

## FEATURES OF THE LANDSCAPE ORGANIZATION OF THE TERRITORIES OF PRESCHOOL EDUCATIONAL INSTITUTIONS

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### ABSTRACT

Current trends in the design of kindergarten territories are revealed, features and problems of landscape organization of modern children's institutions are revealed.

**Keywords:** preschool educational institution, kindergarten, landscape and architectural analysis of the territory, educational environment, landscaping

### INTRODUCTION

The first kindergarten-school-type institution for toddlers was organized in 1802 in New Lanark (Scotland) by Robert Owen. For the first time the name "kindergarten" was given by the German pedagogue Friedrich Wilhelm August Fröbel to a preschool institution in the city of Bad Blankenburg in Germany in 1837. From 1851 to 1860, kindergartens in Prussia were banned.

The main tasks of the preschool educational institution are: protection of life and strengthening of children's health; ensuring the intellectual, personal and physical development of the child; implementation of the necessary correction of deviations in the development of the child; familiarization of children with universal human values; interaction with the family to ensure the full development of the child [1].

Preschool education is considered the first stage of a child's education, since it is during this period that the comprehensive development (physical, artistic and aesthetic, intellectual, creative, speech, communicative, etc.) of the child is ensured, cultural values are introduced, the formation of a worldview, interests, own opinion is ensured, morality and etiquette are instilled. Many scientific studies show that children who received quality education at preschool age continue their education in higher institutions. But at the same time, many countries do not take the necessary measures at the legislative level for the upbringing and education of preschool children. In our country, preschool education is not compulsory, but the Government is taking the necessary measures to ensure that education for children is generally available and guaranteed free.

Strict requirements and standards have always been established for the buildings and territory of the children's institution. When comparing preschool institutions in Europe and Russia, you can find many differences. Kindergartens in Europe have formed individual traits and features, they strive for the most harmonious integration with the environment. Kindergarten buildings have a large glazing area of the first floors, the premises have a large area, eco-logical materials are used in the construction.

In the conditions of Uzbekistan, it is recommended to design preschool educational institutions of a general type for no more than 385 places. It is possible to exceed the recommended capacity of preschool educational institutions by prior agreement with the Ministry of Preschool Education and the State Sanitary and Epidemiological Supervision Service. The capacity and structure of the preschool complex should be determined by the design task. Pre-school educational institutions with a capacity of less than 1,35 places are

recommended to be designed for cities, urban-type settlements and rural settlements. Preschool educational institutions with a capacity of no more than 25 places are allowed to be designed when reconstructing individual residential buildings and transferring them to the category of non-residential premises. Preschool educational institutions are completed in groups taking into account age and taking into account the time of stay of children according to Table 1.[ 2].

Table 1.

Group	Age	Number of seats in the group
Manger	up to 3 years	not more than 20
Preschool	from 3 to 7 years	not more than 25
Junior group	from 3 years to 4 years	not more than 25
Middle group	from 4 years to 5 years	not more than 25
Senior group	from 5 years to 6 years	not more than 25
Preparatory group	from 6 years to 7 years	not more than 25
Short Stay Group		not more than 30

**The number of age groups in preschool educational institutions should be determined by the design assignment, taking into account the demographic data of the construction region.** Complexes of preschool institutions should be designed on the basis of centralization of the catering unit, line-by-line, service-household, medical premises, as well as premises for physical education and music classes of children. It is recommended to provide a free-standing catering unit, line-by-line, connected to the main block by an insulated passage (Fig.1).



Fig. 1.Landscape organization of the territory of the preschool institution.

Preschool institutions are usually represented by typical buildings, individual projects are expensive and are rarely used, more often in large cities. However, comparing the trends in the development of the architecture of children's educational institutions in our country and abroad, we can single out the main common feature: the desire to create conditions in which children will grow up and study in the most comfortable environment for them. The reasons for the differences lie in different approaches in the education system, in the peculiarities of climatic conditions, in the inconsistency of the regulatory documentation governing construction. It is necessary to form a new educational space-architectural and landscape educational environment based on the democratic principles of the new paradigm of education, the ecological approach and the sustainability of the "green" architectural and landscape environment [3]. Currently, there are already new trends in the design and

construction of preschool institutions: the desire to create a highly artistic exterior of the building; inclusion in the project of premises of a new functional purpose, dictated by the modern moment (not only group cells should be included); increased attention to strict compliance with regulatory requirements; construction of complex educational buildings [4]. Most of the territories of kindergartens in the city of Yoshkar-Ola of the Republic of Mari El are quite similar. Features and problems of their modern landscape organization are considered on the example of "Kindergarten No. 64 "Sun". The territory of the kindergarten has an area of 3,615 hectares and, as it is located inside the quarterly building, is protected from the negative impact of the main streets. There are 5 functional zones: economic, main entrance, walking (group) grounds, sports, educational and experimental. Each children's group has its own playground, corresponding to the size of the standards [1]. The route to the main entrance to the building is most actively used, it is short and convenient, has an asphalt surface. Secondary are the routes to the playgrounds and the economic passage. Around the building there is a passage for equipment with a width of 3.5 meters, but there is no turning platform due to the small area of the territory. Coverage asphalt concrete, side stone is absent in accordance with the standards. Outsiders are not allowed on the territory, the entrance is made through the intercom after agreeing on the goals and determining the identity of the incoming. Group areas are provided with a minimum set of small architectural forms-sandbox with a lid, a house, a table with benches, a canopy-gazebo and various loopholes. Also, those remaining after the removal of emergency trees were transformed into various figures or decorated. Most of them are wooden structures, car tires and other safe improvised materials are used. They are cared for and painted annually. There is no coating on the areas of group sites, in fact it is a strongly degraded and trampled lawn. The assortment of woody and shrubby vegetation is poor (11 species, 22 pieces of trees, 35 pieces of shrubs, 45 epaulettes of a hedge), but provides a comfortable insolation regime, in the shade the territory of 152 is in the afternoon. Plants are resistant to recreational loads, most effectively exhaust the air. So, rowan ordinary has a high level of gas absorption; common lilac, birch hanging, Maple American rowan ordinary effective in the accumulation of nitric oxide and ammonia; petiole oak, small-leaved linden, sharp-leaved maple and hanging birch are highly effective in capturing carbon black, and small-leaved linden, smooth elm and lilac common-sulfur compounds; Hanging birch is characterized by high oxygen productivity, smooth elm is effective in dust collection [5-6]. There is a floral design - flower beds, where both perennial (10 taxa) and annual crops (3 taxa) are used. The following shortcomings have been identified on the territory:

- engineering communications pass through the territory, which is not permissible according to the standards;
  - educational and experimental and sports zones are quite typical and unattractive for children, their reorganization is required;
  - the equipment of children's playgrounds is able to provide rest and classes for preschoolers only thanks to the enthusiasm of the staff and active parents, who annually paint and renovate it based on their capabilities;
  - the main entrance area has no decorative design;
  - the territory does not have a buffer zone along the perimeter;
  - asphalt concrete pavement requires repair;
  - the range of woody plants and floral decoration is very standard and monotonous; - sporadically present thorny and berry plants (mountain ash, European gooseberry, common cherry), but outside the areas of playgrounds;
  - hedges that limit group areas require reconstruction (rejuvenation, replanting of fallen elements);
- Tree species located in the area of group sites suffer from soil compaction.

It should be noted that the staff makes a lot of effort to create a comfortable environment for children, but, nevertheless, the territory requires a comprehensive transformation with the involvement of financial

resources and specialized specialists for correction in accordance with modern requests. The territory of the kindergarten at present should perform not only the necessary basic functions of children's stay in the fresh air, but also contribute to their interaction with each other, with the teacher, with the environment, with nature.



Fig. 2. The territory of the kindergarten is currently with the environment and nature.

To do this, it must be content-rich, transformable, multifunctional, accessible 153 and safe. For preschoolers, both motor activity and the possibility of solitude are important. Sensory perceptions—colors, shapes, sounds, tactilesensations—are desirable as an opportunity to know the world. Thus, the reconstruction of the territory should go in the following main directions:

- improvement of ecology and microclimate of the territory (wind and acoustic modes): formation of a high-quality buffer zone, measures to improve the condition of existing plantations (rejuvenation, pruning, loosening, soil filling, formation and restriction of stem circles, transplantation of missing elements of hedges), introduction of additional plants in the assortment that improve the composition of the air;

- ensuring the safety of the territory: repair of hard coatings and equipment, removal or isolation of unacceptable plants;

- creation of an attractive visual and educational environment: decorative design of the main entrance, as the face of the preschool, the development of an educational terrain course with a complex of mini zones (a sensory garden, flower spots and flower beds with a variety of flowers, areas of evergreen plants, beautifully flowering shrubs, a play area on the asphalt, a bird canteen, a vegetable garden, etc.), the development of a harmonious color filling not only through the painting of equipment, but also plant products;

- provision of motor activity, games: updating the equipment of the sports area and playgrounds.

The main problems of preschool education in Uzbekistan remain the lack of places in preschool institutions due to the growth in the number of children, the high need for highly qualified personnel, and the high growth of children with disabilities. Opportunities in comparison with the creation of compensatory groups on the basis of general development institutions, an increase in children enrolled in inclusive education, insufficient mastery of the Uzbek language by children due to the multinationality of children, the development of additional approaches to meet the needs of pupils and their parents, the need for innovative use of high-tech information tools for teaching and developing preschoolers, the degree of competence of students Higher educational institutions, focus not on subject activity, but on the needs of the pupil himself, etc. An important stage of the analysis is the summary and grouping. Summary is a sequence of operations to summarize single facts in order to combine them into a set in order to identify typical features and patterns. Dividing many units of the set into groups according to certain characteristics. Changes in values can be displayed by statistical graphs (using conditional displaying numerical quantities and their ratios).

The dynamics of changes in the indicators of the chronological series can be represented by a change in the level of the series (comparison of the indicator on the accounting period with the previous base level).

Absolute growth shows the rate of increase or decrease of the indicator over the analyzed period of time. The growth rate is the ratio of the indicator in the reporting period to the baseline, expressed as a percentage. The growth rate is calculated by the ratio of the absolute increase in the indicator to the base indicator.

### Literatures

1. Romanycheva N. V. *Sovremenniy detskii sad – dom radosti doshkolyat* / N. V. Romanycheva. – Text : direct // *Modern kindergarten: trends and prospects of development: a collection of articles of the scientific and practical conference of pedagogical and managerial workers of the preschool.* – Krasnodar, 2018. – S. 14-19.
2. Departmental building codes "preschool educational institutions" ikn 03 – 18 mdo ruz Ministry of Preschool Education of the Republic of Uzbekistan. Tashkent – 2018-5 p.
3. Egoshina E. Y. *Planning structure and landscaping of school territories: problems, needs and modern trends* / E. Y. Egoshina, N. E. Serebrya- 154 kova. – Text : direct // *Readings in memory of T. B. Dubyago : a collection of articles mezhduna. Conf. /ed. by I. A. Melnichuk.* – St. Petersburg : Izd-vo Polytechnicheskogo un-ta, 2016. – S. 106-110.
4. Kharchenko L. N. *Modern tendencies in the design of children's preschool institutions* / L. N. Kharchenko. – Text : direct // *Urban planning, architecture, art and design : theses dokl. intl. nauch.-prakt. konf., 6-9 oktyabrya 2009 g.* – Rostov-on-Don : In-t arkhitektur i iskusstva, 2009. – S. 352-355.
5. Abramova D. A. *Diagnostics of the stability of tree plantations of the city of Nizhnekamsk in the conditions of technogenic pollution* / D. A. Abramova, N. E. Serebryakova, V. N. Karasev. – Text : direct // *Readings in memory of T. B. Dubyago : a collection of articles mezhduna. Conf. / ed. by I. A. Melnichuk.* – St. Petersburg : Izd-vo Polytechnicheskogo un-ta. – S. 29-34.
6. Serebryakova N. E. *Analiz ozeleniya prishkolnoi territorii* / N. E. Serebryakova, O. A. Ignat'eva. – Text : direct // *Readings in memory of T. B. Dubyago: a collection of articles in mezhduna. Conf. /ed. by I. A. Melnichuk.* – St. Petersburg : Izd-vo Polytechnicheskogo un-ta, 2019. – S. 81-86.
7. Kayumov, K., & Israyilov, E. (2022). *Renovation of the Urban Environment- Historical Precedents.* *Czech Journal of Multidisciplinary Innovations*, 10, 25-34.
8. Kayumov, H., & Israyilov, E. (2022). *ENVIRONMENT AS THE BASIS AND PERCEPTIONS OF MONUMENTS OF ARCHITECTURE AND HISTORICAL CITIES OF UZBEKISTAN.* *Academicia Globe: Inderscience Research*, 3(10), 112-125.
9. Saloxiddinova, D. Z. (2022). *Architectural environment of Samarkand: traditions and modernity.*
10. Saloxiddinova, D. Z., & Zhuraev, Z. Z. (2022). *The Role and Significance of the Use of Wood Materials in the Architecture and Construction of Traditional Houses of the Indigenous Peoples of Uzbekistan.* *Czech Journal of Multidisciplinary Innovations*, 10, 83-92.
11. Fozilova, Z. Q. (2023). *Irrigation System of Samarkand City.* *JOURNAL OF ENGINEERING, MECHANICS AND MODERN ARCHITECTURE*, 2(2), 64-68.
12. Phi-lis'tine, Z. Q. (2023). *Analysis of the main plans of The City of Samarkand.* *Journal of Architecture, Engineering and Modern Technology*, 2(1), 117-122.
13. Rakhmanova, M. B. (2023). *Analysis of Foreign Experience in Designing Architectural and Spatial Solutions of Medium-Rise Residential Buildings.* *Eurasian Research Bulletin*, 16, 142-145.
14. Maxmatqulov, I. T., & Sherqulova, D. G. (2022). *SYMBOLIC MEANINGS AND CHARACTERISTICS OF PATTERNS AND DECORATIONS IN CENTRAL ASIAN ARCHITECTURAL MONUMENTS IN THE XIV-XV CENTURIES.* *Eurasian Journal of Academic Research*, 2(2), 744-749.
15. Maxmatqulov, I. T. (2022). *Scientific analysis of the Erkurgan historical and archeological complex in Karshi district of Kashkadarya region.* *Journal of Architectural Design*, 4, 27-31.

16. Maxmatqulov, I. T. (2022). Proposals for the Use of Historic Shopping Malls in Uzbekistan for Modern Purposes. *Middle European Scientific Bulletin*, 21, 198-201.
17. Mahmatqulov, I., & Sherqulova, D. (2023). SAMARQANDDAGI ZAMONAVIY SHAHARSOZLIK OB'YEKTLARIDA NAQSH VA BEZAKLARNI QO'LLANILISH ASOSLARI. *Eurasian Journal of Academic Research*, 3(1 Part 4), 161-166.
18. Mahmatqulov, I., & Mavlonov, M. (2023). TURAR-JOYLARNI ME'MORIY-LANDSHAFT TASHKILLASHTIRISH VA LOYIHALASHNING ZAMONAVIY AN'ANALARINI TASHKILLASHTIRISHNING ILG'OR AN'ANALARI. *Eurasian Journal of Academic Research*, 3(1 Part 5), 27-31.