

Analysis of Teaching Module of Architectural Design Basis

Lingling Guo

Binzhou University, Shandong, China

ABSTRACT. *Architectural design is a basic course for architecture, which is a stepping stone for students to enter the architectural profession. In this paper, the four teaching modules of the initial design of architectural design, basic design of building design, architectural analysis, and single space design are analyzed one by one, and the importance and necessity of each module in the whole building design teaching are discussed.*

Keywords: *preliminary design of architecture, first-time architecture, architectural design and basic training, architectural analysis, single space design*

1. Introduction

With the development of society, higher requirements are put forward for higher education. On the goal of talent training, it is required to cultivate knowledge-based talents into application-oriented talents. This is especially true for architecture education, whose main goal is to cultivate innovative architectural design talent.

Architectural design is a basic course in architecture, which is a stepping stone for students to enter the architectural profession. The students facing the initial design of the building design are freshmen who have just entered the university. Since the enrollment of architecture is for science students, they have a good logical thinking in the training of the first ten years, but the lack of divergent thinking training. As a result, their image thinking ability is weak, and they can't adapt to the architecture teaching mode very quickly. This requires that the primary task of the initial design of the architectural design is to cultivate students' professional learning interest, stimulate their creative enthusiasm, and cultivate their image thinking ability. In order to achieve the purpose of the course, generally through the following

modules to achieve(as shown in Fig. 1):

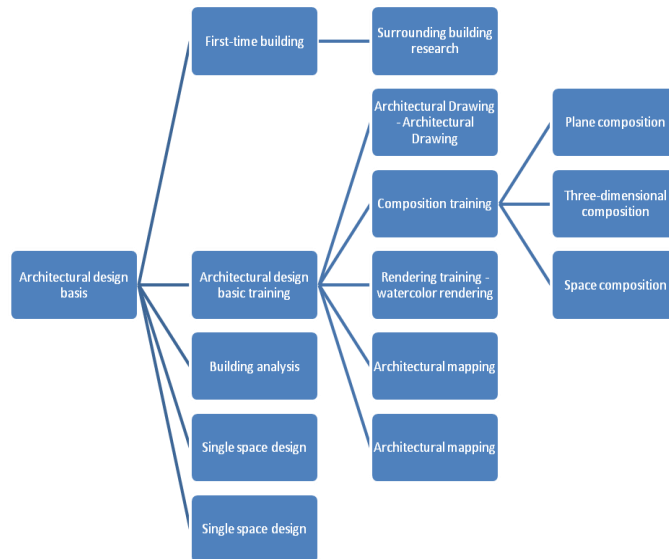


Fig.1 modules to achieve:

2. First-time architecture - surrounding building research

The educational experience of nearly ten years tells me that if a student wants to learn a good job, he or she must first be interested in the profession, and the interest is the best teacher. Students who have just entered the university have little knowledge of their expertise. The most important thing for them at this time is to cultivate their professional interests. In order to stimulate students' interest in learning, combined with the current popular expressions, such as vibrato, volcano video, etc., reflect the buildings in their eyes into the works. In this process, give full play to the initiative of student leaders, stimulate their students' interest, and exercise their creative ability. Express the buildings they like in the way they like. In order to cultivate their interest in learning, the effect will be more significant.

The first step in the construction process focuses on cultivating students' self-learning ability, observing the ability of things, and the ability to express words. At the same time, through this part of the training, students can improve their ability to express themselves, observe things and be able to make corresponding analysis,

for the future. Building a foundation for building research and design.

3. Architectural design basic training

3.1 Architectural Drawing - Architectural Drawing

Architectural drawing is a compulsory part of architecture, a bridge between two-dimensional and three-dimensional transformation of architecture, and the language of architectural design. This module develops students' basic drawing skills through simple explanations and copying of architectural drawings, allowing students to master basic drawing specifications and read simple architectural drawings. A solid "language" foundation for subsequent architectural design.

3.2 Composition training - plane composition, three-dimensional composition and spatial composition

Architectural composition is an important module for developing students' creative ability, and this module is also a favorite part of students. The composition series is completed through heuristic teaching, allowing students to complete the learning tasks in the process of playing. For example, after the three-dimensional component of the architectural composition series, after explaining the basic design methods and aesthetic rules for students, let students actively encourage young people to learn and progress according to the most common topics in the current society, or they can satirize some of today's The phenomenon that should exist should give students sufficient space to stimulate students' enthusiasm and creativity. The homework is done in the form of a work exhibition, allowing students to explain their personal work during the homework show, and relying on the audience's praise to determine the level of achievement. In this process, the students have both the sense of accomplishment and the ability to express their skills.

3.3 Rendering training - watercolor rendering

Watercolor rendering is one of the main means of architectural design expression. In the era when computer graphics are still not popular, watercolor rendering is the

main means of expression of architectural effects and an essential skill for architects. Through this part of the study, students learn about color and watercolor rendering knowledge, improve students' color matching, watercolor expression ability, while honing the patience of students, can calm down and carefully render a pair of architectural works, while carefully watching Check the architectural details to lay the foundation for becoming a qualified architect.

3.4 Architectural mapping

Architectural surveying and mapping is mainly to cultivate students' understanding of the building and the environment and the feeling of scale. This module is a necessary stage for students to understand architecture. Through learning, students can realize that architecture is not independent. It should be integrated with the natural environment, adapted to the base, and integrated with natural conditions. Through field mapping, I will personally understand what the building is, what composition, the size and style of each part, and gradually realize that a good design is not just a building element, but needs to be created from the base environmental conditions. Personalized architectural image and space.

Through the study of architectural surveying, the size is no longer just a data, it can make the boring data live, and understand the concept and feeling of scale in the students' mind. The building in the student's mind no longer stays on the 2D paper, the 3D stereoscopic image is more clear, and it helps students to read the drawings more effectively, and the drawings are like visiting buildings. Inspire students to learn more in a more direct way.

4. Building analysis

Through the three “construction“ learning, students have established a preliminary architectural design thinking logic, which stimulated the students' enthusiasm for learning architectural design. Based on this, they closely followed a famous architectural analysis to continue the students' learning enthusiasm. By selecting and interpreting the architectural works of an architect, and seeing the “success road“ of the architects, the students find their own “creative style“ thinking tendency deep inside, and stimulate the creative design passion inside.

Through analysis, learn the design ideas and design techniques of the architects to solve the basic problems of architecture, and cultivate students' image design thinking. Through the copying and commenting, the analysis of the design features of the masters' masterpieces is completed, and the perceptual thinking and rational analysis based on their own learning experience are exercised. Consolidate the knowledge that has been learned before, and in the process of completing this learning task, from the master's masterpiece demonstration to deepen the understanding and application of the basic principles of architectural aesthetics - the formal beauty law and the basic principles of architectural design - architectural space language. Further study and understand the basic design issues that need to be considered in architectural design with architectural facts (built masterpieces, examples of programs), and think about how to analyze "architecture". Inspire students to be active in thinking, so that students can enjoy architectural design from the heart, so that they can learn better and interest is the best teacher.

5. A single space architectural design

This module is a synthesis of the previously learned knowledge, giving students a simple and interesting single space design topic, allowing students to integrate the knowledge they have learned, to fly their minds, to exert their personal initiative, and to complete the first career in combination with the requirements of the topic. Design works. The design is divided into three stages. The first is the research report stage. At this stage, students collect various related cases and theories through field trips, book reading and online data collection, and integrate the aggregated materials to form their own research report materials. In the process, the design method of excellent cases is used to open the students' design thinking. Secondly, the sketch drafting stage, according to the requirements of the task book, combined with the knowledge acquired to form their own preliminary design ideas - sketches, this stage makes students and teachers a brain The storm, through the exchange of students and teachers, retains reasonable and excellent parts in the process of communication, adjusts the unreasonable parts, re-integrates the design plan, makes the design plan more reasonable; again the model production stage, the model as space conception and expression The auxiliary means can intuitively reflect the superiority and inferiority of the building, improve the understanding and creativity of the space,

and better express the student design ideas; finally, the positive drawing stage, in which the students express the complete design plan on the drawing. Ability to comprehensively demonstrate students' comprehensive design capabilities.

Completing a design for the first time is a milestone for students. To commemorate this important moment, it is also a better way to stimulate students' interest in learning and to make students feel more fulfilled. Organize a preliminary homework exhibition to maximize the mastery of the students.

Through the four-part study, students have a preliminary understanding and understanding of architectural design, which stimulates students' professional interest in learning and lays a solid foundation for studying architecture in the future.

Preliminary is the foundation of the entire architecture profession. As the saying goes: "The foundation is not strong, and the ground is shaken." Preliminary education is an eternal topic for architecture education. In order to adapt to the development of society and professional needs, we should continue to study and learn.

References

- [1] Sun Wei Cao Zhenyu Zhang Tao(2019). Thinking and Practice of Architectural Analysis Teaching in the Foundation of Architectural Design--Taking the Grade 1 of Zhejiang University Architecture as an Example. *Architecture and Culture*, no.02, pp.58-60.
- [2]Wang Jing(2010). Thinking and Exploration of Building Measurement Teaching in "Architectural Design Foundation". *Huazhong Architecture*, no.06, pp.185-186.
- [3]Wang He, Kong Dejing(2016). Scale Cognition and Basic Teaching of Architectural Design. *High Teaching Journal*, no. 01, pp.93-94.
- [4] Gu Daqing, Bai Tingwei(2010). *Introduction to Architectural Design*. China Building Industry Press.