Research on the Integral Practical and Aesthetic Design Teaching of Architecture and Site Environment
—Taking Kindergarten Architecture and Site Logic Model Teaching Approach as an Example

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Abstract: The integral practical and aesthetic design teaching of architecture and site environment is expected to deal with the junior-grade design teaching in architecture major with a current situation that the insufficient consideration of the site environment and the chaotic city image, which caused by long-term emphasis on single function and personality performance of architecture. The key to the integral practicability and aesthetics is the emphasis on the integrality of spatial logical order of those two factors, which contains the integral harmony of function attributes, scale, logics, and modal relationships and so on. Combine with the teaching of kindergarten architecture design, using architecture and site logic model teaching methodology, through the extraction cognitive teaching approach of the site environment order logics, the cognitive teaching approach of kindergarten architecture spatial logics, the strategic teaching approach of the congruent design of the integral order of architecture and site environment logics, module and model congruent counterpoint design teaching approach of architecture and large site environment order logics, organization and construction integrated design teaching approach of architecture and small site environment spatial logics, and result design teaching approach of architectures integrated into the landscape of large site environment and their surrounding small site environment and other teaching procedures to complete the teaching tasks of the integral practical and aesthetic design of kindergarten architecture and site environment.

Keywords: Site environment; Teaching approach of architecture design; Architectural design logics; Architecture model; Teaching approach of architecture logics.

1. Introduction

"Site" in architecture discipline is referred to "a site or place designated or recommended for building architectures, implementation schemes or parts of them; the specific locations of buildings and building groups".[1] Different from the emphasis of "place" on historical sense, "site" emphasizes the logics of the current situation in its surrounding environment.[2]

The integral practical and aesthetic design teaching of architecture and site environment is expected to deal with the junior-grade design teaching in architecture major with a current situation that the insufficient consideration of the site environment and the chaotic city image, which caused by long-term emphasis on single function and personality performance of architecture; meantime, it also conforms to the development trend of urban design which is a product to deal with the senior-grade urban design teaching.in architecture design major. The site environment mentioned in this article includes two levels: first, Large site environment refers to the large site environment that contains a correlation of building site and range site. For example, the community should include the main entrance and exit, the public space of the community, and the buildings surrounding the site. The small site environment around the building mainly refers to the site environment within the construction site area and surrounding the design building.

2. The Current Situation of Insufficient Attention to the Architecture Design Teaching Site Environment by Domestic Architecture Education

For a long time, the domestic construction education has paid more attention to the practical and single appearance

of the architectural space function, and the relevant venue teaching has mainly concentrated on the technical issues such as the site vertical treatment. The feedback from the architectural design course on the site environment focuses on meeting the requirements for planning exit line and entrance/exit location. For the logical scale relationship and modality relationship between the building space and the site environment, the site environment and the construction environment are less practical and practical. This has caused students to pay more attention to the aesthetic appearance of building blocks, the design of building space and the offline environment.

3. Advocate the Development Trend of the Integral Practical and Aesthetic Design Teaching of Architecture and Site Environment under the Background of Urban Design Development

The integral design of the site environment is the subject of many researches in the interior and exterior architectural circles under the background of urban design development. It promotes the spatial design of the building and its external space environment in a rational way, combining the environmental and external environment, and enters the site environment. And becoming an important shaper of the site environment has gradually become the consensus of the design community. With respect to the urban design of the new large-scale urban districts (especially the design of the new urban central district), the constraints and problems of the architectural and environmental design in the specific site environment are more direct to the teaching of architectural design in middle and early grades. The basic design concepts and the basic stages of the basic design for solving the problem are important. Therefore, in this stage, the overall design concept of the building and site environment of the students' site environment and architectural space is established from the source of architecture education, and a corresponding set of design is taught. The strategy approach is very necessary.[3]

4. Discussion on the Integral Practical and Aesthetic Design Teaching of Architecture and Site Environment (Taking Kindergarten Architecture Design Teaching as an Example)

The key to the integral practicability and aesthetics is the emphasis on the integrality of spatial logical order of those two factors, which specifically contains the integral harmony of function attributes, scale, logics, and modal relationships and so on. The kindergarten architecture design teaching course is in the transitional stage of design teaching from the lower grade (second grade) to the middle grade (third grade). It is the first public architecture with comprehensive functions that the students have come into contact with. The site of the architecture is generally located in the community. The relationship between its architectures and the surrounding site environment is very close. In the specific teaching, Combined with the teaching of kindergarten courses, We have had a preliminary discussion on architecture and site logic model teaching methodology, through the extraction cognitive teaching approach of the site environment order logics, the cognitive teaching approach of kindergarten architecture spatial logics, the strategic teaching approach of the congruent design of the integral order of architecture and site environment logics, module and model congruent counterpoint design teaching approach of architecture and large site environment order logics, organization and construction integrated design teaching approach of architecture and small site environment spatial logics, and result design teaching approach of architectures integrated into the landscape of large site environment and their surrounding small site environment and other teaching procedures.[4]

Due to the influence of contemporary management and teaching approaches, the domestic kindergartens have a typical unit model for class placement, which makes it possible to modularize their building space. In combination with our school's kindergarten architecture design teaching, we have proposed an approach of using architecture and site logic model teaching approach to discuss t the integral practicability and aesthetics of kindergarten architecture and site environment.

4.1 Relevant Teaching Approaches

For this teaching process, combined with the kindergarten architecture design course, we gradually established specific teaching methods such as the architectural and venue logic model teaching approach, in order to promote the students' grasp of the site environmental issues. The teaching method teaches through a design model that reflects the spatial logic of the site environment and architecture, emphasizing the logical relevance of the design teaching process.

The major scope of the course preparation stage is mainly to set up four stages of the model (including the main entrance or center of the community, etc.), a large proportion (generally 1:200), and an overall site environment model that can reflect the logic of site order; The architectural model of the overall model of the implanted

site that explores the logic of the site environment and landscape order; the third, the overall structure of the architectural and environmental spatial logic that matches the site environment (combined with the reasonable unit combination of the site environment) Construct a design model of the external environment of the building (integration of the architecture space); Fourth, the model of the environmental outcomes of the building integrated into the large-area environment and the design of the surrounding small-site environmental results.

4.2 Teaching Procedures and Content Arrangement

4.2.1 The Extraction Cognitive Teaching Approach of the Site Environment Order Logics

Teaching content: Through the topic site visits and the large-scale environment model (if the community can best reflect the community entrance and the central square green space, etc., a 1:200 ratio can be used to implant the same proportion of the building results model), Intuitively guide the students of lower grades to learn the spatial sequence of cognitive venues, including spatial sequence, primary and secondary levels of open space and other relevant content. For the junior grades, the focus of teaching should be on the main entrance and exit location of the community or urban local environment, the direction of the flow of people, the open space of the community or the big environment of the city, and whether there is any connection with the design of the small space and so on.[5]

4.2.2 The Cognitive and Applied Teaching Approach of Kindergarten Architecture Spatial Logics

Through the analysis of similar cases, textbooks and other means, we can understand the spatial function types, spatial scales, and the basic constitutional logic of kindergarten architectures. The logic of its composition can be summarized from two aspects of natural order and social order by using inductive deduction, and it can put forward its own spatial organization logic in combination with the conditions of the project site. The illustration shows the spatial unit weaving method and its spatial organization discussed by student Xiao Hu.

4.2.3 The Strategic Teaching Approach of the Congruent Design of the Integral Order of Architecture and Site Environment Logics

The integration of the architecture and site environment logical order means that the architectural space order should be harmoniously integrated into the site environmental order, and form an overall site environment space with other building or site environment components. Its design strategy should include the strategic logic attribute of the architectural space and site environment, the alignment design, the scale logic matching design, and the modal logic matching design.

The logical design of the architecture space and site environment function refers to the design that the space function attributes such as dynamics, privacy, and public of the building space should be matched with the functional attributes of the large site environment. The construction and the surrounding small site environment must be practical. At the same time achieve maximum space benefits.

The logic matching design of architecture space and site environment scale means that the scale of the architecture space should match the scale sense of the surrounding architectures and the environment, neither abruptly nor oppressively, nor is it due to smallness and deficiencies.

The logical matching design between architecture space and site environment ambiguity refers to the echo and match relationship between the architecture space form and the site environment and the existing forms of the architecture through the design.[6]

In teaching process, the above strategies and design approaches should be used in conjunction with the characteristics of the junior grade students to carry out relevant teaching approaches. For example, students are required to master the matching of functional attributes through teaching, to understand the spatial scale matching design, and to understand the possible approaches and means of modality matching design.

4.2.4 Module and Model Congruent Counterpoint Design Teaching Approach of Kindergarten Architecture and Large Site Environment Order Logics

Kindergarten architecture logic should be consistent with site logic from functional attributes, scale relations, and modal relationships. The main function unit of the kindergarten is made into a flower mud or foam module model (the dark green part is the module of the kindergarten's functional units), and the layout and alignment design are performed on the site environment model so that the functional attributes of the two are aligned. Scales and relationships are consistent, modal relationships echo each other, and students intuitively understand the integral design process of spatial logics.

4.2.5 Organization and Construction Integrated Design of Kindergarten Architecture and Site Environment Spatial Logics

Kindergarten architecture space (inside) and site environment (external) space organization and interior and exte-

rior integration of space construction are designed, and the two complement each other and integrate into each other. Space-based integration design mainly refers to the intrinsic link between the spatial organization logic of the architecture and the surrounding site environment and the overall design. It also includes ethical order, functional logic, scale logic, and modality relationships, and at the same time, the surrounding of the architecture. The site environment should form a buffer and transition between the site environment and the architecture space.[7] The spatial constitutional design means that the constituent elements and constitutional forms of the space and space in the environment surrounding the architecture and its surrounding areas should have intrinsic connections and be integrated in the design.[8] Through that process, students are fully aware of the internal and external correlations between architecture space and site environment space and the relevance of design techniques.

4.2.6 Result Design Teaching Approach of Kindergarten Architectures Integrated into the Landscape of Large Site Environment and Their Surrounding Small Site Environment

Through the integration of a large site environment and a result model that includes the design of a small site environment (which can be performed in conjunction with computer-based solid modeling), students can further understand the relationships between the site environment and the architecture space and recognize the significance of the integral design.

5. Conclusion

The Conclusion contains summary and improvements of teaching characteristics.

5.1 Summary of Teaching Characteristics

(1) Emphasize on method teaching.

(2) Emphasize the controllability and intuition of the design process.

(3) Emphasize the authenticity of the course site environment and the sense of presence of the design.

(4) The logical relevance and procedure gradualness of the course link settings.

Each design process of model control has a strong pertinence, and there is a strong logical relationship between the teaching links, meantime with the front and back courses related to each other; teaching procedures are arranged at every level, whose links can give students a step that can be achieved through hard work, and thus students can gradually grasp the related approaches to combining the site environment to start designing.

5.2 Improvements of Teaching Characteristics

Architecture and site logic model teaching approach effectively helps students to recognize and deal with the logical relationships of the site environment, but at the same time, the design based on the existing spatial model also constrains the exploration of the essential needs of the kindergarten, which requires the reinforcement of the kindergarten unit space and its organizational design in teaching to encourage students' creative aspirations.

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