



Theoretical and Methodological Aspects of the Organization of Education Oriented on the Individuality of Children

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Article History	Abstract
Received: 26 June 2023 Revised: 05 September 2023 Accepted: 24 September 2023	<p>The article is devoted to the research of the theoretical and methodological aspects of organizing the process of education for children in a way that is focused on their individuality. In addition, based on the results of the achievements of scientists of different countries in the field of pedagogy and psychology, as well as cognitive neurosciences, scientific-methodical recommendations on determining the mechanisms of children's perception and organizing the educational process taking into account these data are referred.</p>
CC License CC-BY-NC-SA 4.0	<p>Keywords: Children, Education, Person-Oriented Education, Individual-Oriented Education, Child Psychology, Teaching Methods, Game, Nervous System, Brain Activity, Cognitive Mechanisms</p>

1. Introduction

In modernizing Uzbekistan, all conditions are being created for the growing up of the young generation to become healthy and well-rounded people and for their intellectual, moral, aesthetic and physical development. For this purpose, great attention is paid to the issues of providing preschool educational institutions with modern teaching and methodical materials and literary literature, as well as highly qualified pedagogues and specialist personnel, introducing innovations and advanced pedagogical technologies into their teaching process. The issue of education and upbringing of children of the age of A vivid example of this is the fact that special attention is being paid to filling pre-school educational institutions with modern teaching and methodical materials and literature, attracting qualified pedagogues and management personnel to the field (Decision, 2019). The effective implementation of these urgent tasks places a great responsibility on educators, stylists and psychologists of preschool educational organizations.

Main Part

It is an important step to provide modern education to children from preschool age, to actively develop them mentally, intellectually and socially, and first of all, to put into practice innovative methods of teaching and upbringing. One of such problems is the widespread introduction of innovative teaching technologies focused on the personality and individuality of the student in the educational process. For example, preschool educational institutions teach children the basic concepts of arithmetic using interactive methods, which form a permanent interest in mathematics. This, in turn, will stimulate children's interest in learning arithmetic, as well as early detection and purposeful development of their various abilities and special talents. It is known that the preschool period is not only a stage of preparation for school for children, but at this age, the foundations of individuality as a human being are formed and developed in a child - creative imagination, figurative thinking, imitation of others (often adults), control of one's own behavior and "social" feeling. The most active point of

this development corresponds to the period before children reach the age of 5-6 years. Some scientists who have been conducting research in the field of pedagogy and pedagogical psychology for many years have stated that artificially accelerating the process of teaching children can accelerate the pace of children's development and have a negative impact on their personal development.

They believed that artificially speeding up the process of education and upbringing of children from a technical point of view could slow down the process of normal mental development of children, while accelerating their entry into the ranks of adults and the process of "social adaptation". The reason for this is that, in accordance with a strictly defined curriculum, they are required to master the specified knowledge and skills in classes with children who have not completed their mental formation in relation to their age, and such situations have shown that children's educational motivation "disappears" early and defensive neurotic reactions occur (Kandel, 2006; Gazzaniga, 2009); Kandel, 2006), Steven M. Platek, Julian Paul Keenan, Todd K. Shackelford (2007), Randall C. O'Reilly, Yuko Munakata (2009) development of brain components and systems obeying the basic neurobiological laws, they determined that they are activated only in concrete social conditions. Based on the analysis of the research results conducted by them, as a rational solution to this problem, we believe that it is important to focus on the need to take into account not only the personality of the child, but also the peculiarities of the organization of his brain activity in the process of raising and teaching children.

Based on this approach, since the development of the child's psyche by age is directly related to the growth and formation of the brain, it is important to take into account this "elegant" proportion when organizing the teaching process. The "elegant" of this ratio is that if it is used correctly and rationally in the teaching process, it ensures the active formation and development of mental, intellectual and social qualities, abilities and talents in the child, but the wrong influence on this process has a negative effect on the mental development of the child. scientifically based (Gulyamov et al., 2020). Below, as an example, we will analyze these "elegant" aspects of organizing the education of preschool children. It is necessary to take into account a number of important specific aspects for teaching children in preschool educational institutions. A.L.Sirotyuk's scientific researches specifically emphasized that in the organization of educational work with children of preschool age, the purpose of each activity should be clearly defined, and the achievement of specific quality changes in the organization of the cognitive process should be considered. According to the scientist, for the normal development of preschool children's psyche according to their age, educational activities should be focused on the child's personality and individuality (Sirotyuk, 2003).

Based on the above considerations, it can be considered that the organization of the teaching process through interactive game methods in order to have a positive effect on the development of the components and systems of the brain, will enable the creation of concrete social conditions for the active development of the child's psyche by age. It is known that the organization of the education of preschool children in the form of a class-lesson creates many difficulties in the process of adapting them to the educational environment. The main reason for this is that during the preschool period, the formation process of children's mental functions - attention, memory, imagination, logical thinking, emotional-volitional sphere, etc. continues actively. Therefore, it is recommended to use interactive game methods individually and in small groups when teaching preschool children, taking into account that their mental functions are still actively developing. Because games, toys, fairy tales and other types of creative activities actively develop individuality in children (Eremeeva, & Hrizman, 2001).

In teaching children of this age, it is appropriate to use interactive game methods rather than the classroom-lesson format. Teaching on the basis of interactive didactic games and materials makes it possible to organize education focused on the personality of a preschool child. Such educational activities arouse great interest in children, logical and creative thinking develops without excessive stress during the game, the skills of social activity and compliance with moral standards are cultivated, their perceptions of the natural and social environment are regulated, and the correct formation of concepts is ensured. For this, the educator should focus on what they can do with the help and guidance of adults, and not on what they can do independently when teaching preschoolers. The mechanisms of children's acquisition of new knowledge and formation of skills are mutually different. The main reason for this is that all children differ sharply in terms of the volume of

information reception and processing speed, the volume of attention and memory, the superiority of one or another memory system, the progress of perception processes, the way they imagine and understand existence, and "see the world" (Gazzaniga, 2009; O'Reilly Munkata, 2019). It is these differences that determine the individuality of children. Individuality is inextricably linked with the organization of brain activity - which of the hemispheres is of leading importance in the activities of human life. Because both hemispheres participate in complex cognitive processes, each hemisphere differs from each other by using different sign systems and cognitive strategies to receive and assimilate information with the help of its own unique language and symbols.

As a rule, rational-symbolic thinking is characteristic of left-hemispheres, so the tendency to perform analytical, classification, abstract, algorithmic, inductive operations is observed in such children. They are more communicative and active people than others because they prefer to work with problems and solve them in a logical way. Right hemisphere leaders prefer to review information and find solutions to complex questions intuitively. Due to the fact that the right hemisphere accepts images as a whole and perceives the world as a whole, such people are characterized by figurative thinking. In them, the feelings of modeling and designing in the visual space are more manifested, and they are active in identifying and inventing. Mixed-hemisphere types use both left and right hemisphere strategies depending on the situation. Synchronous operation of both hemispheres allows to significantly increase the efficiency of the human brain. Because the data analysis in mixed hemispheres is performed using the left and right hemispheres at the same time (Eremeeva, 2001). Based on the above, it can be recognized that taking into account these unique aspects of children in the process of education is one of the important factors in providing them with education and training. So, how can teaching be focused on the individuality of the child?

As a solution to this problem, we believe that it is appropriate to use the method of "Synthesized education" recommended by (Kuzmina, 2014; Gulyamov et al., 2020) - taking into account the organization of the functional asymmetry of the hemispheres. When using this method, the information provided by two subjects of the pedagogical process is directed to the consideration of the neuropedagogical uniqueness of children. For this, the subject of the pedagogical process focuses on performing inductive operations by expressing the data interpretation in an analytical, classification, abstract, algorithmic way. Presenting information in this way ensures that children analyze problems and look for solutions in a logical way. They look for specific evidence during training, draw conclusions based on this evidence, and try to put forward new ideas. The second time, by the subject of the pedagogical process, information and assignments are intended for students with emotional-emotional, figurative-intuitive thinking strategies, they are directed to perceive images as a whole, and think figuratively.

Educational tasks should be bright and emotional and include modeling and design in visual space. Information is presented in this way, i.e., the peculiarities of the thinking strategy of students with right hemisphere leadership are taken into account - a creative approach is focused on bringing complex information with internal conflicts into a coherent context, and the formation of creative qualities. Taking into account the individual characteristics of children in the presentation of educational information ensures the mutual compatibility of individual lateration profiles of pedagogues and students during the education process. This, in turn, helps to develop the synchronous functioning of the cerebral hemispheres, as well as deep and complete absorption of knowledge.

The synthesized educational method based on hemispheric asymmetry is implemented in the following manner during the training session.

1. In the preparatory phase:

- assign tasks to children in advance;
- determining the neuropedagogical terrain of the group;
- determining the ratio of children in the group according to the leading hemispheres;
- formation of two lecture texts taking into account the features of the strategy of the hemispheres for one training session;
- selection and preparation of tasks and educational tasks, visual and technical materials for use in training.

2. At the main stage:

- monitoring children's reception and processing of information from the point of view of the leading hemisphere during training, as well as the performance of tasks and assignments;
- try to activate all representative systems of children when they perform tasks;
- implementation of neuropedagogical cooperation by dividing children with different laterality into pairs or small groups and giving them a mixed task.

3. At the final stage, the children first draw conclusions based on their hemispheric leadership, and then draw conclusions specific to the second hemisphere. Such organization of the educational process has a positive effect on children's full acquisition of knowledge, increasing their cognitive activity, formation of "literate thinking", activation of the non-leading hemisphere, and development of hemispheric synchronization. This directs learners to involve existing knowledge in the process of thinking for "literate" thinking of information, to further form existing educational information and to increase cognitive activity. Approaching the process of teaching children in educational organizations from the point of view of the peculiarities of the organization of the brain makes it possible to organize individually oriented education.

For this, educators should have comprehensive and deep knowledge of the child's personality, take into account his psychophysiological characteristics as well as his neurological capabilities and aspects. Therefore, another important aspect that should be paid attention to in the education of preschool children is to direct this process to take into account the individuality of the child, the organization of brain activity and the peculiarities of cognitive mechanisms. At the same time, it is necessary to take into account the gender differences of children when organizing the teaching process. Because in the process of socialization of boys and girls, their speech and thinking develop at different speeds and volumes. Most boys' brains develop slightly slower than girls'. The central nervous systems of boys and girls are not ready to absorb information at the same speed (Gulyamov et al., 2020; Yunusova et al., 2016).

For example, in the process of teaching numbers and letters to children under 5 years old, if there are deviations in the normal individual development of their organism, such deviations can cause situations such as emotional-personal deviations and speech disorders. It would be appropriate for educators and child psychologists to organize neuropedagogical correctional activities based on a special program with children of this category.

In order to effectively organize the process of teaching children, the following conditions must be met:

- 1) to determine the peculiarities of the organization of children's brain activity and mechanisms of perception.
- 2) ensuring that the educational process is directed to the individuality of the child;
- 3) differentiation of teaching methods and didactic assignments taking into account the peculiarities of children's mental development and age, as well as gender differences;
- 4) use of interactive game methods in teaching children individually and in small groups;
- 5) training is aimed at children's acquisition of knowledge based on logical thinking, based on the principles of play and interactive conversation;
- 6) the level of complexity of educational tasks should be designed so that children can perform them not independently, but with the help and guidance of pedagogues and adults. Fulfillment of these conditions enables preschool children to develop competencies such as active interest in learning, independent finding and use of information, understanding of simple connections between objects and events, and perceiving them as a whole.

2. Conclusion

Organization of the educational process, taking into account the fact that the development of children's psyche by age is directly related to the growth and formation of the brain - to accelerate the processes of their social, mental and intellectual development, to absorb information with understanding and interest, to organize and correctly form their ideas about nature and society, and in their mental development along with qualitative changes, the problems of early identification of

creative thinking, abilities and talent and their purposeful development are solved. In order for educators and teachers to effectively use methods and technologies that take into account the organization of the brain in the process of teaching children, they should be able to identify this "elegant" uniqueness in each child by means of neuropedagogical diagnostic methods and organize their practical activities taking into account the mechanisms of information acquisition.

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