

THE POSITIVE VALUE OF THE MINI-LABORATORY ENVIRONMENT IN IMPROVING THE EXPERIMENTAL RESEARCH ACTIVITIES OF CHILDREN 6-7 YEARS OLD

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Abstract. *This article describes the positive significance of the creation of mini-laboratories in preschool educational institutions for the intellectual development of children 6-7 years old, the validity of experimental samples by state requirements and the state curriculum, high-quality preparation for school. It also highlights the analysis of raw materials for mini-laboratory activities, the recommendability of equipment on a standard basis, safety instructions for teachers and children, the expected positive results of experimental research activities of children 6-7 years old.*

Keywords: *preschool, observe, direct, understand, presentation, theory, approach, study, process, seminal, worldoutlook, purpose, keep, education, laboratory activity, exact and natural scineces, development, save experiments, equipment, logical and free thinking.*

Within the framework of this topic, many scientists of Uzbekistan conducted scientific research. In particular, F.R.Kadyrova (preschool pedagogy), T.L.Huruvaliyeva(improving the methodology for introducing preschool children to the environment), N. Sh. Abdullayeva, I.I.To ychieva, M.A.Rasulkhoyayeva (acquaintance with nature), D.T.Karimova (formulating the first concepts of time in children), N.Ravshanova (environmental education in preschool institutions), G.E Dzhhanpeisova, G.A.Amirova (aesthetic perception of nature), K.A.Eshpolatov, M.M.Rizayeva (educational activities in the development centers "Science and nature"), G.G.Ismanova (cognitive-research and experimental-research activities) is being studied.

From research in the formation of environmental education in preschool children Z.M. Borisovna, A.L. Tretyakov, Svetlana Nikolaevna (young ecology program). Sh. Gasankadievna, E.N. Piskunava, I. Valerevna, M.M. Prishvin (education of ecological culture), Y. Baldirav

Improving the content of the education of the world around children of preschool age, environmental education researched by U. Altmann, J. Davis, R. Fisher, M. Ferreira, R. Velea & G. Shamburlini, Hanne Gale, Dr. Lauri Tuami, Dr. Ritva Laakso Manninen, Tapio Lahtero, Ph.D, M. Somerville.

Children's research is one of the techniques for the development of the cognitive process of preschool children. Experimental research activities combine all types of activities (speech, art, elementary mathematics, plot role-playing games, research, understanding of the world, intelligence, observation, ...) and all aspects of upbringing. The creation of a mini-laboratory for experiments of children 6-7 years old in preschool educational organizations can be an optimal solution to the implementation of the above types of activities in practice.

The child's competencies, particularly, the child's knowledge, skills and abilities, as well as values, sufficient for the targeted performance of tasks characteristic of a particular age period, are embodied in five areas of development.

- ✓ Formation of physical development and a healthy lifestyle;
- ✓ Socio-emotional development;
- ✓ Speech, communication, reading and writing skills;
- ✓ Development of the cognitive process;
- ✓ Creative development

The field of "development of the cognitive process" is divided into the following sub-areas:

- ✓ Intellectual-awareness skills;
- ✓ Elementary mathematical skills;
- ✓ Research-cognitive and effective reflexive activity;

The tasks and requirements for the development of preschool children in experimental research activities are included in the field of “ development of the cognitive process”, in the sub-field “research - cognitive and effective reflexive activity”. Experience is one of the types of activities that the child loves and is interested in, through safe and fun experiences, children will have the opportunity to draw conclusions generalized through observation, conversation, play, comparison, free and logical thinking.

Preschool educational organizations provide for the creation of a small laboratory room and space in order to improve the activities of the Center ” Science and nature”.

The principle below is taken into account in the organization of the small laboratory:

- * safety of children's life and health;
- * rich of content; uniqueness;
- * multi-functionality;
- * ease of use;
- * emotional well-being and comfort;
- * the fact that it is based on the requirements of the state standard and SanPin.

The purpose of the study is the organization of laboratory areas for the experiments of children of the preparatory group for school in preschool educational organizations in the qualitative organization of education of children of early age. Through safe experiments, it is necessary to interest children in the exact and Natural Sciences, to form an ecological culture, to understand the interesting environment, to form the skills of research knowledge, to allow free and logical thinking, to qualitatively prepare for school.

Research task

To study the conditions for the organization of laboratories for the experiments of children of the preparatory for school groups in preschool educational organizations, as well as to analyze the experiences of leading countries;

Development of integrated improvements taking into account child’s base competencies and development areas in experimental developments;

To enlighten the safety recommendations that pedagogue and children should pay attention to during the experiment;

Development of pedagogic psychological ways, forms, means and methods of organization of laboratories for children of preschool groups in preschool educational organizations;

To enlighten the equipments, materials, tools necessary for the organization of a laboratory for the experiments for children of preschool groups;

Taking into account the fact that the experimental developments are adopted to the local conditions of the regions of Uzbekistan – in accordance with cultural and historical values, national and regional traditions, features related to nature, climate, peculiarities of industrial development in the territory;

Introduction of interesting and safe experience developments in experimental state preschool educational organizations;

Research Principles

Absolute observance of the rules of safety of teachers and children on the territory of the laboratory;

Enlightening the safety level of equipments and materials used in the experimental process.

When organizing a research laboratory in a preschool educational organization, it is necessary to take into account the specific requirements for the environment, educator and child. In this case, it is necessary to comply with regulatory legal acts, including state requirements, state training program, SanPin rules and norms.

Safety regulations in the research laboratory

For educators

Always

- ✓ During the experiment, use safety eyeglasses; (special laboratory view mark)
- ✓ Wear special protective clothing;
- ✓ A safe headdress and closed shoes are recommended;
- ✓ Follow the neatness of the form;
- ✓ Listen to and respect children's opinions;
- ✓ Plan the experience process in advance ;
- ✓ Familiarize children with safety rules before each experimental activity;
- ✓ Wash hands after experimental activity;
- ✓ Use all materials and raw materials comprehensive and careful;
- ✓ Approach responsibly;
- ✓ Ventilate the room after the experiment.

Never

- ✓ Not to leave children alone in the laboratory room in the apartment;
- ✓ Not to use hazardous, sharp, suspicious materials and raw materials;
- ✓ It is not recommended to eat and drink;
- ✓ Not to use electric and fire tools.

For children

Always

- ✓ Use only the materials you need; (laboratory materials are shown in the picture)
- ✓ Be friendly to your groupmates; (keeping the hands of the children together with smile)
- ✓ After the experiment, wash your hands; (painting of hand washing with water)
- ✓ Listen carefully to the educator and follow his instructions; (picture of the ear and the educator)
- ✓ Maintain peace by hearing the bell ring voice; (bell ring voice)
- ✓ During the experiment, use safety eyeglasses; (special laboratory view mark)

- ✓ Wear special protective clothing;
- ✓ A safe headdress and closed shoes are recommended;
- ✓ Follow the neatness of the form;

Never

- ✓ Do not touch anything suspicious; (X sign to electricity)
- ✓ It is prohibited to taste and smell; (forbidding sign on eating)
- ✓ Do not use collars and long hair ties;
- ✓ Do not touch the materials until you are allowed;
- ✓ Do not run and play during the experiment;
- ✓ During the experiment, do not eat, drink or chew gum;
- ✓ Do not look directly at the tube or flask, but rather look from the side;
- ✓ Do not take laboratory materials and raw materials with you into the group;
- ✓ Do not pluck plants in the reserve and greenhouse;
- ✓ Do not scatter the sand on one of you, especially in your eyes.;
- ✓ Don't put things in your mouth;

Favorable conditions and environment for conducting experiments in the research laboratory of preschool educational organizations should be provided. All equipment and instruments in the research laboratory must be at a height that reaches the height of the child and be able to use them without obstacles. The environment in the research laboratory should also be favorable for the educator and children (pupil). In the research laboratory, it is important that the furniture equipment is placed unhindered so that the child can move freely, to his physical condition.

It should also be remembered that experimental activity is clearly shown to all children. All containers, tools, materials, raw materials, didactic materials in the research laboratory are required to be safe.

Conclusion: in preschool educational organizations of the Republic of Uzbekistan, the territory of the laboratory for children of the preparatory group for school has not been established, and the methodology of laboratory activities has not been developed based on the state program, requirements. The establishment of this project shows its positive and significant result in the field of preschool education of Uzbekistan. As a result of the project, a new method, and advanced technologies are used in preschool organizations, the development of talents from childhood is achieved, the possibility of the creation of small scientists and researchers is increased, children are allowed to think logically and freely, the awakening of interest in the Exact Sciences is achieved from childhood.

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