Highlights in Art and Design
ISSN: 2957-8787 | Vol. 4, No. 1, 2023

Education Building Space Design in China's New Teaching Model

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Abstract: Under the background of China's new teaching model, many schools in China have changed a lot of teaching methods, teaching models, and teaching skills. Therefore, it is important, creating more and more suitable learning and practical space for students, providing new directions for students' future, and maximizing the overall education level of the school. Therefore, modern schools should be based on the new teaching model. According to the more reasonable design and education building space, they should create a better teaching space for students. Different learning activities have different requirements for space. Curriculum design must be more flexible and practicality, to meet the various needs of students' different learning activities, making students more immersed in classroom teaching. The article outlines the new teaching model in China, and then proposes the transformation method based on the design space design of educational architectural space in the new teaching model, as well as the principles and strategies of education building space design based on the new teaching model.

Keywords: New Teaching Model; Educational Building; Space Design; Teaching Space.

1. Introduction

As a material carrier of educational architectural space, it carries different forms of educational actions. Its adequate determines the success or failure of educational behavior. The change in educational behavior will also affect the form of education space. With the development of education, educational concepts and educational methods have different degrees of development and changes. Education building space also needs to be adjusted accordingly to adapt to the education model in the new situation and achieve the best education effect. In view of the development of the reform of education in primary and secondary schools and its relatively open and free educational environment, the exploration of the education space of primary and secondary schools has been carried out for a long time, and it has achieved application results worthy of promotion. With the reform of the education system and the update of educational concepts, educational behavior based on new concepts will inevitably conflict with traditional education space, resulting in students' learning, activities and living needs cannot be met. Therefore, it is necessary to design a new education building space based on the new teaching model.

2. Overview of New Teaching Mode

Compared with traditional classroom teaching models, the main features of the new teaching model can be summarized as creating situations, stimulating emotions, active discovery, and active development. Creating context and inspiring emotions reflect the characteristics of teachers 'teaching. Through the careful design courses, teachers create different learning scenarios and stimulate students' learning emotions. During the teaching process the process, this is the indicator of the overall effectiveness of teaching, fully stimulates the students' learning motivation, make them form a strong desire for learning, and generate strong internal motivation. Active opening and active development are a systematic and integrated collaborative education model. It adopts a flexible and diverse teaching method to actively participate in the learning process under the guidance and encouragement of teachers, discover, put forward, discuss and solve problems, realize the realization, realize it Positive, comprehensive, and sustainable high -quality learning.

2.1. The Change of Education Building Space Design based on the New Teaching Model

In the context of the new teaching model, the design transformation of education building space is mainly reflected in four aspects.

2.1.1. Diversification

With the development and popularization of computers and the Internet, the new teaching model is gradually penetrating into the classroom, breaking the traditional teaching method. Facing the development of technology and needs, the educational structure has begun to develop in a more diversified direction.

2.1.2. Scale

From the development of ancient schools to the huge educational building in modern society, Chinese educational buildings have undergone quality and quantity changes. The current educational building gradually combines students' needs with design. While meeting the needs of learning, the innovative design model makes the educational architectural style very different. It not only assumes teaching functions, but also inherits the teaching culture. Since the development of education in Chinese education, the form of architecture has been increasing, architectural design has been continuously updated, and the scale of architecture has continued to expand.

2.1.3. Open

Traditional education is often centered on teachers. Students only need to listen carefully in class. This learning model emphasizes the importance of classroom teaching too much, resulting in spatial division, forming a closed state, and

restrictions on teacher -student interaction to a certain extent. Under the new teaching mode, learning activities are characterized by students -oriented, independent research, require appropriately open learning space, relax students' behavior and psychological state, and encourage students to learn and discuss freely.

2.1.4. Humanize

Under the new teaching mode, the learning space has the characteristics of humanization, interest, a sense of domain, and a sense of belonging. Students get fun while gaining knowledge, and develop physical and mental. Interesting facilities can also form interesting space, bringing students a comfortable and happy experience, promoting students' growth, and inspiring their enthusiasm for learning.

2.2. Principles of Education Building Space Design based on the New Teaching Mode

Multi -functional space principle. High -quality school education requires students to combine life with learning. The principle of multifunctional space is to meet certain conditions in the same space, exert different functions, and can change the use of space, meet the needs of space, and meet different learning needs.

Principles of inclusive space. Compared with large building space, the interior configuration design must meet the requirements of large and small space applications at the same time. Among them, the layering of large space provides the possibility of the flexibility of space. The integration of large space and small space can increase the practicality of educational buildings.

The principle of space remaining. The capacity of educational facilities depends on the number of students who can accommodate the school, and the design of educational buildings should be left with a lot of space. Taking 30 students in each classroom as an example, the classroom space should be designed according to the standards of 45 students. This can not only allow all students to move freely, but also improve the utilization rate of the classroom.

2.3. Education Building Space Design Strategy based on the New Teaching Model

As an important carrier of the school, teaching space is the core space of school architecture. How to effectively implement the modern concept of teaching space and directly affect the effect of education reform. The teaching space that adapts to contemporary education concepts can be analyzed from different stages of children's growth and different teaching methods.

2.3.1. Independent Teaching Space Design

Autonomous learning space is a completely open learning space mode. The entire classroom is separated by a flexible combination of fixed walls and flexible sliding walls. There are relatively fixed spaces, such as concentrated teaching spaces and bathrooms, but also have flexible interest space. For different learning needs, let groups, groups, and individuals move freely. This space model is suitable for low grades. In addition to classroom space, personal learning space also includes multi -functional learning space, teacher space and living service space and other supporting spaces.

Classroom space. Classroom space is an important part of learning space independently. It must integrate and open with multi -functional learning space, expand the scope of learning activities, and allow students to learn and live in a more free and rich space. At the same time, the classroom space should also maintain flexibility to adapt to teaching activities or curriculum design, the number of users and other situations. Student class chairs should have the following characteristics: flexible combination; adapting to ergonomic needs of students in different body types; have appropriate storage and suspension functions; beautiful and durable. The arrangement of the classroom table and chairs should be flexibly arranged according to the form of teaching and need.

Multi -functional teaching space. Multi -functional teaching space is an open space that students often use. If you can coordinate with the planning of the exhibition content, it will help students to learn, observe and analyze the environment they are in anytime, anywhere, and continuously stimulate students' thinking and learning interest. The display space in the multi -functional teaching space is best set around the surrounding settings to maintain the integrity of the space. The exhibition space is mainly organized by teachers and students in conjunction with the learning curriculum, which is more interesting and educational. The planning of multi -functional teaching spaces should be considered to consider the configuration of related storage equipment to ensure that various learning tools can be properly displayed and stored.

Teacher space. The lack of privacy, small space, and unable to rest due to distraction are common problems in teachers' space. Therefore, teachers' space planning must have certain confidentiality, so that they can concentrate on planning courses or rest, and they are not easily disturbed. At the same time, it provides teachers with supporting room space that can watch classroom activities at any time.

Living service space and other supporting spaces. Service space includes washing, boiling water, etc. Try to set up the surroundings of the classroom as much as possible to meet the needs of teachers and students to meet the needs of teachers and students. At the same time, consider the needs of drainage, non -slip, etc. on the surrounding ground to avoid hidden safety hazards. Set storage space in the classroom and place students' clothing and school supplies. You can also consider designing some space with ritual sense as a place for interactive communication. Carrible design at the entrance and exit meet the needs of different people, and make the design more humane and reasonable.

2.3.2. Class Group Teaching Space Design

The 2 to 4 classrooms are combined into a classroom. The new class combination is based on the new educational content and teaching methods, and the characteristics of students in different stages are studied. Each class has its own classroom and a public open space, which can share larger space or resources, gather teachers to do professional teaching and learn together.

The teaching space of the class includes classrooms, auxiliary space and combination classrooms, and the additional spaces of classrooms and auxiliary space include halls, corridors and storage rooms. One of the three major changes of the focus of quality education is the combination of classroom teaching to classroom teaching and student extracurricular learning. Therefore, the auxiliary space is not only used for evacuation of people and storage, but also for students' thinking, learning and emotional communication. The exploration of this part of the space is mainly to open the open space and connect with the learning space to provide flexible learning space.

2.3.3. Seismic Structure Design

School buildings in some areas need to consider seismic

design. Effective control of structural majors can make the education building space more reasonable and secure. Due to the requirements of architectural functions and aesthetics, the rules such as "L" and "Y" are usually used. There is a contradiction between the diversity of the building and the earthquake resistance of the building. Therefore, structural engineers must involve the early stages of building planning in advance. On the one hand, the structural requirements are considered as much as possible in the planning, and the factors that are conducive to earthquake resistance are added to give full play to their functions. On the other hand, adapt to different building layouts and strive to formulate structural rules. Adjust the height and vertical section of the building. The horizontal and vertical stiffness of the structure should be uniform, and the cutting size and material thickness of the vertical resistance component should gradually increase from top to bottom to avoid sudden changes in the horizontal stiffness and carrying capacity of the horizontal resistance components.

It should meet the requirements of earthquake resistance stipulated in relevant regulations and consider the following issues. In educational buildings, there are many multi-storey teaching buildings in kindergartens and primary and secondary schools. Seismic level is B. When the local defense level is 6 to 8 degrees, the seismic strength of this range should be increased by 1 degree. In principle, a solid surface should be selected to avoid possible base damage during weak earthquakes during earthquakes. The architectural form is unified and correct. Whether it is horizontal or vertical, the structure layout should be aimed at the geometric size, quality, and stiffness of uniform, symmetry and rules. Ensure the strength and viscosity of structural components. Structural vibration damage is caused by the vibration of the earthquake structure. Therefore, the seismic structure should minimize the vibration energy transmitted from the basic, and the structure should have sufficient strength, stiffness, and viscosity to prevent unbearable damage.

3. Conclusion

In order to provide a good learning space, we should pay attention to the design of architectural space. Taking the classroom where the students are located as the learning object, provide the correct design concepts and methods to create more and better space. The classroom is designed as a multifunctional space, and different learning activities have different requirements for space. Therefore, professional courses must be more flexible and adaptable to meet different learning activities. Through the above design, the classroom space is more flexible and practical, and students are immersed in classroom teaching.

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