

# Discussion on the value and importance of “practical exercises” in classroom teaching of craft products —take handicraft wax as an example

Jian Pan<sup>1</sup>, Yaning Wang<sup>2</sup> and Siqi Tian<sup>3</sup>

<sup>1</sup>Art and design, Liaoning Shihua University, Fushun city, Liaoning province, 113000, China

**Abstract.** In the classroom teaching of process products, the actual operation is the most effective way to ensure that students can fully grasp the contents of classroom teaching. As a craft product that needs to be finished by hand, students' practical operation in the classroom teaching of handicraft wax will further improve the classroom teaching effect of craft products. This paper mainly discusses the importance and value of practical process operation in classroom teaching of process wax.

## 1 Foreword

In order to achieve a better teaching effect in the craft products classroom, so that students can master the course content of craft products more thoroughly, we usually adopt the combination of theory teaching and practical teaching. Using the theory teaching to guide the students to design thinking and deepen the further understanding of the process products, the field practice teaching allows the students to personally participate in the production of process products, to understand the whole process of process production of process products. In the classroom teaching of handicraft wax, different practical operation technology will have a certain impact on the effect of craft wax products. After a long period of analysis of classroom teaching, it is found that it can not be confined to theoretical teaching alone. Practical teaching is easier to develop students' practical ability and artistic thinking, and the effect of classroom teaching is also significantly improved.

## 2 Practical operation technology of handicraft candle and its effect on products

### 2.1. Summary of practical operation process of handicraft candle

Process wax is a kind of process product with paraffin as its main material. Its manufacturing process includes wax melting, color matching, injection molding, color hanging, carving, decoration, glazing, air drying and so

on. In this paper, the actual operation process of wax making is described.

The initial form of paraffin wax is a translucent white block solid. After high temperature melting, transparent liquid paraffin is formed. The dye used for candle is added into wax to finish color matching. The paraffin wax that has been turned into liquid is injected into the pre-prepared candle mold to complete the injection mold. When the wax in the mold is resolidified, paraffin wax is demoulded and immersed in the colored liquid paraffin. After 2~3 seconds, remove it, put it in warm water, stabilize the paraffin wax state, and repeatedly hang the color 30~50 times according to the change of design pattern and pattern, finish the hanging process; hanging colored and thermostatic candles on a carving rack, and carve it with professional carving tools; after carving, after the product is thoroughly cooled, put the candle into glaze. Before picking up the process wax, make sure that all its patterns have been immersed in the glaze. Hang the glazed process wax on the air drying rack to complete the glaze and air drying process.

### 2.2. Effect of process operation on product effect

The manufacturing process of wax has been briefly described above, but any variable during the production process will affect the final display effect of the process wax. The effect of the process variables on the product is shown in the following table 1.

\* Corresponding author: 23557186@qq.com

**Table 1.** Effect of process variables on products.

Technological steps	Influence factor	Influence effect
Wax melting	Paraffin wax melting point	After comparing paraffin wax 58 and paraffin wax 48, it is found that the lower melting point of paraffin wax, the shorter melting time.
Color matching	Selection of pigment and proportion of blending	Two kinds of candle color materials and heavy color wax blocks were selected after many experiments on the color materials. After comparing the actual operation, we found that the heavy color wax block has high color saturation and simple deployment, and is more suitable for the production of process wax products (high cost).
Injection model	Different types of wax liquid temperature and the cooling time	The higher the wax temperature, the longer the cooling time after injection. The mold forming time required for 48 paraffin injection is longer than that for 58 paraffin wax, and the wax is too soft at constant temperature and high temperature, so it is not suitable for carving and hanging for a long time.
Hanging color	Wax temperature and time of wax impregnation	The temperature of wax and the control of the time of wax immersion determine the thickness of the hanging color. The best hanging color temperature is between 65 and 75 C.
Carving	Paraffin wax type, operation speed and indoor temperature	The faster the operation speed, the higher the success rate; the indoor temperature will extend 2~3 minutes operation time above 24 C; operation time after 48 paraffin wax coloring >20 minutes, and operation time after 58 paraffin wax coloring <15 minutes.
Glazing glaze	Ambient temperature	The minimum storage temperature of glaze paint is not more than -10 C.
Air drying	Ventilation and ambient temperature	The dry and warm indoor environment is beneficial to the drying of wax glaze. 3~5 days air drying is completed at 24 C indoor environment.

\*Paraffin wax 48 is a wax with a melting point of 48 degrees; paraffin wax 58 is a wax with a melting point of 58 degrees.

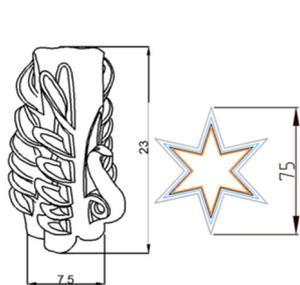
In paraffin selection problem, the softness of paraffin wax 48 can extend the carving time, but not suitable for injection molding; paraffin wax 58 hardening faster, not suitable for carving, but suitable for injection molding. In order to ensure the carving effect as long as possible to extend the carving time, in the 58 wax liquid (color) to add about 20% paraffin wax 48, the base molds are still using 58 paraffin wax for casting.

### 3 The influence of students' practical exercises on teaching results

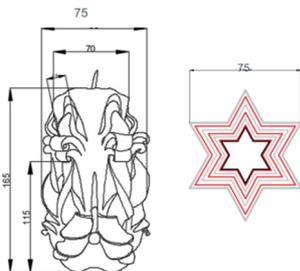
#### 3.1. Analysis of classroom results of theoretical teaching

Process wax product is a course that focuses on practical operation rather than theoretical guidance. The results of classroom teaching are directly reflected in the operation

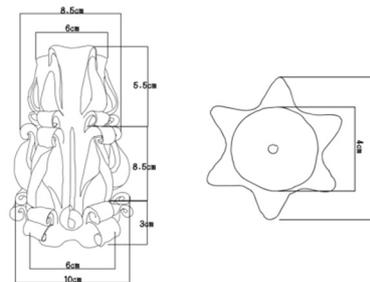
results of students. In order to enable students to better grasp the knowledge of wax, students will carry out theoretical teaching before manual operation. In the process of theoretical teaching, teachers will discuss and demonstrate the characteristics of paraffin wax. Teaching about paraffin products, market environment, candle culture, shape design and color collocation. In the students' classroom homework, we select three research topics of ancestor worship, consecrate and wedding, and guide the students to develop and design a series of craft wax products. Through the study of the culture of ancestor worship, consecrate and wedding, to extract different element symbols and color collocation schemes, then merge the element symbol with the paraffin carving. Through size definition and sketch drawing, students can master the wax structure more thoroughly and lay a theoretical foundation for practical operation.



**Figure 1.** Ancestor worship series candle draft



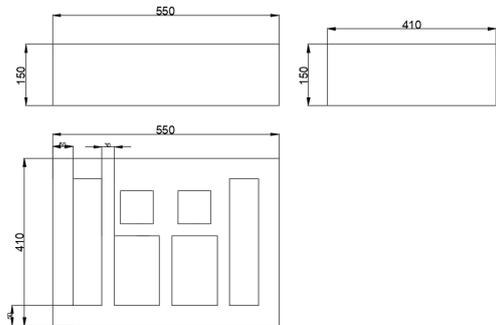
**Figure 2.** Wedding series candle draft



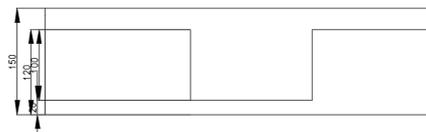
**Figure 3.** Consecrate series candle draft

In addition to the theory of wax and its practical operation teaching, students are required to complete the packaging design independently in order to reflect the integrity of the process wax system. Teachers lead students to understand and master the basic points of packaging design, and use modeling and drawing to complete the packaging effect. Take the packaging with wedding as the theme as an example. Students will

combine traditional Chinese dragon and Phoenix elements with traditional red and gold colors, use black prominent center and through the changing adjustment of Longfeng Touteng to finish the wedding series wax packaging design. The display is shown below.



**Figure 4.** Packaging three views



**Figure 5.** Packaging sectional drawing



**Figure 6.** Packing rendering drawing

### 3.2. Display of classroom results in practical teaching

With the solid theoretical foundation, the students will add more strength to the practical class. As a craft product that needs to be finished manually, manufacture of process wax needs to be trained for three months or so. During this period, a lot of manpower, material resources and financial resources are needed to be invested. In the

previous article, the specific operation process of process wax is introduced in detail. The students showed excellent operational ability and form creativity in the practical classroom. They kept developing their thinking and using color is becoming more mature. After half a semester's practical teaching, they produced excellent results. The results are as follows.



**Figure 7.** Consecrate series of candles



**Figure 8.** Ancestor worship series of candles



**Figure 9.** Wedding series of candles

## 4 The value and importance of practical operation to teaching effect

### 4.1. The value of “practical exercises” in classroom teaching of craft products

Classroom practice can stimulate students’ technological thinking, enhance interaction with works, and enhance students’ perception of wax products. It is of great significance for developing students vision, shaping artistic thinking and cultivating students’ sound artistic quality. The teaching of process products is of great value to the cultivation of students’ practical ability and creativity. It is easier for students to understand the paraffin characteristics in practice. It is also easier to train students in their production techniques. On the basis of a lot of practice, students are more skilled in making wax and can produce wax products independently. The long-term practice course has the direct realistic significance to the student’s production level enhancement. It has important value for the acquisition of classroom teaching results.

### 4.2. The importance of “practical exercises” in the classroom teaching of craft products.

The purpose of craft products classroom teaching is to enable students to master a complete process of craft products design. The teaching results are mainly embodied in the final results of classroom production. Hand-son operation is the main way for students to complete classroom learning. “Practical Exercises” helps students to complete the physical production to the maximum extent under the condition of a large theoretical foundation. Let students realize the relevance and difference between theory and practice. They can also improve their aesthetic taste through emotional expression, and feel unique humanities and arts from their works. Only by doing a lot of practical operation can students grasp the influence of various processes of process wax products on product effects before they can improve their process level. Only by making the craft wax products alone can a complete craft wax production

system be formed. And then complete the task of teaching craft wax, achieve the best classroom teaching effect. It can be seen that the practical operation in the classroom is to improve the students’ comprehensive literacy, cultivate students’ development, further improve teaching achievements, and an important means to expand development channel of process wax products.

## 5 Concluding remarks

To sum up, the practical teaching is an indispensable part in the classroom teaching of craft products. The importance of actual operation in the classroom teaching of craft is further highlighted through the teaching discussion and research on the case of handicraft wax. Through experiment teaching, we conclude that practice is an important means of the final product, and how the craft product is formed and how to make it, then real show in front of the students. And the variables that will take place in the production process are taken into consideration. It is the core of this discussion to guide students how to design and manufacture process products most effectively through practical operation.

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