The Teaching Practice of Curriculum Ideology and Politics in the Teaching of Professional Courses in Colleges and Universities—Take the Course "Packaging Structure Design" as an Example

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Abstract

Product design is a profession that is closely related to the national manufacturing level, design innovation ability, and national life happiness. The construction of curriculum ideology and politics is an inevitable requirement to improve the quality of product design talent training. Taking the course "Packaging Structure Design" as an example, this paper expounds on the specific content of the ideological and political teaching construction practice of this course, including the ideas of ideological and political construction, the course ideological and political teaching measures, and course ideological and political achievements and results, and puts forward future suggestions for teaching optimization. Combining the characteristics of the course "Packaging Structure Design" and the goal of talent training, this paper integrates ideological and political concepts into the teaching content, and comprehensively utilizes various teaching methods to achieve the purpose of teaching and educating. Students of Dalian University of Science and Technology are the target subjective of the implementation in this teaching practice. Through our analysis, we found that the integration of the ideological and political content into the curriculum brought positive teaching and learning results. It aims to provide references and suggestions for the ideological and political construction of packaging structure design courses in product design education.

Keywords: construction of curriculum ideology and politics, packaging design, the "Packaging Structure Design" course, traditional culture, product design

1. Introduction

It is a comprehensive educational concept that takes "foster virtue through education" as the fundamental task of education and is a teaching method that organically integrates correct moral norms, ideological understanding, values, and political concepts into the whole process of teaching various courses, and realizes the cultivation of qualified builders who meet the requirements of national development. To promote the development of the curriculum ideology and political system, the design and innovation of professional courses are essential. To improve the system of curriculum ideology and politics, the professional courses should be an important part of "curriculum ideology and politics education". The course "Packaging Structure Design" is a compulsory course for product design majors, which is a course that integrates the knowledge of natural science and aesthetics. The content involves several disciplines, it is based on creative thinking, basic design composition, visual communication design, and other courses, focusing on the overall strategy and methods of packaging structure design, the course is not only the teaching of professional knowledge and printing processes and materials and other knowledge but also professional, industry ethics and other ideology and politics content throughout the teaching process. In addition to emphasizing the basic theoretical knowledge and professional skills, the "Packaging Structure Design" course focuses on the exploration of the moral and humanistic content of the course, as well as the cultivation of students' scientific research spirit, service consciousness, innovation ability, application ability, and teamwork spirit, helping students to master the whole process of product packaging design while completing the course tasks. It helps students to master the whole process of product packaging design while completing the course tasks and can be better applied in their future careers and life.

2. Packaging Design

Package design is not just a method for ensuring safe and efficient delivery to consumers at minimal cost, but it

is also a powerful marketing tool used to communicate the brand message to consumers (Hellström & Nilsson, 2011). According to a marketing perspective, the packaging of the product is an extrinsic cue (Chung et al., 2006), and consumers are initially exposed to the product packaging, then they experience the products (Orth & De Marchi, 2007). Manufacturers use product packaging to subliminally communicate with consumers (Thalhammer, 2007) for purposes of brand identity and differentiation, product evaluation (Chung et al., 2006), and consumer brand influence (Bakan & Bakan, 2022; Underwood, 2003). Because packaging reaches most buyers at the crucial moment when they are making a purchase decision. As an important carrier of brand culture, the packaging design of goods has a different degree of consciousness to guide "the owner, buyer, user or aspirant of a brand in terms of the unique beliefs, values, rituals, norms, and traditions associated with that brand. Therefore, it is imperative to integrate the ideological elements of the curriculum into packaging design.

3. The "Packaging Structure Design" Course

"Packaging Structure Design" is a compulsory course for product design majors, which is oriented to the mass consumer market and based on the practical utility of packaging in the context of new consumption patterns and marketing methods. This course provides a comprehensive explanation of packaging design through five chapters with more in-depth exploration and a comprehensive perspective.

Among them, the first chapter of the course is an overview of packaging design, which enables students to have a basic knowledge of packaging design, understand the development history of packaging design, get insight into the definition, function, and classification of packaging design, understand the relationship between packaging design and brand building; comprehend the process of packaging design and the design positioning method of packaging design. The second chapter includes an overview of the visual expression of packaging design, mainly clarifying to students the classification and characteristics of text design, graphic design, and color design in packaging design; illuminating to students the principles and methods of text design, graphic design, and color design in packaging design, and requiring students to master the layout design in packaging design. The third chapter mainly explains the structural expression of packaging design and the methods of packaging container design. The chapter elaborates on the structural expression of packaging design and container design methods from several aspects, including the structure of packaging design, decorative accessories and materials, the methods of packaging volume, and the methods and basic guidelines of packaging container modeling design. Chapter 4 focuses on the printing process and sustainable design of packaging design, including pre-press preparation, post-press processing process, and printing process. Students are required to understand the concept of sustainable packaging design, its categories, and its embodiment, and to master sustainable packaging structure design methods. Chapter 5 introduces students to the packaging design of common commodities, including the classification and design characteristics of food packaging, cosmetic packaging, medical and pharmaceutical packaging, gift packaging, and series packaging.

The goal of the ideological construction of this course is to cultivate students' innovative consciousness and innovative thinking ability, to support students master the basic theoretical knowledge and application skills of packaging design, to cultivate students with an international perspective, good professional ethics, and sound personality qualities so that they can become innovative design talents who can adapt to the development of modern economy and society. We aim that by offering the course "Packaging Structure Design", students can understand what is an excellent packaging after learning the basic principle knowledge of packaging design, combined with the market research and data collation; at the same time, they can be familiar with and utilize various common packaging materials during the class and research; master the knowledge of packaging container modeling, and skillfully use the knowledge learned for packaging visual and structural design, to lay the foundation for students to carry out product packaging design and promotion and communication afterward.

4. Ideas for the Construction of Curriculum Ideology and Politics

The construction of the "Packaging Structure Design" course not only includes the training of students in basic knowledge and professional skills but also focuses on the exploration of the moral and humanistic content of the course, as well as the cultivation of students' scientific research spirit, service consciousness, innovation ability, application ability, and teamwork spirit, to assist students to master the whole process of product packaging design in the process of completing the course tasks. Students can master the whole process of a product packaging design which can be better applied in their future work and life. The course combines the current situation of social development, training students to apply the concept of sustainable design, combining several traditional festivals in China (e.g. Spring Festival, Dragon Boat Festival, Mid-Autumn Festival), tea culture to explain and analyze, guiding students to understand the methods and techniques of packaging structure design, and cleverly applying Chinese traditional culture and traditional cultural graphics and symbols to product

packaging structure design. As a packaging designer, to inherit Chinese traditional culture and art, and to integrate Chinese traditional culture into packaging design is the source of packaging design creation. And itis both the source of enhancing cultural self-confidence, and the steadfast inheritor and promoter of Chinese wonderful traditional culture (Geng & Qiu, 2021). We aim to train students through the course to focus on the expression of our traditional cultural elements in their creations and to have patriotic feelings. To create their own s with a more comprehensive thinking perspective, a more complete creative process, and a more innovative way of expression. To enhance students' professional quality and comprehensive quality to meet the needs of their future development.

5. Measures for Construction of Curriculum Ideology and Politics

In the teaching process, we adhered to the correct political direction and achieved the principle of "adhering to the unity of teaching and educating people, insisting on the unity of words and deeds, insisting on the unity of asking questions and concern for society, and insisting on the unity of academic freedom and academic standards", actively combined online and offline integration as the main channel of education, and integrated ideological and political education into the teaching and reform of the curriculum. We integrated ideological and political education into the teaching and reform of the curriculum and realized the effective combination of knowledge transfer and value leadership. The packaging of products carries the function of protecting products and transmitting information and is the messenger of product marketing and propaganda. Packaging shows the market trend, consumption concept, and aesthetic trend, fully reflecting the integration of technology, fashion, and demand, while the development of packaging design and multicultural communication also makes the product packaging carries a heavy cultural connotation.

In the new era, "the contradiction between people's growing need for a better life and unbalanced development" has become the main contradiction of our society, and people's growing need for a better life has put forward higher requirements for the quality of packaging materials, printing, and technology, as well as higher requirements from the artistic and spiritual aspects. Therefore, it is important to pay attention to the existence of this imbalance and insufficiency in the teaching and practice of packaging design. From this perspective, in the market research and design positioning stage of product packaging design, we combined the theory of the primary stage of socialism, analyzed the causes of social contradictions, and then determined the positioning of packaging design according to the characteristics of the product, and formed packaging design ideas and concepts. To make it meet the needs of consumers, solve certain social contradictions and specific problems of product marketing, make the packaging with better quality, more convenient practicality, and stronger artistic aesthetics, and achieve green packaging and sustainable development. In addition, packaging can be deeply explored in terms of technology, fashion, heritage inheritance, and protection as well as morality, values, humanistic connotation, and elements of the times to be effectively implanted in the teaching of course knowledge. The specific teaching measures we took in each chapter were summarized below.

In the first chapter of the course, we have adopted the lecture-based method, discussion method, and case analysis method. Before the lecture, teachers have built corresponding teaching resources on the learning platform, such as building a design material resource library. The teacher utilized the knowledge base of teaching resources prepared before class to analyze the cases of different brands and types of tea packaging products to help students understand China's tea culture and the way China's tea brands build their brands and shape their brands with the help of packaging. To enable students to have a basic knowledge of the development of packaging design of China's traditional brands, understand and master the definition, function, and classification of packaging design, and understand the relationship between packaging design and brand construction. To help students establish the concept of using product packaging to build a brand.

In the second chapter of the course, we still adopted the teaching method of lecture-based, discussion, and case study, and we referred to the online teaching resources knowledge base with relevant cases of the packaging boxes of rice dumplings and moon cakes, the derivatives of the Dragon Boat Festival and Mid-Autumn Festival in China's traditional festivals. We started with the mooncake box, a derivative product of the Mid-Autumn Festival, to guide students to understand and master how to design and position the packaging design. Students learned the process of packaging design and comprehended the design positioning of packaging design, especially the design of products with local ethnic characteristics. In addition, we also utilized the lecture-based method and case study method to analyze in detail the visual expression methods of their packaging design from four aspects: text, graphics, color, and layout. Students also discussed the relevant cases they prepared before class to maximize knowledge sharing. Through the case study method, students are guided to better understand the traditional cultural symbols of China and to apply them appropriately in the design of text, graphics, color, and layout in packaging design.

In the third chapter of the course, we built a knowledge base of online teaching resources in advance and selected packaging structure shapes and materials that can reflect Chinese cultural characteristics, taking China's traditional tea culture and the festival of Mid-Autumn Festival examples, and detailed analysis of the basic form of carton structure of tea packaging and the moon cake packaging, the design principles of carton structure, operation steps, decorative accessories, packaging materials and other different ways of expression. We used lecture-based and case study methods to help students master and understand the structural expression of packaging design. Students would be able to extract the elemental symbols and structural forms through tea culture and the traditional culture behind our traditional festival derivatives, master the basic structure and special structure of tea packaging and moon cake packaging design, and understand the basic and unique decorative accessories of tea packaging and moon cake packaging and realize the common and new materials of tea packaging and moon cake packaging design. Through the cases, students would be familiar with the application of traditional Chinese cultural symbols in packaging structure design, as well as learn the rich Chinese wisdom contained in the process of promoting China's cultural characteristics.

In the fourth chapter of the course, we uploaded a number of gift packaging works of traditional Chinese festivals on the online teaching platform in advance. Taking the moon cake packaging as an example, we analyzed its post-printing process, printing process, and the specification of packaging information through the lecture-based method to help students understand the pre-press preparation of packaging design. Through the introduction of mooncake packaging design, students are guided to understand the post-press process and master the printing technology. Also in this chapter, we took the perspective of the seriousness of environmental pollution and resource shortage crisis in China to enhance students' awareness of environmental protection and the concept of sustainable design. Through lecture-based and discussion methods, we helped students understand the concept of sustainable packaging design. We also applied cases to guide students to understand the embodiment of sustainability in packaging design (e.g. sustainable packaging materials, sustainable packaging structures). We also introduced excellent sustainable design cases which belong to the green packaging design from all over the world into the classroom to deepen students' understanding and mastery of the recycling and reuse of packaging waste. To help students develop an awareness of environmental protection and sustainable design. Recently, international green packaging design has become one of the most important indicators of good packaging design work, as well as one of the most important indicators of a country's sustainable economic development (Zhang et al., 2019).

In the last chapter of the course, we continued to employ the online teaching resource platform to deliver the lectures. We selected classic food packaging in China (e.g., rice dumplings, mooncakes, dumplings, lantern), cosmetic packaging (e.g., Pechoin, INOHERB), pharmaceutical packaging (e.g., comparing the differences between pharmaceutical packaging in Japanese drugstores and domestic pharmaceutical packaging), gift packaging (e.g., Chinese New Year, Dragon Boat Festival, Mid-Autumn Festival gift boxes), and series packaging (series packaging of foreign well-known brands with localized performance in China, such as KFC, Starbucks, etc.) and other cases. The teacher analyzed and appreciated the packaging design of different types of goods together with students through lecture-based and case study methods, and guided students to be familiar with the classification and design characteristics of different product packaging. To cultivate students to deepen their understanding of the design trends of traditional brand packaging in China, so that they can better apply it to their design studies and work in the future.

6. The Effectiveness of the Construction of Curriculum Ideology and Politics

This course aims to help students establish new aesthetic heights, broaden their horizons and ideas through the explanation and analysis of China's traditional cultural elements, and enable them to inject fresh design inspiration into their designs, creating packaging design works that reflect both China's traditional culture and current aesthetic trends. We showed some examples in the next section to demonstrate the effectiveness of the course.
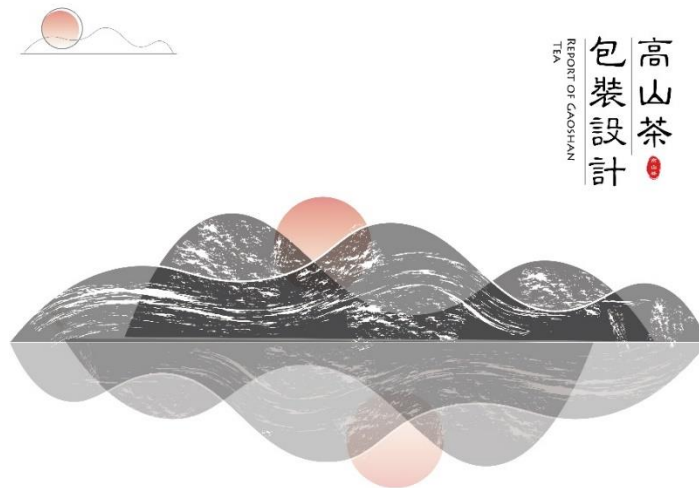
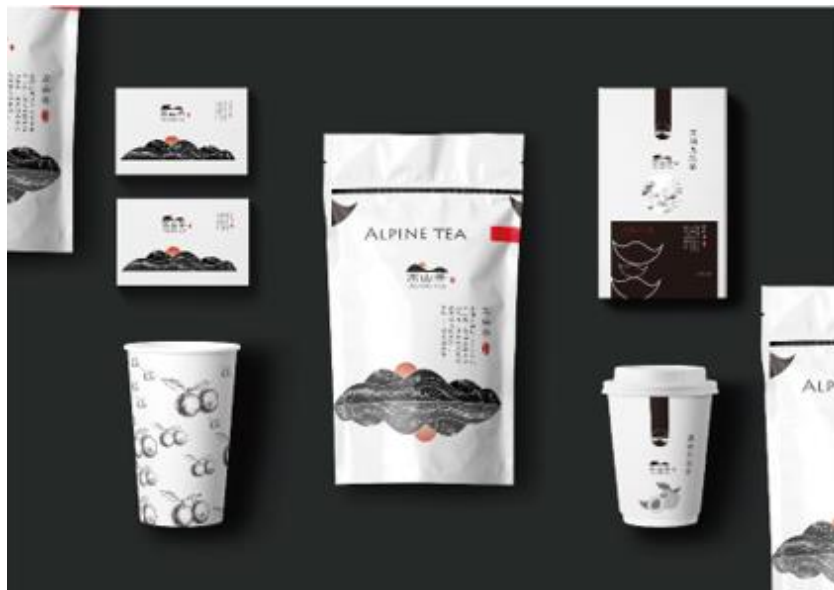Figure 1. Graphic elements of "High Mountain Tea" packaging design

Figure 2. The visual effect of the "High Mountain Tea" packaging design

For instance, the pictures above show the student's final design work which is the "High Mountain Tea" packaging design. The student used Chinese ink painting elements, combined with landscape painting and tea culture, to refine the graphic elements of the "High Mountain Tea" product. In the visual presentation of the packaging design, the student combines traditional elements with modern ones, concentrating on the cultural connotation of the high mountain tea brand.

Figure 3. Visualization of the packaging of "Mengke Mongolian Horse Milk Wine"

Figure 4. Partial detail of "Mengke Mongolian Horse Milk Wine"

Figures 3 and 4 above show the final design work of a Mongolian student in the class. The student's final design work is a packaging design for a Mongolian horse milk wine, a specialty product from his hometown.

Figure 5. The research process of students during the completion of their work "Mengke Mongolian Horse Milk Wine"

During the design process, the student first conducted detailed research on the existing horse milk wine in the market (see Figure 5). She gained a more comprehensive understanding of the existing products of Mongolian horse milk wine and did detailed research and analysis of the consumer groups of the product. The above data was compiled and applied to the product design and positioning.

Figure 6. The design positioning process during the completion of the student's work "Mengke Mongolian Horse Milk Wine"

The students carefully analyzed and refined the collected data, and derived graphic symbols and bottle designs that fit the Mongolian culture in conjunction with the target group, i.e., young consumers. Throughout the research and design process, the students gained a deeper understanding of Mongolian culture and were able to derive visual symbols and packaging shapes that reflect Mongolian wine culture through creative thinking.

College students are the builders and successors of the socialist cause with Chinese characteristics in the new era, and they need to have a strong sense of social responsibility and be brave enough to take the corresponding social responsibility. In the curriculum of packaging structure design, we have introduced targeted packaging design cases with national characteristics in China and introduced various problems faced by the packaging design industry at home and abroad. By guiding students to put the unique culture of their hometowns into the course tasks, the course stimulates students' sense of social responsibility and guides them to take the development of local culture, national culture, and traditional brands as the thinking point of the course assignments and future professional development, and always establish the awareness and mechanism of "preparedness" to upgrade the brand packaging, to enhance the sense of responsibility of college students to devote themselves to the construction of our national culture. Students are guided to promote the development and renewal of Chinese brands through the development of new packaging, integrate their dreams of personal success into the ideological understanding of the Chinese dream of achieving the great rejuvenation of the Chinese nation, and enhance their ideological recognition and theoretical consciousness of the common ideal of socialism with Chinese characteristics. This also reflects the content of the "Chinese Brand Packaging Design and Branding" part of the course, which contributes to the progress of China's packaging design industry while increasing students' sense of personal social responsibility.
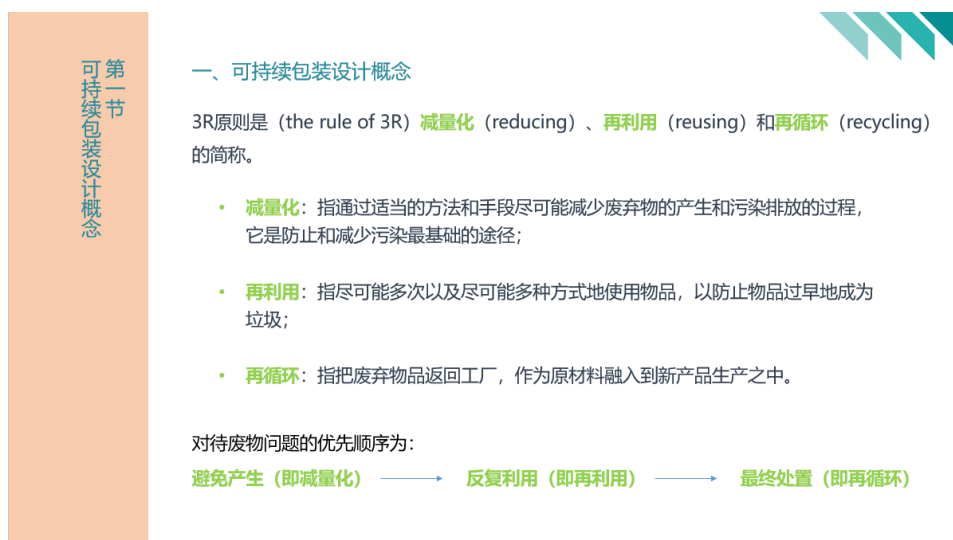
Figure 7. Illustration of the "Sustainable Packaging Design" part of the "Packaging Structure Design" course

Figure 8. Illustration of the discussion between students and teachers in the course "Packaging Structure Design" on the online education platform

The course also included a section on "Sustainable Packaging Design and Future Design" (see Figure 7). In the course, we actively guided students to comprehend the positive significance of new materials, new technologies, and crafts for the development of packaging design. On the other hand, we also helped students to recognize the social problems caused by "packaging pollution" and guided them to design human-centered packaging design. We also strengthened the interaction with students through online discussions (see Figure 8). Students are guided to consider the concept of green, environmental protection, and conservation in the selection of packaging materials. The functional design should be diversified, and efforts should be made to enhance the chance of packaging reuse and promote students' awareness of ecological concepts, crisis, and responsibility.

In the teaching of this course, we organically integrated the concept of ideological and political education, such as the shaping of socialist core values into the course, to cultivate students' sense of social responsibility, scientific outlook, ecological outlook, humanistic spirit, and self,-innovation, too manifest cultural self-confidence, allowed students highly identify with their majors, and then form correct professional ethics, establish pride in the industry, professional loyalty, and craftsmanship. In the course, we focused on cultivating students' patriotism, starting from centered on our traditional festivals and the traditional culture and symbols, and guiding students to design human-oriented packaging design by observing existing products in the market and investigating users' needs, to improve students' humanistic feelings. In the process of designing packaging

structures, students are promoted to have good observation skills, self-learning skills, and the ability to identify and solve problems. Also to train students to be able to use the learned software combined with creative thinking methods for project planning, implementing design research, proposing design concepts, and completing design production for relevant subject projects. By explaining to students a large number of design cases of traditional culture, we helped students to build cultural confidence and national confidence.

7. Future Suggestions for Teaching Optimization

The teaching method of integrating the concept of ideological and political education into design courses is still in the stage of exploration and continuous experimentation. Although this course has achieved great teaching results and students' feedback after class is also positive. There are still some problems and limitations, such as:

1). The content of online teaching resources should be further enriched and expanded.

2). Teaching cases need to be expanded.

3). The course is not perfect in the assessment criteria for the cognition of students' ideological and political section.

4). The students' self-innovation awareness still needs to be improved.

5). The content of ideological and political which to improve students' professionalism is not perfect.

Therefore, in view of the above problems found in our teaching process, we put forward the following suggestions for the future education:

1). Regularly update and upload excellent packaging design cases at home and abroad, and make a detailed classification in the online teaching resource knowledge base, to facilitate students to find information in the resource base at any time. The purpose is to provide inspiration for students at the early stage of design and expand their design ideas.

2). Since most of the current teaching cases focus on traditional festivals and food culture in China, we can also explore more ethnic cultures and customs of different regions. In the course, we could guide students to draw attention to different ethnic cultures in China and design product packaging with ethnic characteristics for different regions, so as tote the development and inheritance of the unique cultural brand of the region.

3). For the course assessment criteria, clarify the assessment details of the ideological and political part, such as clarifying the assessment criteria of humanistic sentiment, patriotic sentiment, social responsibility, and innovation consciousness. So that students can consciously think about and reflect on different ideological and political elements in the process of creating their works.

4). Strengthen the use of the case study method in the teaching process. Teachers could analyze outstanding packaging design works at home and abroad in-depth to cultivate students' understanding of the design creativity of each work, continuously develop students' design horizons, and enrich their sense of innovative thinking.

5). External instructors can be invited or design forums can be held to introduce students to the development of packaging design and industry design standards to continuously standardize the process and steps of students in the design process.

8. Conclusion

In future education, the course of packaging structure design still needs to integrate more elements of the ideological and political. To accelerate the construction, of course, ideological and political, so that students can establish a correct world view, outlook on life, and values while learning professional knowledge, to provide high-quality and highly skilled talents with good professionalism for social development.

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