From Stereoscopic Thinking to Creative Practice - Innovation of Classroom Teaching Methods in Fashion Modelling

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ABSTRACT

Whether in China or Japan, clothing solid modeling is a professional core course, but also a technical course. It requires the combination of rationality and sensibility in the process of creation. However, at present, there are many problems in the clothing modeling class of universities in China, such as prominent management problems, backward teaching ideas and poor students' enthusiasm. My innovative teaching ideas are: in this course, the introduction part of the course, combined with the three-dimensional structure of knowledge, with the clothing and platform as the carrier, through the profile experiment, the purpose is to arouse the students' initial consciousness of the body surface. The operation method is to allow students to cut the same circular, triangle, rectangle, square, polygon and other common plane geometric patterns before teaching, and put them on the human platform for modeling test. The open experimental proposition can give full play to students' imagination and stimulate students' enthusiasm. The teacher's assessment and examination are combined with the knowledge points of the course -- acupuncture, fabric and modeling techniques. The whole teaching method, with the geometry and the human platform as the carrier, let the students peel off the prototype thinking, think more about the layout of the cloth, and look for more stereoscopic material. In this way, we can get rid of the limitations of plane thinking and modeling techniques and expand creative thinking.

1. INTRODUCTION

The goal of fashion modelling is, from the cognitive perspective of the relationship between clothing and human body. Focusing on "face" and "body", we should understand the three-dimensional fashion modelling techniques and different types of fashion modelling methods, and cultivate students' imagination and logical thinking. During the experiment, we can fully experience the creativity of design activities and easily grasp the basic principles and skills of garment modelling. Many teachers have rich experience and professional skills. But in practical teaching, it is difficult to achieve the best teaching results. In the limited time and field, in the process of emphasizing manual skills, students are often mechanically imitated. It is difficult to truly understand the emergence of creative passion and inspiration.

The way of explaining knowledge, the design and management of practical

classroom are all important factors affecting the teaching effect. Furthermore, with the development of Internet technology, many design courses have begun to try advanced teaching methods such as online teaching or flipping classroom. However, the clothing three-dimensional modelling course is still blank in this area. Therefore, it is necessary to find a scientific and reasonable teaching plan, and to find out how to guide students to use their hands and brains in class, and how to integrate technology and creativity. This is the most urgent task in the teaching of fashion modelling. Through the new teaching methods, students' creativity can be effectively improved, and students' creative interest can be enhanced.

2. METHOD

The "surface" and "body" in clothing design represent two kinds of modelling methods: plane cutting and draping. Over the years, there were two main teaching ideas of the fashion modelling course in universities: the modelling based on human body and the modelling based on inspiration elements. Based on years of teaching experience, the author observes and compares the above two teaching methods, and puts forward a new teaching idea, which is based on geometric cloth experiment, from three-dimensional thinking to innovative practice.

From teaching aims to methods, from teaching contents to students' works. The following will be a comparative analysis of the operation methods and experimental results of the three teaching methods.

2.1 Modelling based on human body

This teaching method guides students to understand the surface of human body from the perspective of human anatomy. Based on the pattern system, the standard body is the carrier, and the prototype is used as an example to demonstrate the operation.

The advantage of this method is that the understanding of human body is more profound, and it is easier to connect the prototype and plane structure knowledge, which is conducive to pattern design and production management of enterprise garments. The disadvantage is that students' curriculum assignments are similar. Lack of creativity in modelling.

Figure 1 is student A's modelling training series. Figure 2 is student B's modelling training series. From the works can be seen that students were more like to save the transfer of the dart, cloth segmentation, a small number of silhouette. The form of operation is similar.

2.2 Modelling based on inspiration elements

From inspiration, we can refine the structure, color, texture or connotation of inspiration. Around the theme to refine the elements of summary, partial sample production, and finally implemented to the three-dimensional clothing terrace.

The advantage of this method is that the early collection of inspiration is rich, and the stereoscopic sculpt is rich.

The disadvantage is that in the same class hours, students have fewer styles. Rubbing is more trivial, mostly in the form of conceptual packaging, style is difficult

to copy production, production costs are higher, production quality control is difficult. Fig. 3 is a local modelling experiment for students.

Figure 1: student A's modeling training series

Figure 2: student B's modeling training series

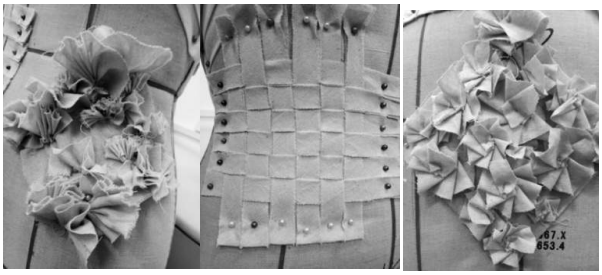

Figure 3: Student's local modeling

2.3 Modelling based on geometric cloth experiment

This new teaching method, starting from the basic geometric cloth, combines inspiration elements to obtain a basic type, and carries out geometric divergence, geometric deformation, geometric segmentation, geometric scaling, geometric repetition and so on, thus obtains a large number of derivative modelling.

The concrete operation is that students can give full play to their imagination and create a large number of new profiles under the limit of the area of the cloth, without considering the operation of provinces, dividing lines and so on. The assessment method of the course is that students freely create more than 20 styles, choose excellent styles, through the mutual evaluation of class works, explore and learn from each other, understand their own shortcomings, stimulate interest in learning, so as to facilitate the follow-up courses targeted in-depth teaching.

The limited geometry cloth simplifies the form of rubbing, and focuses on the design of the inner structure of the rubbing.In the process of implementing the teaching method of three-dimensional modeling based on basic geometry, a student's homework was selected for comparative analysis. From Fig.4, Students compare the

similarities of all their works, and compare the similarities of the whole class of students'stylistic photos, and gradually understand what they want, their own style preferences and shortcomings. This is also one of the deepening paths of interaction.

Figure 4: Student E's later modeling work

3. CONCLUSIONS AND DISCUSSION

As students get rid of the limitations of plane thinking and modeling techniques, learning from this simple to complex geometric thinking, effectively activate the inspiration of students, in the process of conception, modeling, modification, the hand, brain, eyes get continuous interaction. Help students get close to the state of creativity as soon as possible, thus creating various effects that can activate their creative thinking and enthusiasm. Finally, achieve the "interaction" of students themselves.
Teachers in the process of guidance, combined with the shape of the students, to "guess inspiration" game, analysis of inspiration elements, elements of extraction, to achieve the technique.

The modelling experiment based on geometric cloth is an open experimental proposition. In the experimental process, students' self-interaction, teacher-student interaction, interaction can be a process of constant amplification. This kind of solid modelling based on basic geometry does not need to be realized in order to design a perfect work. At every moment in the modelling process, we have the possibility to generate new ideas, and design becomes a choice. Students learn to choose, choose and improve in the process.

The whole teaching method, with geometry and platform as the carrier, allows students to strip off the prototype thinking, thinking more about the layout of cloth, looking for more three-dimensional material. In this way, we can get rid of the limitations of plane thinking and modelling techniques and expand creative thinking.

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