

**THE ARTICLE EXAMINES THE FEATURES OF THE
ARCHITECTURAL ORGANIZATION OF THE SCHOOL OF THE NEW
DIRECTION USING THE EXAMPLE OF THE IRKUTSK SMART
SCHOOL**

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ABSTRACT

The article examines the features of the architectural organization of the school of the new direction using the example of the Irkutsk Smart School. A clear and so far the only example of building a school based on this concept is a school in the Irkutsk region. The features of the project, designed for more than a thousand students, are a compact low-rise closed planning composition of buildings with openness, thanks to extensive panoramic glazing into the surrounding nature. The features of the project, designed for more than a thousand students, are a compact low-rise closed planning composition of buildings with openness, thanks to extensive panoramic glazing into the surrounding nature.

KEYWORDS: *Smart School, Architectural And Planning Composition, Development Perspective, Flowing Spaces, Progressive Trends, Original Architectural And Imaginative Solutions*

INTRODUCTON

A distinctive feature of modern design and construction practice is a noticeable intensification of the search for new directions in the architectural organization of secondary schools. Among them, the development trend of the so-called “Smart Schools” comes to the fore. For the first time in the entire post-Soviet space, the concept of "Smart Schools" originated in Russia in 2014-16. Its main goal was to create a variable form of education, in which each student has the maximum opportunity to receive his own individual education, i.e. the educational system is, as it were, adapted individually for each student. This concept assumes that each student develops his own educational attitude, the ability to set goals for himself, look for resources to achieve them, learn everything that will have to be faced in adulthood. It also assumes the absence of special selection, on the contrary, it proclaims the representation for children of a wide variety of abilities, equal opportunities on the basis of social justice. A clear and so far the only example of building a school based on this concept is a school in the Irkutsk region. For its construction, a plot of 20 hectares surrounded by a natural beautiful natural landscape was allocated near Irkutsk near the Chertugeevsky Bay, not far from Lake Baikal. The construction of the school complex was carried out according to the project of the Danish company CEBRA, the winner of the competition, in which more than 50 architectural bureaus took part. Specific local climatic conditions and the surrounding natural landscape have determined a closed volumetric-spatial composition with open recreation developed in its center (Fig. 1).



Figure 1. Smart school, general view

Therefore, the composition of the school. The complex included a special settlement for foster families, which houses 30 comfortable cottages and apartments for foster families, each of which is engaged in raising 5-6 children. All this taken together creates a generally comfortable environment for the learning and development of children from 3 to 18 years old with the aim of their maximum adaptation to the new living space. The features of the project, designed for more than a thousand students, are a compact low-rise closed planning composition of buildings with

openness, thanks to extensive panoramic glazing into the surrounding nature. This architectural ensemble with a peculiar design combines, in addition to residential buildings, art and craft workshops, sports grounds and concert halls. All this is surrounded by a landscaped area filled with gardens and parks, sports, playgrounds, and a unique natural landscape, with which, thanks to the use of continuous panoramic glazing in the floor arranged in the recreational areas and living rooms of residential sectors, a visual connection is established between the surrounding landscape and the interior. creating the illusion of flowing spaces (Fig. 2). For the sake of greater expressiveness, the technique was used Rice. 2 Visual connection between the interior and the surrounding landscape [1].



Figure 2. Visual connection between the interior and the surrounding landscape

"Play" geometry of window openings of arbitrary sizes, which seem to scatter along the facades of objects in a free and random order (Fig. 3).

Small cozy windows illuminate bedrooms, and spacious window openings for classrooms and libraries. Against the background of actively used wooden cladding of the facades in red, they give the appearance of the complex some originality and vivid figurative expressiveness. As conceived by the authors of the project, the students of the school will take an active part in zoning and filling the surrounding space, Fragment of the facade to train and train your landscape design skills here.



Figure 3. Fragment of the facade

In a smart school, sectors of different functional purposes are united by a large-scale courtyard space intended as a single center for communication between schoolchildren (Fig. 4).



Figure 4. The device of continuous glazing of the courtyard facade of the school

As a result of this review, it can be assumed that the progressive trends developed in this school inspire optimism that this experiment, bold in its novelty, will give good shoots in the modern design and construction practice of general education schools not only in Russia, but also far beyond its borders. , including Uzbekistan. There is also hope that an unprecedented experiment will become a good "infectious" example for a "breakthrough" to improve the architectural organization of future schools in Uzbekistan, both in ensuring comfortable conditions for students to stay in the surrounding school environment, and in educational technologies and reaching the level of world standards. [2]

REFERENCES:

1. Saidov AA. The basic principles of increasing the density of multi-story residential development. *European Journal of Molecular & Clinical Medicine*, 2021;8 (1):732-740.
2. Saidov AA. The Planning Solution and Landscape Design of Courtyard Spaces in Multi-Storey Residential Buildings of Uzbekistan. *International Journal of Advanced Research in Science, Engineering and Technology*, 2018;5(11):7243–7248.