and open the difference. The final exam is a target reference exam, the purpose of the exam is to measure the degree of candidates' mastery of specific knowledge and skills, and the difficulty can be appropriately high, controlled between 0.6 and 0.9. As can be seen from Table 2, Single choice question is the easiest for students, with a difficulty coefficient of 0.93, indicating that students basically got the answers right, and Multiple choice question is the most difficult, with a difficulty coefficient of 0.65. All the questions are from picture books, so the students' answers can truly reflect the students' mastery of traditional culture course under the condition of using picture books. The evaluation difficulty of the score is 0.76, and the overall difficulty is moderate.

Table 4.4 Difficulty analysis table

Question type	Single choice question	True or false questions	Gap filling	Multiple choice question	Examination paper
Total	30	20	30	20	100
$\overline{X}$	28	15	20	13	76
Difficulty	0.93	0.75	0.67	0.65	0.76

4.2.3 To study the satisfaction of students in Sichuan Vocational College of Health and Rehabilitation in learning Chinese traditional culture course through picture books

The researchers conducted a questionnaire survey on 40 first-year college students in Sichuan Vocational College of Health and Rehabilitation to explore the students' satisfaction in learning Chinese traditional culture course through picture books.

Table 4.5 Students' satisfaction with the use of picture books in Sichuan Vocational College of Health and Rehabilitation

Assessment	$\bar{\mathrm{X}}$	S.D	Result
1. Overall satisfaction of learning cultural course through picture book is improved.	4.86	0.51	Highest
2. Picture book length is appropriate, will not make people's concentration of learning fatigue.	4.69	0.63	Highest
3. Picture book experience is good, deep memory.	4.66	0.63	Highest
4. Picture book can be easily applied after learning the course.	4.62	0.81	Highest
5. Picture book use improves academic performance.	4.61	0.80	Highest
6. The combination of picture book and traditional classroom teaching can achieve the most valuable learning effect.	4.55	0.62	Highest

Table 4.5 Students' satisfaction with the use of picture books in Sichuan Vocational College of Health and Rehabilitation (Cont.)

Assessment	$\overline{X}$	S.D	Result
7. The content of the picture book is clear and easy to understand, which helps to better understand the course knowledge.	4.43	0.77	High
8. The picture quality and technical level of picture book need to be improved.	4.43	0.72	High
9. The interspersed form of picture book in the cultural course arouses interest.	4.43	0.72	High
10. Picture book can stimulate the demand for learning resources of Chinese traditional culture course.	4.33	0.71	High
Total	4.58	0.67	Highest

As can be seen from Table 4.5, the evaluation results of students' satisfaction with the use of picture books in Chinese traditional culture course show that the study on the use of picture books in Chinese traditional culture course in Sichuan Vocational College of Health and Rehabilitation is conducive to students' learning, and the overall satisfaction of students is very consistent. When considering each project, it is found that learning Chinese traditional culture course through picture books can stimulate students' creativity and learning interest, which is very consistent. Learning Chinese traditional culture course through picture books creates a good atmosphere ($\overline{X}$=4.58, S.D=0.67).

Chapter 5

CONCLUSION AND DISCUSSION

5.1 Conclusion

By combing literature and theoretical basis, this study puts forward research questions, and takes Sichuan Vocational College of Health and Rehabilitation as an example to study and analyze the current situation of the application of picture books in Chinese traditional culture course. Through the questionnaire survey and analysis of students in Sichuan Vocational College of Health and Rehabilitation, this paper discusses the comparison of test scores of Chinese traditional culture course using picture books and the satisfaction of students learning Chinese traditional culture course using picture books, and mainly draws the following conclusions:

5.1.1 Taking Sichuan Vocational College of Health and Rehabilitation as an example, the average score of students who did not use picture books to teach Chinese traditional culture course in this study was 62.63 points, and the average score of the post-test was 76.28 points, and the average score of the two groups was compared by P<.05. It can be concluded that the use of picture books in teaching Chinese traditional culture course in Sichuan Vocational College of Health and Rehabilitation is conducive to improving students' academic performance.This may be because the use of picture books to teach Chinese traditional culture course has substantial improvements in improving students' academic performance.

5.1.2 The effectiveness of learning picture book in Sichuan Vocational College of Health and Rehabilitation to improve students' performance in learning Chinese traditional culture course was studied. The results show that the students had a 36.52 percent of cognitive score improvement.The difficulty coefficient of the examination paper is 0.76, which indicates that the students' answers can truly reflect the students' mastery of traditional culture course under the condition of using picture book.

5.1.3 The study performance of picture book application in Chinese traditional culture course of Sichuan Vocational College of Health and Rehabilitation was evaluated. The results show that the mean value of the overall score is $\bar{X}=4.33$, and the standard

deviation is 0.66, indicating that the application of picture books in Chinese traditional culture course is conducive to promoting students' understanding of curriculum knowledge and the output of cultural course content.

5.1.4 This paper studied the satisfaction of 40 first-year college students in Sichuan Vocational College of Health and Rehabilitation in learning Chinese traditional culture course through picture books. The results show that the mean value of the test score is $\overline{X}$=4.58, and the standard deviation is 0.67, which indicates that students are more satisfied with the use of drawing to learn Chinese traditional culture course, and can stimulate students' interest in learning to a certain extent.

5.1.5 The reliability of the application results of picture books in Chinese traditional culture course is studied. Three content experts were invited to evaluate the learning achievements in the use of picture books in Chinese traditional culture course. The overall quality is good with an average of $\overline{X}$=4.33 and an average of S.D=0.66. It can be seen that the application of picture books in Chinese traditional culture course is more conducive to the teaching and output of traditional culture courses, and more conducive to stimulating students' interest and passion for learning, and thus promoting the effective improvement of students' grades.

5.2 Discussion

Although this study has made some preliminary findings through empirical research, there are still some shortcomings that need to be improved in future research:

First, in terms of sample, due to the influence of funds, manpower and other factors, this study could not strictly follow the stratified sampling method when conducting questionnaire survey, resulting in unbalanced distribution of some demographic variables in the sample, which may affect the representativeness of the sample to some extent. The next step is to expand the sample size and draw more general conclusions.

Second, this study only conducted a horizontal study without longitudinal follow-up investigation, and the cross-sectional data cannot be used to explain the causal inference relationship. In the future research, the relationship between variables can be clarified through longitudinal investigation, and the reasons for students' differences in

using drawing books to learn Chinese traditional culture course can be discussed and analyzed in detail and depth.

Thirdly, the study performance before and after the test was conducted to understand the influence of picture book learning on improving students' performance in Chinese traditional culture course. The results show that the application of picture books to Chinese traditional culture courses can improve students' performance in learning Chinese traditional culture courses. The mean pretest score was 62.63 and the standard deviation (S.D.) score was 6.44. After using picture books to improve students' learning of Chinese traditional culture course to improve their academic performance, students' academic performance was significantly improved, which was translated into an average score of 76.28 and a standard deviation (S.D.) of 8.02 in the post-test, as well as a T-test analysis of 23.85 before and after treatment, indicating that the use of picture books in teaching can help stimulate students' learning interest in Chinese traditional culture course. And improve academic performance. The questionnaire was used to analyze and compare the students' satisfaction in learning Chinese traditional culture course with picture books. The results of this experiment are consistent with those of Song Yu (2023). This study believes that illustration is an important part of books, and illustrated books are conducive to improving the quality of books. Therefore, we should pay attention to the role and value of illustrations, explore the generation mechanism of illustrations and the relationship between illustrations and texts, and further promote the high-quality development of illustrations. This study is consistent with the results of Liu Dan et al. (2023). The study holds that illustration is an easy way for students to accept, and the operation of illustration in teaching materials can make the course more interesting and friendly, and also help students improve the understanding of teaching materials, which carries the interest and beauty of knowledge, and has important value and significance.

5.3 Suggestions

5.3.1 Create good conditions for teachers to use picture books for teaching

First, schools should provide excellent teaching environment for teachers. First of all, schools should provide teachers with a broad sense of space and encourage college

teachers to actively innovate teaching methods and use various course and teaching resources. Secondly, schools should be able to put consciousness into action, effectively reduce the burden for teachers, so that teachers can apply more energy to teaching. On the one hand, the division of duties and responsibilities of the school should be clarified, and the administrative affairs should be undertaken by full-time personnel, reducing the task levels and the transactional work of teachers, so that teachers can have more sufficient time to study teaching. On the other hand, teachers can devote more time and energy to their own lesson preparation. With sufficient time, teachers are more able to work hard in their own work, and then implement the use of teaching resources in every place.

Second, we will deepen the teaching and training of teachers. Teacher training is a kind of continuing education for in-service teachers, which mainly includes collective observation and mutual discussion. First of all, schools can form a support group of "promoting the new with the old", select teachers with senior teaching age and rich teaching experience, let them become teaching models, learn how the old teachers make use of explicit teaching resources such as picture books, and then transfer them to their own teaching. Secondly, experienced teachers lead new young teachers to carry out "collective lesson preparation" activities. Study the syllabus, textbooks, teachers' guide books together, analyze the learning situation, make teaching plans, etc.

5.3.2 Teachers reshape the cognitive concept of textbook picture book

5.3.2.1 Establish the awareness of giving priority to using textbook picture book

The digital resource library includes higher vocational education and teaching resources, open resources of social services, and virtual simulation resource library. The professional teaching resource library includes all kinds of professional course self-study and counseling resources, professional quality resources, etc. The open resources of social services should include enterprise information, talent demand information, job skills standards, innovation and entrepreneurship cases and other resources; Virtual simulation

resource library includes virtual simulation training resources, virtual simulation practice resources, virtual simulation experiment resources and so on.

Teachers' awareness of giving priority to the use of picture book in textbooks means that the relationship between pictures in textbooks and pictures outside textbooks must be dominated by pictures in textbooks and supplemented by pictures outside textbooks. In the teaching of Chinese traditional culture course, teachers should give priority to using pictures in textbooks as teaching resources to teach students new knowledge and arouse students' learning consciousness. It is worth noting that teachers should first read the explanation and hints of the pictures in the teacher reference book when preparing the lesson. If they can meet the needs of teachers, they can directly learn from and use them; If you can't meet the needs of teachers, you can also search for more information about the pictures in this lesson according to the prompts on the teaching staff, and then internalize them into your own products, and then deliver the language to students.

5.3.2.2 Correctly grasp the relationship between pictures and text

The construction of educational management information system education resources in higher vocational colleges lags behind that of higher institutions, and lacks experience in the development of educational management information system teaching resources. Therefore, it is necessary to learn from the experience of other schools or build together with other schools and institutions in resource construction and software development. Such as the construction of higher vocational college teaching resources co-construction and sharing alliance, colleges and universities to concentrate human and financial resources to set up one or several high-quality education management information system teaching resources, to achieve the co-construction and sharing of resources between schools; To carry out school-enterprise cooperation, enterprises and vocational colleges jointly build social service resources. At the same time, we should also pay attention to new technologies, use cloud technology and big data means to effectively integrate the teaching resources and resources of the education management information system, avoid the repeated construction of resources, realize the

interconnection of campus resources, and eliminate the phenomenon of information islands.

Teachers need to correctly grasp the relationship between pictures and words. On the whole, especially for college students, teachers need to teach students how to read, have an overall grasp of the center of the article, and understand the deeper meaning behind the article, etc. However, teachers should not completely ignore the existence of pictures in textbooks, making them lose their teaching function, and use picture books for the purpose of using picture books. The specific use situation should also be analyzed by teachers according to the actual situation. When the understanding of students is not very good or the learning difficulty is a little bit, the teacher can use the picture book to consider how to use the picture book according to the text content and the actual needs of students.

5.3.3 Improve teaching skills using textbook pictures

In order to obtain teaching resources with high quality and suitable for teaching content, teachers can browse more websites with high evaluation, avoid making arbitrary selection for saving time and effort, and select the courseware that is most appropriate for the teaching content of the unified compilation edition from multiple courseware resources. They should also pay attention to whether pictures in textbooks are used and whether the links and methods of use are appropriate. Finally choose one or two best quality courseware as teaching resources. At the same time, teachers should improve the technology of software operation such as PowerPoint and Shiwo whiteboard, watch more videos, and use spare time for practical operation training. If the pictures in the multimedia courseware coincide with those in the textbook, the teacher only needs to make appropriate additions and deletions; If the picture in the textbook is not used in the courseware, the teacher must search, insert and edit the picture again.
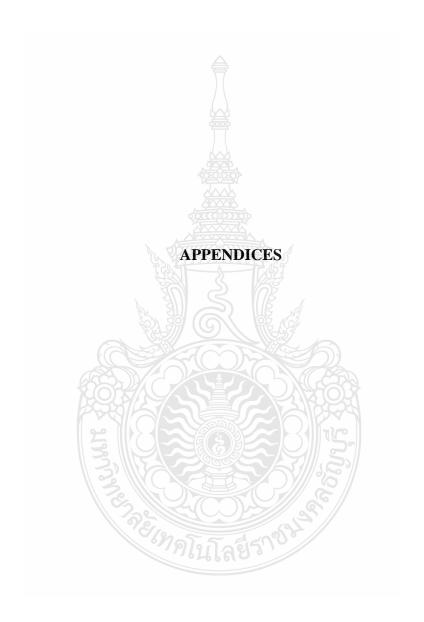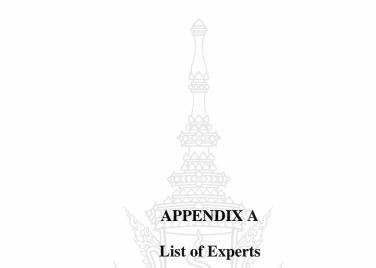
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APPENDICES

APPENDIX A

List of Experts

Invitation Letter to experts to examine research instruments

Content expert

1. Lecturer: Ms. Yang Lei

Sichuan Vocational College of Health and Rehabilitation,Education and physical Education Department

2. Lecturer: Ms. Zhang Xiaolu

Sichuan Vocational College of Health and Rehabilitation,Education and physical Education Department

3. Lecturer: Ms. He Jianqin

Sichuan Vocational College of Health and Rehabilitation,Education and physical Education Department

MHESI 1025.4/2023

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15 August, 2023

Dear Ms. Yang Lei
Teacher, Sichuan Vocational College of Health and Rehabilitation

Subject: Respectfully Requesting for letter of Invitation of Experts for M.Ed.Thesis

      I am writing to request your assistance as an honorary external research reviewer in evaluating the research instruments of Ms.Lan Lan, Master of Education Program in Technology and Learning Innovation Rajamangala University of Technology Thanyaburi, who has been working on the thesis titled "The impact of Picture book to enhance learning achievement on the Chinese traditional culture course". under the supervision of Assistant Professor Dr. Metee Pigultong. In this regard, I would like to request your valuable time to evaluate the research instruments as I strongly believe that your expertise will be of great value in improving the research instruments.

      If you have any questions or need further information, please feel free to contact Ms. Lan Lan, on the e-mail: lan_l@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education

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15 August, 2023

Dear Ms. Xiaolu Zhang
Teacher, Sichuan Vocational College of Health and Rehabilitation

Subject: Respectfully Requesting for letter of Invitation of Experts for M.Ed.Thesis

    I am writing to request your assistance as an honorary external research reviewer in evaluating the research instruments of Ms.Lan Lan, Master of Education Program in Technology and Learning Innovation Rajamangala University of Technology Thanyaburi, who has been working on the thesis titled "The impact of Picture book to enhance learning achievement on the Chinese traditional culture course". under the supervision of Assistant Professor Dr. Metee Pigultong. In this regard, I would like to request your valuable time to evaluate the research instruments as I strongly believe that your expertise will be of great value in improving the research instruments.

    If you have any questions or need further information, please feel free to contact Ms. Lan Lan, on the e-mail: lan_l@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education

Office of the Dean, Faculty of Technical Education
Rajamangala University of Technology Thanyaburi
Klong Luang, Pathum Thani 12110 Thailand
Tel:+66-2-549-4710 Fax:+66-2-577-5049

15 August, 2023

Dear Ms. Jianqin He

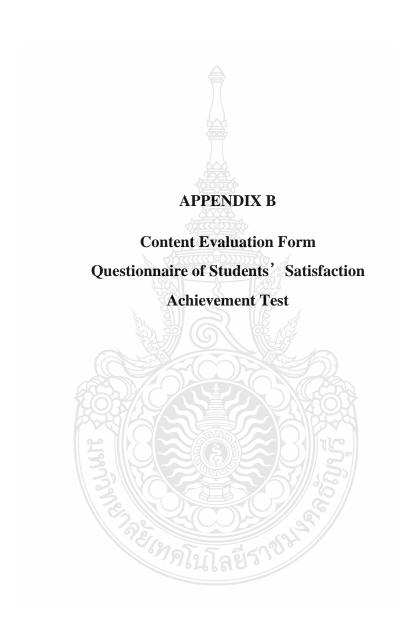Teacher, Sichuan Vocational College of Health and Rehabilitation

Subject: Respectfully Requesting for letter of Invitation of Experts for M.Ed.Thesis

      I am writing to request your assistance as an honorary external research reviewer in evaluating the research instruments of Ms.Lan Lan, Master of Education Program in Technology and Learning Innovation Rajamangala University of Technology Thanyaburi, who has been working on the thesis titled "The impact of Picture book to enhance learning achievement on the Chinese traditional culture course". under the supervision of Assistant Professor Dr. Metee Pigultong. In this regard, I would like to request your valuable time to evaluate the research instruments as I strongly believe that your expertise will be of great value in improving the research instruments.

      If you have any questions or need further information, please feel free to contact Ms. Lan Lan, on the e-mail: lan_l@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education

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APPENDIX B

Content Evaluation Form

Questionnaire of Students' Satisfaction

Achievement Test

Picture book content quality evaluation

The influence of picture books on improving students' Chinese traditional culture course results

Sichuan Vocational College of Health and Rehabilitation

(Content Expert)

Directions: This questionnaire aims to investigate experts' opinions on improving students' academic performance by using picture books to learn Chinese traditional culture. Please answer all questions to the best of your knowledge. Your answer will be kept confidential.Please mark √ in a box that best describes the degree of your agreement with each statement.

Items	Level of agreement				
	5	4	3	2	1
1.Picture book is good for stimulating interest in learning					
2.Using picture book is easy to understand					
3.Picture book has clear pictures					
4.The content of the picture book is suitable for the cultural curriculum					
5.The picture content of the picture book is consistent with the course					
6.Picture book looks good, not complicated					
7.Picture book enable everyone to understand the cultural content more deeply					
8.The picture book is clear and easy to understand					
9.Use picture book teaching to promote development and innovation					
10.Picture book is related to the course content					

Questionnaire of Students' Satisfaction

Description: This questionnaire aims to investigate the students' views on learning Chinese traditional culture from picture books in order to improve the academic performance of students in Sichuan Vocational College of Health and Rehabilitation. Please answer all questions to the best of your knowledge. Your answer will be kept confidential.

Please write √ in the box that corresponds to your satisfaction.

Items	Level of agreement				
	5	4	3	2	1
1.Overall satisfaction of learning cultural course through picture book is improved.					
2.Picture book length is appropriate, will not make people's concentration of learning fatigue.					
3.Picture book experience is good, deep memory.					
4.Picture book can be easily applied after learning the course.					
5.Picture book use improves academic performance.					
6.The combination of picture book and traditional classroom teaching can achieve the most valuable learning effect.					
7.The content of the picture book is clear and easy to understand, which helps to better understand the course knowledge.					
8.The picture quality and technical level of picture book need to be improved.					
9.The interspersed form of picture book in the cultural course arouses interest.					
10.Picture book can stimulate the demand for learning resources of Chinese traditional culture course.					

Tests

一、单选题

1. 甲骨文最早是用于（　　　）

A.绘画　　　B.卜辞　　　C.识别身份　　　D.计时

2.秦吞并六国,建立了大统一的秦王朝,秦王朝推行的"书同文,车同轨",其中书写文字大力推行（　　　）

A.小篆　　　B.大篆　　　C.隶书　　　D.楷书

3. 其书法作品被后世称为"颜体"的书法家是（　　　）

A.颜回　　　B.颜真卿　　　C.颜渊　　　D.颜复

4."书圣"指的是（　　　）

A.吴道子　　　B.王羲之　　　C.张择端　　　D.顾恺之

5.横平竖直、形体方正、结构严整是指的哪一种字体（　　　）

A.篆书　　　B.行书　　　C.楷书　　　D.隶书

6.多呈宽扁，横画长而竖画短，讲究"蚕头燕尾"、"一波三折"，是指的哪一种字体（　　　）

A.篆书　　　B.行书　　　C.楷书　　　D.隶书

7.吴道子被称为"画圣"，其代表作品是（　　　）

A.《步辇图》　　　B.《洛神赋图》　　　C.《辋川图》　　　D.《送子天王图》

8.现存规模最大的古代风俗画是（　　　）

A.《清明上河图》　　　B.《千里江山图》　　　C.《富春山居图》　　　D.《早春图》

9.初唐画家阎立本的代表作品是（　　　）

A.《步辇图》　　　B.《洛神赋图》　　　C.《辋川图》　　　D.《送子天王图》

10.《霓裳羽衣舞》是唐代法曲中最为著名的舞蹈,出现在（　　　）在位时期。

A.唐太宗　　　B.唐高宗　　　C.唐玄宗　　　D.唐肃宗

11.北方汉族民居中的"四合院",最具代表性的在（　　　）

A.天津　　　B.北京　　　C.沈阳　　　D.河北

12.花灯,又叫"彩灯",是我国著名的民间工艺品。古时每逢（　　　），人们会在街头巷尾挂起各式各样的彩灯。

A.春节　　　B.七夕　　　C.元宵　　　D.中秋

13.我们所能见到的早期最大的青绿山水卷轴画是（　　　）

A.《清明上河图》　　　B.《千里江山图》　　　C.《富春山居图》　　　D.《早春图》

14.中国佛教的第一座寺庙是（　　　）

A.大昭寺　　　B.灵隐寺　　　C.白马寺　　　D.少林寺

15.（　　　）是国内仅存的佛、道、儒三教合一的独特寺庙。

A.万佛寺　　　B.报国寺　　　C.白马寺　　　D.悬空寺

二、判断题

1.曹植的《洛神赋》是中国十大传世名画之一。（　　　）

2."客家土楼"是客家人为了防卫而建造的一种对外开放、对内封闭的民居建筑。（　　　）

3.自贡灯会历史悠久,中外驰名。最初自贡地区的各种灯节活动,一般是由各类祠庙主办的。（　　　）

4.纸的发明是在东汉时期，因而剪纸艺术也是在这一时期之后兴起。（　　　）

5."颠张醉素"是指张芝和怀素。（　　　）

6.早期的陵墓表饰雕塑遗迹见于汉代。西汉霍去病至今存有十余件杰出的动物石雕，其中"马踏匈奴"最为出色。（　　　）

7.自贡的小三绝是龚扇、剪纸、扎染。（　　　）

8.自贡的大三绝是恐龙、盐史、彩灯。（　　　）

9.中国画是世界上唯一以国家称谓命名绘画品类的画种。（　　　）

10.自贡恐龙博物馆，是我国第一座专业性恐龙博物馆，是世界上收藏和展示侏罗纪恐龙化石最多的地方之一。（　　　）

三、填空题

1.秦汉时代秦陵＿＿＿的出现,缔造了明器雕塑史上的第一个高峰。

2.隋唐时代的＿＿＿彩塑代表着彩塑佛像的最高成就。

3.被称为"天下第一行书"的是＿＿＿＿＿＿。

4.世界上最大的佛像是＿＿＿＿＿＿。

5.中国传统书法的工具＿＿＿、＿＿＿、＿＿＿、＿＿＿，合称为"文房四宝"。

6.中国古代书法大体可以分为篆书、隶书、＿＿＿、＿＿＿、草书。

四、多选题

1.中国绘画主要分为哪三大类（　　　）

A. 人物画　　　　B. 绢帛画　　　C. 山水画　　　D.花鸟画

2.被称为"颜筋柳骨"的是哪两位书法家（　　　）

A.颜真卿　　B.颜光敏　　C.柳公权　　D.柳宗元

3.中国古代书法家中的"宋四家"，包括下列（　　　）

A.王安石　　　　B.苏轼　　　　C.黄庭坚　　　D.米芾

4.下列哪几项是楷书的别称（　　　）

A.正楷　　B.行书　　C.真书　　D.正书

5.明、清故宫又称紫禁城，外朝以（　　　）（　　　）（　　　）"三大殿"为主。

A.太和殿　　　　B.中和殿　　　　C.交泰殿　　　　D.保和殿

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วิทยานิพนธ์ฉบับนี้เป็นงานวิจัยที่เกิดจากการค้นคว้าและวิจัย ขณะที่ข้าพเจ้าศึกษาอยู่ใน คณะครุศาสตร์อุตสาหกรรม มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี ดังนั้น งานวิจัยในวิทยานิพนธ์ ฉบับนี้ถือเป็นลิขสิทธิ์ของมหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี และข้อความต่าง ๆ ในวิทยานิพนธ์ ฉบับนี้ ข้าพเจ้าขอรับรองว่าไม่มีการคัดลอกหรือนำงานวิจัยของผู้อื่นมานำเสนอในชื่อของข้าพเจ้า

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Lan Lan

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(Ms.Lan Lan)