

Innovative exploration of traditional cultural elements in the teaching of cultural and creative product design in colleges and universities

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Abstract: With the vigorous development of cultural industry and the gradual prosperity of traditional culture, the teaching of cultural and creative product design in colleges and universities, as an important foundation for its industrial development, has gradually attracted widespread attention. How to integrate traditional cultural elements into the teaching of cultural and creative product design to make teaching more suitable for the development of industries and professions has become an important discussion topic. This paper will discuss the application and innovation of traditional cultural elements in the teaching of cultural and creative product design in colleges and universities from multiple angles, taking calligraphy elements as an example.

1. Introduction

China traditional culture is an important part of China's history and culture. It is the crystallization of China people's wisdom and creativity for thousands of years and the spiritual wealth of the Chinese nation. In recent years, with the rapid development of China's economy and the promotion of its international status, China's traditional culture has gradually received more attention and attention, which has become one of the important manifestations of China's cultural self-confidence.[1].

Product design course is a very important course, which covers all aspects of product design. Through the study of this course, students can master the skills of market research, user demand analysis, creative design, prototyping and user testing, so as to better design products that meet market demand and user demand. With the continuous development of science and technology, product design teaching is constantly updated and improved. At present, there are still some problems in product design teaching in colleges and universities, which not only affect the learning effect of students, but also affect the development of product design industry.

Traditional culture can provide inspiration for the design of cultural and creative products. Traditional culture itself is a creative treasure house with great aesthetic power, which contains rich cultural connotations and artistic expressions. Integrating traditional cultural elements into the design of cultural and creative products can provide designers with new inspiration and creativity, and make the products have more cultural connotation and artistic value. Traditional cultural elements have

more important application value and innovative significance in the teaching of cultural and creative product design in colleges and universities. In teaching, we should pay attention to the excavation and application of traditional cultural elements, cultivate students' knowledge and understanding of traditional culture, improve students' cultural literacy and innovation ability, and make contributions to the development of cultural and creative industries.[2].

2. Research background

2.1. Application and development of traditional cultural elements in design

Traditional cultural elements refer to cultural symbols, cultural forms and cultural values that are representative and widely inherited and recognized in the history, culture, art, philosophy and religion of a nation or country. Traditional cultural elements are the cultural genes of a nation or country and an important part of its culture.[3]. The application of traditional cultural elements can not only inherit and carry forward the culture, but also provide inspiration and material for the design of cultural and creative products. In the teaching of cultural and creative product design in colleges and universities, the application of traditional cultural elements has also become an important teaching content[4].

With the development of modernization, many modern things came into being, and many cultural and creative industries in China have changed under the influence of western modernism, and reduced the use of traditional elements in the long historical development process. The existence of this phenomenon has gradually neglected the position of traditional elements in cultural and creative industries, which has affected the inheritance and development of traditional culture to some extent.[5]. In recent years, the application of traditional elements in China Wenchuang products has gradually increased, occupying the main market of Wenchuang products, which is a problem that needs attention. So as to promote the inheritance and development of traditional culture, promote the sustainable development of cultural and creative industries and make greater contributions to the promotion of China's social economy. Wenchuang product patterns can be used as an important carrier of China's excellent traditional culture, and strengthen the display of the connotation and characteristics of traditional elements in China, so as to adapt to the aesthetic taste of the public.[6].



Figure 1: Application of traditional cultural elements in interior design

Chinese traditional cultural elements are abstract in practical application, and the connotation of traditional cultural elements is intangible. When designing cultural and creative products, relevant designers should first make clear the application methods of traditional cultural elements in the design of cultural and creative products, and show them to the world through various forms. This will not only enable the masses to understand the rich humanistic connotation in the patterns when watching

cultural and creative products, but also let more viewers know the profound meaning in the patterns, so that the designed patterns can show more value in the application of traditional cultural elements in architectural design.[7]. For example, China's traditional architectural style, building materials, building structure and other elements can be applied to modern architectural design. These elements can not only make the building more cultural and regional, but also make people feel the charm of traditional culture in the building (Figure 1).[8].

With the development of society and the strengthening of cultural exchanges, traditional cultural elements are constantly being diversified and integrated. For example, China's traditional patterns, patterns, colors and other elements have been integrated and innovated with other cultural elements, forming a new design style and form. These new design styles and forms not only have the characteristics and charm of traditional culture, but also have diversified cultural connotations and fashion sense (Figure 2).[9].



Figure 2: Application of traditional cultural elements in packaging design

In addition, the application of traditional cultural elements in product design can make products have more cultural connotation and historical sense. For example, China's traditional patterns, patterns, colors and other elements can be applied to the design of household products, clothing, jewelry and other products.[10]. These elements can not only make the product more artistic and aesthetic, but also make people feel the charm of traditional culture when using the product (Figure 3).[11].



Figure 3: Application of traditional cultural elements in furniture design

The application and development of traditional cultural elements in design can not only promote the inheritance and promotion of Chinese culture, but also enrich and enhance the connotation of design and promote the innovation and development of design.[12]. Therefore, we should pay more attention to the application and development of traditional cultural elements in design, so that traditional cultural elements can play a greater role in design.

2.2. Features and main contents of product design courses in colleges and universities

The product design course in colleges and universities is a comprehensive course involving many disciplines, aiming at cultivating students' product design ability and innovative thinking. This paper will elaborate from the characteristics and main contents of the course. The product design course in colleges and universities is a comprehensive course involving many disciplines, aiming at cultivating students' product design ability and innovative thinking. The characteristics of the course include comprehensiveness, practicality, innovation and teamwork. The main contents include product design theory, product design practice, product design case analysis, product design display and so on. This paper will elaborate from two aspects: the characteristics of the course and the main content.

2.2.1. Course characteristics

Product design course is a comprehensive course, which involves many disciplines, such as engineering, aesthetics, psychology, marketing and so on. Therefore, students need to have a comprehensive knowledge reserve and interdisciplinary thinking ability. In addition, it is practical and requires students to carry out practical design operations and experiments in class to cultivate students' practical ability and innovative thinking. At the same time, students also need to participate in the actual project, cooperate with enterprises, understand the market demand and user demand, so as to better design products.[13].

Innovation and team thinking are also the main characteristics of the course, which requires students to have innovative thinking and innovative ability, and to constantly innovate and improve in design. At the same time, students also need to know the latest design concepts and technologies to maintain their innovative ability. In teamwork, students are required to design and cooperate in the team to cultivate their teamwork and communication skills. At the same time, students need to learn how to communicate and cooperate effectively with enterprises and users to better meet the market demand and user demand.[14](Figure 4).



Figure 4: Teamwork in the course

2.2.2. Main contents

(1) Product design theory

One of the main contents of product design course is product design theory, which includes the basic concept, design process, design principle and design method of product design. Students need to understand the basic concepts and design processes of product design and master the basic principles and methods of product design in order to apply them in actual design.

(2) Product design practice

The second main content of product design course is product design practice, which includes

practical operation and experiment of product design. Students need to carry out practical design operations and experiments in class to cultivate their practical ability and innovative thinking. At the same time, students also need to participate in the actual project, cooperate with enterprises, understand the market demand and user demand, so as to better design products. Case analysis includes the analysis and research of some successful product design cases. Students need to understand the design ideas, design principles and design methods of these successful product design cases in order to apply them in actual design.

(3) Product design display

The fifth main content of product design course is product design display, which includes the display and selection of students' design works. Students need to learn how to display and publicize product design, so as to better demonstrate their design ability and innovative thinking.

2.3. Problems in product design teaching in colleges and universities

At present, the teaching content of product design in many colleges and universities is relatively simple, mainly based on hand drawing, model making, CAD and other skills. Although this teaching method can enable students to master some basic skills, it cannot meet the needs of modern product design. What modern product design needs is a comprehensive ability, which requires students to have the abilities of market research, user demand analysis, creative design, product development and so on. Therefore, product design teaching in colleges and universities should pay more attention to cultivating students' comprehensive ability, so that students can be competent for various tasks in practical work.

Teaching methods are still relatively old, mainly based on traditional classroom teaching. Although this teaching method can enable students to master some basic knowledge, it cannot stimulate students' creativity and innovative spirit. What modern product design needs is an innovative way of thinking, which requires students to have keen market insight and innovative thinking ability. Therefore, product design teaching in colleges and universities should pay more attention to cultivating students' innovative ability, so that students can constantly innovate and make progress in practical work.

Teaching resources are still insufficient, mainly due to the lack of modern teaching equipment and laboratories. This situation not only affects the learning effect of students, but also affects the development of product design industry. Modern product design needs a kind of high-tech teaching equipment and laboratory, and students need advanced technology and equipment. Therefore, the teaching of product design in colleges and universities should pay more attention to the construction of modern teaching equipment and laboratories, so that students can master advanced technology and equipment in practical work.

In addition, the teaching of product design in many colleges and universities is out of touch with practice, mainly because of the lack of teaching methods combined with practical work. This situation not only affects the learning effect of students, but also affects the development of product design industry. What modern product design needs is a teaching method combined with practical work, which requires students to have practical experience and skills. Therefore, the teaching of product design in colleges and universities should pay more attention to the teaching method combining with practical work, so that students can master practical experience and skills in practical work.

Teachers' resources are also very important in product design teaching, and the number of product design teachers in many colleges and universities is still insufficient, mainly due to the lack of teachers with practical work experience. This situation not only affects the learning effect of students, but also affects the development of product design industry. Modern product design needs a kind of teacher with practical work experience, which requires teachers to have practical work experience

and skills. Therefore, product design teaching in colleges and universities should pay more attention to cultivating teachers with practical work experience, so that students can master practical experience and skills in practical work.

In a word, colleges and universities should pay attention to cultivating students' comprehensive ability and innovative ability, building modern teaching equipment and laboratories, and combining teaching methods with practical work to train teachers with practical work experience. Teachers should pay more attention to the innovation of teaching methods and the renewal of teaching content, so that students can be competent for various tasks in practical work. Only in this way can product design teaching in colleges and universities meet the needs of modern product design and make greater contributions to the development of product design industry.

3. The application and innovation of traditional cultural elements in the teaching of cultural and creative product design in colleges and universities

3.1. Application in the Teaching of Creative Product Design in Colleges and Universities

3.1.1. Provide inspiration and material.

The application of traditional cultural elements can provide inspiration and material for the design of cultural and creative products. For example, Four Great Classical Novels's Dream of Red Mansions, The Journey to the West, Water Margin and Romance of the Three Kingdoms in China's traditional culture are all very rich cultural resources, which can provide inspiration and material for the design of cultural and creative products. For example, the characters and story lines in A Dream of Red Mansions can be applied to the design of cultural and creative products to create products with China traditional cultural characteristics.

3.1.2. Cultivation of innovative ability

The application of traditional cultural elements can cultivate students' innovative ability. In the application of traditional cultural elements, students need to combine traditional cultural elements with modern design to create innovative and creative products. This requires students to have innovative thinking and innovative ability, thus cultivating students' innovative ability.

3.1.3. Training interdisciplinary ability

The application of traditional cultural elements can cultivate students' interdisciplinary ability. In the application of traditional cultural elements, students need to combine traditional cultural elements with design, art, science and technology and other disciplines to create interdisciplinary cultural and creative products. This requires students to have interdisciplinary ability, so as to cultivate students' interdisciplinary ability.

3.1.4. Cultivate cultural self-confidence.

The application of traditional cultural elements can cultivate students' cultural self-confidence. In the application of traditional cultural elements, students can have a deeper understanding of the connotation and value of China traditional culture, thus enhancing their sense of identity and pride in traditional culture. At the same time, by applying traditional cultural elements to the design of cultural and creative products, students can also better demonstrate their cultural self-confidence.

3.2. Innovative exploration with calligraphy elements as an example

Calligraphy elements are widely used in product design, which can be used in various types of product design, such as household goods, clothing, tableware, stationery and so on. For example, calligraphy elements can be applied to the design of household products, such as the application of calligraphy fonts to wallpaper, curtains, carpets and other designs, which can make household products more cultural and artistic. In addition, it can be used in various types of graphic design, such as posters, business cards, brochures and so on. For example, calligraphy elements can be applied to poster design, such as applying calligraphy fonts to the title, text and other parts of the poster, which can make the poster more artistic and cultural. And with the development of network technology, the application of calligraphy elements in digital media design is more and more extensive. For example, you can apply calligraphy elements to website design, such as applying calligraphy fonts to the title, text and other parts of the website, which can make the website more artistic and cultural.

In the teaching of cultural and creative product design in colleges and universities, innovative teaching methods can be adopted, such as combining calligraphy elements with modern design to create new design styles, and innovative design concepts can be adopted, such as combining calligraphy elements with environmental protection concepts to create environmentally-friendly cultural and creative products. And traditional calligraphy elements can be combined with modern graphic design to create a new graphic design style. In the teaching of cultural and creative product design in colleges and universities, innovative design techniques can be adopted, such as combining calligraphy elements with 3D printing technology to create a three-dimensional cultural and creative product, and applying calligraphy elements to 3D printing product design to create a three-dimensional cultural and creative product.

The application and innovation of calligraphy elements in the teaching of cultural and creative product design in colleges and universities has a very wide space. Create a new design style by combining calligraphy elements with modern design; Combine calligraphy elements with environmental protection concepts to create cultural and creative products with environmental protection significance; Combine calligraphy elements with 3D printing technology to create a three-dimensional cultural and creative product. These innovative design concepts, techniques and styles can not only enrich the connotation of Wenchuang products, but also promote the inheritance and innovation of China traditional culture (Figure 5).



Figure 5: Application of Calligraphy in Wenchuang

4. Summary

With the development of society and the constant change of people's aesthetic concept, design is

also constantly developing and innovating. As an important resource in design, traditional cultural elements can not only enrich the connotation of design, but also make design more cultural and historical. As an important part of China traditional culture, calligraphy elements have also been widely used in the design of cultural and creative products. The innovative exploration of traditional cultural elements in the teaching of cultural and creative product design in colleges and universities can not only improve students' cultural literacy and innovative ability, but also carry forward traditional culture and promote the development of cultural industries. Therefore, colleges and universities should strengthen the teaching and research of traditional cultural elements and explore more innovative ways to make traditional cultural elements glow with new vitality in modern society.

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