



Theme: Analysis of Experience in Design and Reconstruction of Educational Institutions in Different Foreign Countries

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Abstract: *The experience of designing and reconstructing children's educational institutions in different countries of the world is considered. The creation of school facilities and their role in the environment, urban planning, children's health, economic and social spheres are revealed.*

Keywords: *children's town, kindergarten, schools, architectural design, urban planning, landscape, Waldorf School, Debrezen International School, Fuven Primary School, "Green" School.*

Date of Submission: 18-4-2022

Date of Acceptance: 20-5-2022

Introduction

Over the past few years, the attitude to the quality of housing in our city and adaptation to modern requirements is advancing. Active work is being done in the field of construction, regional development programs are being developed using the world's best practices, new standards for the creation of public and recreational facilities are being adopted and tested. But there is no answer as to how safe, comfortable, understandable and fun the city we are developing is for children.

The World Health Organization (WHO) is calling for effective solutions to public health problems, investing in children's health and development, ensuring that their interests are taken into account, protecting their rights and building a future in which they can live. Today, a large portion of the world's population already lives in cities, and a third of the entire urban population is children [6].

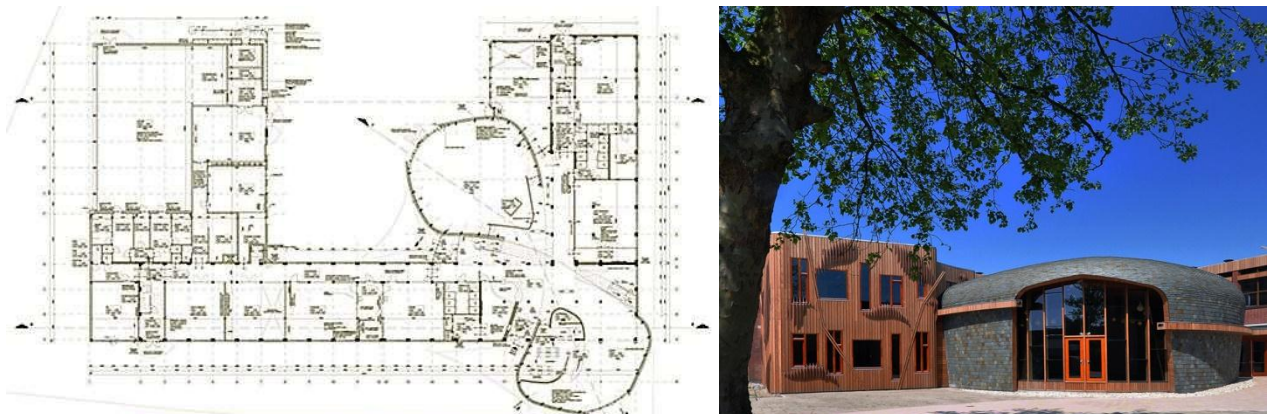
Large cities were organized for the city-building group, and children sometimes visited the centers for periodic and episodic needs. The daily needs of the children are organized within the residential districts, and the kindergartens and schools are located within their radius of service, depending on the population density. During the holidays, there are summer camps, boarding houses or sanatoriums for children.

Main part. Today, the issue of adapting the environment to the interests and needs of children has long been raised in the world: various ways of working to improve the urban environment are being developed and constantly replenished with new solutions, small architectural forms. We know that the creation of a safe and environmentally friendly environment is a complex task at the city level, but the concept and principles of "Children's City" have been developed in several foreign countries [6]. However, nowadays, school-age children spend most of their time in educational institutions. In this regard, it is important to improve preschools and general education schools in order to ensure that the health and development of children and their interests are taken into account.

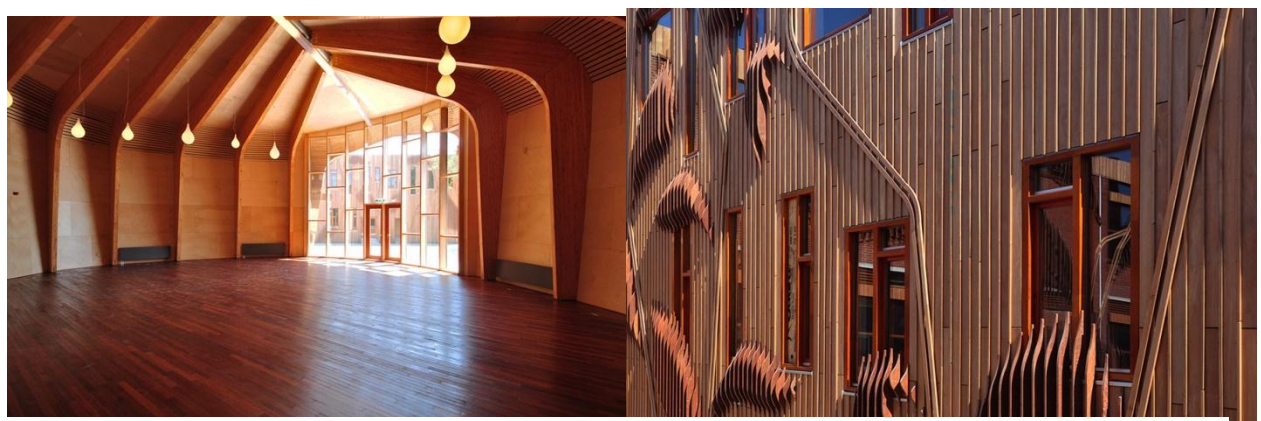
The environment has a huge impact on children's health and mental development. In this regard, the solution of architecture, design and landscape architecture, which includes the task of educating children, has a positive effect on the psychology of students and helps to develop their minds. Today, good results can be obtained by studying the experience of foreign countries that aim to develop education in their homeland.

There are educational institutions in the world where the individual approach to students and freedom of movement are important. The conditions created for the needs of their students, and for the environment in which students are built, to meet its conditions at the required level, must be close to reality. The great achievements of the reconstruction of school buildings can be seen in the Waldorf School in the Netherlands.

The Netherlands, Waldorf School. Mare College is a Waldorf school in the Netherlands, and in the 1960s, its location was planned to be relocated due to new city plans in Leiden. However, a reconstruction project developed by the project companies for a school building for 450 students, which was neglected in the 1960s, it has become a school that is now comfortable and environmentally friendly with modern solutions. Interesting new forms designed by the architects to expand the building have enabled the school to create a healthy, warm and stimulating learning environment with a unique look and the use of natural materials. The entrance to the building and the new central hall are located inside a special shape of the main building called the “lemniscate” (butterfly curve, Pic.1). The facade of the main building is covered with bricks, the rest of the buildings are covered with unusually shaped wooden panels, and special patterns are created with the help of shadows. The courtyard has a children’s playground and 32 rooms in the building, including a dance hall and organic cooking rooms, and classes that teach painting and textiles [9].



Picture 1. Waldorf School Project in the Netherlands



Picture 2. Waldorf School Project in the Netherlands

School in Paredish. Portugal. The school is located in Paredish, northern Portugal, and one of the distinctive features of the school is that it has a kindergarten on the first floor and an elementary school on the second floor. The layout of the school building and its functionality, designed by architects, are very carefully designed. The access roads for schoolchildren to the kitchen or sports grounds do not intersect with the paths of the children in the kindergarten, and the service facilities on each floor are approached with an individual solution.

The school building is covered with vertical wooden panels and has an elongated shape with a chaotic arrangement of windows. The dynamic sloping roof of the school, combined with the rhythmic composition of the windows, creates a cheerful mood, attracts children to creativity and develops their imagination [9].



Picture 3. School in Paradise. Portugal

Today, most primary schools in European countries are surrounded by kindergartens. Socio-economically, the convenience is created for families with many children who use the services of this organization, that is, for those whose children from one family have to attend kindergarten and school, this kindergarten and primary school are located in one place. In terms of urban planning, the location of educational institutions in one place increases the range of services. Architecturally, the separation of education and upbringing through floors ensures the safety of children.

Hungary, Debrecen International School. The school is located in Nagyerdo, near the city park of Debrecen, Hungary's second largest city, in a development and popular residential area called Pallag. The Debrecen International School is designed for up to 500 children and its project has a semicircular shape, which means protection, union and unification. The perimeter of the building is surrounded by forest and blends so naturally that the forest has become part of the projected object.

Kindergarten and elementary school students have individual access zones, and in the landscape of the building, a courtyard for individual young children has created a completely independent world. On the first floor there is an administrative zone, a meeting hall and a dining room, the second floor is completely reserved for classes. Classrooms are arranged in such a way that a long corridor forms a dynamic connection between them. There is an indoor gym and an outdoor stadium in the school yard. The school building and its courtyard show a special spirit of clarity and seriousness, which encourages children to take responsibility for their education [8]. Both the Paredish School in northern Portugal and the Debrecen International School in Hungary have separate rooms for young children and school-age children through the floors, with group rooms, service rooms and even a separate area in the organization's landscape. The walls will be replaced by colored polycarbonate panels, transparent and bright colors will create a sense of pleasure and courage in children, as an aesthetically pleasing space.



Picture 4. Hungary, Debrecen International School

Reconstruction of Fuvén Primary School, China. Teaching children from an early age to care for nature, to love it, and to be literate in nature in general is an important educational process today. The Chinese Fuvén School took the lead in this regard. The main purpose of the reconstruction of this educational institution was to create better conditions for education and improve the environment, thereby bringing a special brilliance to the children's education system and improving its quality. The reconstructed educational institution has now led to the discovery of unique aspects of architecture with its unique style and bright colors. The design of the renovated school, the roofs are adapted to the surrounding villages and nature. Stairs, rope bridges, and tunnels bear a resemblance to a winding road in the mountains. It is surrounded by bamboo forest, fruit trees, mountain flowers and a small pool. School is like a cozy home where children grow up in the bosom of nature, which means that there are no strict restrictions and requirements.

Using colored polycarbonate panels, tiles, bamboo-shaped wooden planks, folding windows and doors, these conveniences create a comfortable, healthy, artistic, natural living space where children can watch mountains, clouds, wind and stars [10].



Picture 5. Fuvén Primary School School, China

The Green School in Paris, France. In September 2014, a magnificent Green School opened in the business center of Boulogne-Billancourt, on the western outskirts of Paris.

The unusual project was developed by the French architectural studio Chartier Dalix to bring elements of nature into the urban environment. The primary school building is a multi-storey

building with a green roof. The 12-meter building has 11 primary classrooms and rooms for 7 kindergarten groups, a sports complex for children and adults, and a unique landscape on each floor.

Architects have sought to restore biodiversity in urban areas by not only improving the quality of the environment there, but also creating a complete ecosystem that serves as a “visual aid” for children.

The building has been tasked with rehabilitating a fully functioning ecological system as an educational institution, meaning that it has become a place where children can realize their potential, as well as places of interest to the local population. The uniqueness of this school is that it has a wall along the perimeter, which retains the tone of the landscape of a large area. This small area has separate play and educational areas for kindergarten and school age children. [7]



Picture 6. “The Green” School in Paris

Conclusion.

In foreign countries, a great deal of attention is paid to educational institutions in the reconstruction of cities, and the solution of the most pressing issues and problems today is not enough to renovate the school building and grounds. The main focus, such as the reconstruction of the Waldorf School in the Netherlands, is not only to beautify the building, but also to create a new entrance to the school and a new hall.

Currently, the problem of urban planning can be solved by creating a single school for kindergartens and primary schools in the regions, using the experience of the Paredish School in northern Portugal and Debrecen International Schools in Hungary.

Depending on the climatic conditions of our country, the use of color in the repair of recreational areas, corridors, activity halls of school facilities, using the experience of the Chinese school of Fuven, raises the mood of *the children*.

The Paris School Project examines the conditions under which schools and kindergartens can be exposed to disease in cities, its architecture, safety solutions, ecosystems and biodiversity. A small area can be achieved by developing a landscape architecture and design that has both a kindergarten and a developmental school, as well as its own function.

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