The Application of Constructivism in the Teaching of Architecture

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Abstract

This article is from the perspective of constructivism.This paper discusses the teaching method of architectural design specialty from two aspects: teaching method and learning method.

Keywords

Constructivism, teaching of architecture, Leaning.

1. The Background

Architecture is a discipline with strong practicality. Its goal is to better improve our living environment and living environment. The major of architectural design is to provide high-quality architectural design talents for the society. The teaching mode of architecture should adapt to the market economy, so that students can apply some book knowledge and practical skills learned in school to practical projects. Architec-tural education needs to integrate the above three basic concepts of architectural design, and make these concepts combined with the concept, theory and thinking system.

2. Objective of Constructivism Philosophy

Based on my working experience and understanding of constructivist philosophy, I believe that the application of constructivism in teaching mainly reflects the following three goals

2.1. Active Cognition of Architecture and Continuous Improvement of Humanistic Quality

Interest learning is the most important motivation. Constructivist philosophy is used to cultivate interest in architecture, stimulate the source power of active learning, and achieve the purpose of improving active cognition of architecture and continuously improving humanistic quality. From the perspective of active cognition of architecture, on the one hand, learners achieve the purpose of observing urban culture and architectural characteristics deeply by visiting the actual site; On the other hand, multimedia technology can be used to further understand the architectural creation methods of outstanding architectural works and outstanding architects, and encourage learners to think independently about the basic features of architecture and feel the architectural space personally. From the perspective of improving the humanistic quality, according to the students' interest in architecture, from the aspects of geography, history, religion, nationality and humanities, enrich, active and expand the students' thinking, making them realize that "architecture cannot be separated from the society and architecture cannot be separated from the nature".

2.2. Stimulate the Consciousness of Innovation and Design Ability

The training of creative ability should be emphasized in the course of architectural design and should run through the whole teaching system. A teacher should be a patient listener and strive to make students have the courage to express their ideas. Promote students' active thinking on architecture and really understand students' thought process. In the whole teaching, students

are the main body and teachers are the leading part. Teachers respect the principal position of students, arouse their enthusiasm, and strive to create a democratic atmosphere of common learning.

2.3. The Establishment of the Concept of Results-Oriented Learning

Results-oriented classroom teaching mode is a very important teaching method for architectural design specialty, which advocates the interaction between teachers and students and breeds knowledge together. The acquisition of knowledge is a process of subjective construction, and the construction of knowledge needs the assistance of classroom environment. The approach of results-oriented education philosophy starts from two aspects and achieves five directions of transformation. On the one hand, to promote students to develop the habit of active learning and problem finding; On the other hand, teachers should be encouraged to conduct proper guidance and evaluation to achieve the ideal teaching effect. At least five changes should be realized in classroom teaching: from inculcating classroom to dialogue classroom, from closed classroom to open classroom, from knowledge classroom to ability classroom, from attaching importance to learning rather than thinking to the combination of learning and thinking, and from placing importance on teaching rather than learning to the teacher focusing on learning. Student-oriented, study the basic rules of learning activities, create a situational learning environment, reflect the way knowledge is used in the real world, approach to expert work and process patternized access and diverse roles and prospects; Support knowledge construction and promote reflection to form abstraction; Promote clear presentation of knowledge. Using information technology to design realistic, simulation environment and virtual situation to improve the effectiveness of learning is a common way.

3. Constructivism Teaching Design

According to the philosophy of constructivism and in combination with my own professional teaching, as a teacher, I advocate constructivism teaching methods in the following aspects:

3.1. Organize Teaching with Students as the Center

In the teaching process, students' active learning ability should be brought into full play all the time. Teachers should become the participants in discussing problems with students and the helpers and promoters of students' learning outcomes. Teachers should fully respect the individual characteristics of students, fully mobilize the enthusiasm of learning, and strive to improve students' conscious awareness and cognitive ability. Help students to analyze strategies together and attach importance to the diagnosis and correction of students' mistakes.

3.2. Respect the Actual Situation and Create A Socialized Real Practice Environment

In view of this point of view, teachers need to create beneficial learning activities around practical problems. These activities need to guide students to participate in the construction more actively and actively based on socialized and real situations. Teachers need to create a real environment related to learning and guide students to solve real problems. For example, in the process of architectural design, the analysis of architectural functions and space needs is fully emphasized, the process of solving practical work is sorted out into knowledge points and decomposed into practice teaching process.

3.3. Encourage Resource Sharing and Collaborative Innovation

The Internet is a very important communication medium in the current social development, and it is an important platform to improve the teaching effect of constructivism. As a teacher, in the teaching process of architectural design, we need to give full play to the "mentoring

relationship" communication between teachers and students and the "mutual learning" communication between students and students, so as to achieve the goal of giving full play to our subjective initiative and solving practical problems through teaching organizations such as group discussion and collaborative learning.

4. Constructivist Learning Methods

As a student, combined with the philosophy of constructivism, we need to pay attention to the following three aspects of training

4.1. Fully Respect the Real Needs of Society

Design is a highly practical specialty. With the continuous development of society, social needs will constantly change. In the learning process, it is necessary to respect the real needs of the society and conduct in-depth investigation and research on problems. In the process of learning and research, even if you know the latest needs, latest technologies and latest materials, you can find new problems to be solved in time. Only in this way can you give full play to your subjective initiative and seek for better solutions.

4.2. Absorb the Essence

Nowadays, with the rapid development of Internet technology, the communication and utilization of digital information resources become more and more convenient. As students, we should use of multimedia and Internet, make full use of network resources, combined with the professors to provide learning methods and learning strategies, carefully analyse the thought of experts from various channels and methods to deal with problems, they strive to become the ways and methods to solve the problem by themselves and achieve the objectives of the optimization to solve practical problems.

4.3. Cooperate and Innovate Actively

Architectural design is a kind of work integrating sociology, urbanology, architecture, psychology and other disciplines. In the learning process, students should learn to cooperate, actively absorb the thoughts and creative methods of team members, carefully analyze their practical situations, and combine their own characteristics with various aspects and multiple perspectives.

5. The Conclusion

Architectural is characterized by its emphasis on practice and constructivist philoso-phy, which is an important method suitable for architectural design education and learning. It is an important way for architectural teaching to attach importance to active learning. Teachers and students to practice together and give play to learners' subjective initiative. The realization of combining the real architectural design situa-tion is conducive to the innovation of architectural design practice, the internal com-munication and improvement of team members, and the improvement of the profess-ional quality of learners.

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