

## Research on the Reflection of Green Building Education Thoughts in the Elements of Architectural Space

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**Abstract:** With the continuous development of China's society and the continuous improvement of the economic level, people's requirements for architecture are no longer satisfied with the housing in the traditional sense, but put forward higher requirements for the use of architectural space components in architectural design. Because buildings are industries that consume more energy, they are also the main source of pollution for various types of pollution. In order to meet the concept of sustainable development, people have proposed the idea of green building in the process of urbanization. Based on this paper, the characteristics and application of building space constituent elements are analyzed firstly. Secondly, the concept of updating education is an effective means of green building development. Then, from the education of college talents, cultivate green building management talents, so as to meet the construction ecology. The demand for civilization promotes the sustainable development of society.

### 1. Introduction

Construction activities are energy-intensive and resource-intensive, environmental impacts and devastating production activities. In addition to a large amount of energy consumption such as heating, cooling and lighting during the use of buildings, a large amount of raw materials and non-renewable resources are consumed in the production and transportation of building materials, and a large number of environmentally-damaged pollutants are discharged; during construction and demolition The massive energy consumption, as well as waste, noise pollution, etc., are enormous damage to the environment. As far as China is concerned, the three major industries with the most energy consumption in China are construction, industry and transportation. In addition, the continuous increase in the total amount of construction brought about by the vigorous construction in recent years, as well as the improvement of living standards, the improvement of living comfort requirements, the building energy consumption has shown a sharp rise. The energy consumption in the use of buildings accounts for 30% of the total energy consumption of the whole society. If coupled with the energy consumed in the production process of building materials (16.7% of the total energy consumption of the whole society), the energy consumption related to buildings will account for the total society. 46.7% of energy consumption. The annual consumption of building materials in China is about 5 billion to 7 billion tons, and the waste, sewage and air pollution emitted by buildings are increasing year by year. It can be seen that the impact of buildings on the environment is enormous, and the ecological, energy-saving and green issues of the building are imperative. In the process of architectural design, the design measures adopted by the architects are of great significance for the sustainable development of the building.

The design of the architectural space is to be accompanied by a large number of spatial elements to obtain a pleasant sensory experience and a beautiful and spectacular feeling [1]. Therefore, the architectural space and the constituent elements have the beautifying characteristics, and the spatial layout scheme is optimized and designed to improve its application. Value, which gives people a better visual effect, is a factor that people value when choosing a living space. In addition, it is the

embodiment of the practical function of the building space. People choose the practical characteristics of the building space when selecting. The splicing and collocation of the space constituent elements must conform to the basic conditions required for the practical functions, especially in the industrial building. The space design is very significant. The perfect combination and combination of the elements in each area to meet the requirements before the production work can help to improve work efficiency, which is the practical characteristics of the spatial elements in architectural design. Finally, on the basis of practicality, architectural space designers should further utilize the space, improve the design plan, and deeply analyze the relationship between the constituent elements of each space, and rationally combine and match, not only to be practical, but also to pay attention to people's The sensory experience will not cause obstacles and adverse effects, allowing limited space to display greater application value [2-5].

In the new era, people's demand for interests is not purely immediate, but more important is long-term interests. Naturally, the emphasis on environmental protection and sustainable development is more important. People have already made themselves and nature. Relationships are defined as a harmonious coexistence relationship, rather than the original transformation and uncontrolled use relationship [6-9]. The development of society cannot rely on the uncontrolled use of energy and resources. The attitude towards the ecological environment cannot be the original "post-polluting governance", but it should take a coordinated and sustainable economic, social, cultural and ecological environment. The road to development [10]. Judging from the current use of resources and energy, it is undeniable that buildings are industries that consume a lot of energy and are the main source of pollution for various types of pollution. Therefore, solving environmental resource problems, environmental pollution problems and building energy consumption problems The effective means is to update the concept of training talents and cultivate green building management talents so as to meet the needs of building ecological civilization and promote the sustainable development of society [11].

Since the 1990s, green building management talents have gradually been recognized in China, but there is still a large space for development in terms of effect. The green building management talent training model suitable for China's national conditions still needs constant exploration. Most of them Architectural type colleges and universities focus on the education of professional building knowledge [12], and do not involve too much green building content, which causes the scarcity of relevant knowledge systems, and students do not form a complete green awareness. There is no accurate understanding of green buildings, there is no opportunity for green practice, and it affects the green education of building management talents. Under the premise of applying the architectural space constituent elements in architectural design, this paper draws on the training strategy of foreign green building talents, implements it from the perspective of green building technology, and analyzes China's green building management based on China's national conditions and specific social needs. Talent training mode.

## **2. Method**

### **2.1 The Characteristics of the Building Space**

Aesthetic characteristics The aesthetic characteristics refer to the architectural space needs to meet people's aesthetic needs and aesthetic identity to the greatest extent. With the continuous improvement of living standards, people pay more and more attention to the rationality, functionality and externality of the internal structure of the building. Coordination between the aesthetics of the construction. In order to better ensure that the architectural design can conform to the trend of the times and meet the needs of people's production and life, it is necessary to use the spatial elements in the architectural design. (2) Practical characteristics: The practical characteristics specifically refer to the building space needs to have the function to meet certain practical purposes. The building space has certain practicability, which is the most primitive and essential requirement in architectural design. With the continuous development of the economy, the functions of buildings are becoming more diversified, and various functional buildings are constantly emerging. In order

to give full play to the value of the building itself, different designs must be made for the different characteristics of its functionality. (3) Rationality characteristics: The characteristics of building space rationality are proposed on the basis of practical characteristics. In order to better meet the various needs of people in production and in daily life. For example, when designing a residential building, the orientation of the building can be designed to open the window so that the indoor air circulation can be made smoother while satisfying the lighting requirements of the people, and the surrounding environment and the living space can be well integrated. . (4) Versatility characteristics: The versatility of architectural space is proposed on the basis of rationality characteristics, which mainly includes two aspects: one is the combination of functional and practicality of the building itself; the other is the aesthetic appreciation of the building itself. Coordination between the surrounding environment. Reasonable design can make the building better meet the diverse needs of people, so that the building Can Better Serve People.

## **2.2 The Application of Architectural Space Elements Promotes the Development of Architectural Design**

The architectural elements are mainly composed of a little bit, line, face, body, light and shadow. In the design of architectural engineering, by using the elements of architectural space to provide more diversified changes and rich design elements for the space, external space and internal space within the architectural project, it is of great practicality in ensuring the design of the architectural space. On the basis of the unified design style, the artistic beauty is constantly improved, and the people are more surprised and more comfortable. Therefore, the application of architectural space elements in architectural design has positive significance. Therefore, the application of building space constituent elements to the positive significance of architectural design has promoted its development. (1) The architectural space constituent elements can enrich the overall effect of the construction project. The construction project provides the function of living and living in the survival and development of human beings, laying a foundation for the physical and mental health for human beings to better engage in economic production. By applying architectural elements to architectural design, the elements and style of the overall space can be effectively enriched. Different from the simple living and living functions of the ancient living space, the building space constituent elements are used to modify the functions in the existing building space, and to better present them, ensuring the use of functions intact while bringing people Come to a better artistic beauty experience and enrich people's spiritual enjoyment. (2) The application of building space constituent elements can make the design of building space more beautiful. In the design work of building space, the designer integrates the engineering environment and the specific needs of the owner, and realizes the building space composition within the flexibility range allowed by the design work. The better application of elements in the architectural space guarantees excellence in the function display of any detail, providing the owner with a refined and beautiful living place, and building a good style while being the aesthetic area of the owner. Bring a better experience. Therefore, the application of architectural space components in construction projects can make the overall architectural space more beautiful and aesthetically pleasing.

## **2.3 Characteristics of the Training Mode of Green Building Management Talents**

With regard to the research on the characteristics of the cultivation mode of green building management talents in China, different scholars have studied the training mode of green building management talents in China according to different training target models, different angles and different classification basis. The characteristics of China's green building management talent training model is that from the macroscopic perspective, the cultivation of green building management talents, professionalism and development prospects have been highly concerned by the entire construction management industry and even the entire society. The current mode of absorption of green building management talents is directly transformed by traditional construction management practitioners, providing short-term training on green building knowledge and green building technical knowledge, and then practicing according to specific building management projects, self-learning application of green building technology. The advantage of this type of talent

is that the knowledge base of its own building management is solid and has rich practical experience. However, due to its own training or self-study time, it has not been systematically educated, and there are still specific applications in green building technology. Some lack, green building knowledge learning is only at the surface stage, there is no forward-looking thinking, the green knowledge system is not perfect, and some green building management talents still stay at the level of green building management is energy-efficient building. Therefore, it is necessary to rely on the strength of schools, society, and enterprises to train green building management talents to cope with the current demand for green building development. By setting up relevant green education majors and green courses for systematic training and learning, it can effectively alleviate green building talents. Insufficient and important choice for optimizing the green building talent team.

## **2.4 National Macro-Control**

The training of green building talents abroad has been supported by the national education department and relevant departments. For example, Japan and the United States have facilitated from a legal point of view, which has emphasized the serious legal status of green buildings and the country's green building. Attitude, this is also the key to the implementation of green building management talent training in the country. Among these countries, the United States has a particularly strong advantage. It is funded by the national government to help the development of green building engineers, to ensure adequate funding for local development, and then to determine the methods and regulations for the cultivation of green building engineers from a national perspective. Work is carried out nationwide. The UK has developed and issued a series of regulations by the education department and relevant departments to clarify the teaching objectives, teaching environment and scientific research results of university green building management talents. The state supports policy and funding. Therefore, from the perspective of China, we should also support the cultivation of green building management talents from the perspective of national legislation to ensure the feasibility within the country, and then the teaching objectives and teaching plans of each university will follow Changes in national laws and policies have been adopted.

## **2.5 Integrating Green Building Technology into College Teaching**

Green education itself does not exist independently, or should it be combined with disciplines, especially from the construction industry. From the perspective of industry, green education should be integrated into the discipline in the usual teaching activities. In other words, in addition to the usual classroom teaching, students should increase their practical opportunities in green building technology so that students can. On the combination of knowledge and practical knowledge, green building knowledge is integrated into subject education, and this person is better improved. The cultivation process. The choice of the form of green education abroad is not a simple theoretical study, but a rational. The combination of practice and practice not only allows the study of theoretical knowledge, but also allows students to have time to practice and truly understand the lesson. The knowledge explained in the church. Australia's green building management talent training model has been adhering to theoretical knowledge learning. And the principle of equal emphasis on practice. From the perspective of the teaching methods of colleges and universities, the professional environment that is closely related to the environment. Basic education courses are offered, while other majors offer environmental practice courses that allow students to go out of the classroom to conduct field research and then learn knowledge. Among the major universities in Japan, relatively strong professional disciplines are health workers. Majors in studies, environmental engineering, environmental chemistry, and construction studies, paying attention to the theoretical knowledge that students will learn in practice. Application capabilities. The implementation of the British green building management talent training model in education is more systematic and note. Re-training students' practical ability, systematically analyzing the objectives of environmental education and teaching, including knowledge, Three aspects of skills and attitudes. It can be seen that in the process of developing green education in China, it is necessary to teach in school. Combined with off-campus teaching, combining teaching, research and practice to better improve the quality of green education in colleges and universities. Let green education truly integrate into the education

work.

### 3. Conclusion

The application of architectural space elements in the overall design of construction projects provides them with better aesthetic effects, enhances the artistic height of the architectural space, and provides a positive impetus for the overall development of the construction project. Through the combination of architectural elements and architectural elements, it is possible to design a variety of styles such as strong sense of hierarchy, rich space and warmth, and provide people with a more humane and artistic place to live. From the perspective of China, it is also necessary to support the cultivation of green building engineers from the perspective of national legislation, to ensure the feasibility of green building engineers to cultivate in the country, and then the training plan for green building engineers will follow national laws, Changes are made to the policy changes. In the process of cultivating green building engineers in China, we should also strengthen cooperation between schools and society, give full play to their respective functions and characteristics, and learn from the advanced experience of foreign countries in order to better realize the green education work of various universities.

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