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FORMATION OF COGNITIVE INTERESTS OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS THROUGH EIDETICS

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Abstract. The article emphasizes that Eidetic is one of the effective methods of forming the cognitive interests of preschool children with special educational needs (SEN). Eidetic methods include chain, acroverbal, pictographic, phonetic associations, the method of loci (based on visual associations), nonverbal associations, paradoxical verbal transformations, enlarged structuring of educational material. Their use helps to transform incomprehensible information into an achievable and understandable form to them. Due to Eidetic, various analyzers are involved in cognitive activity at the same time. The child can see and hear and touch, smell, and even taste. At the same time, children's mastery of new knowledge is based on already well-known images, so Eidetic creates a boundless play space in which children's imagination has a wide field for development. The authors note that a characteristic feature of the cognitive interest of preschool children is a selective focus on interest in phenomena, objects, and environmental processes. For students with special educational needs the subject of cognitive interest, as well as for their peers with normative development, is not the whole environment, but only some of its elements, which are personally relevant, attractive, and valuable. The cognitive interest of preschoolers can be both situational and sustainable. It occurs in the process of performing a certain action but may disappear immediately after its completion. At the same time, with systematic pedagogical support, it can become a relatively stable personal quality of a child with special educational needs.

An important positive aspect of the use of Eidetic in working with preschool children with SEN is that it creates a psychological situation of success, activates the neurodynamics of brain activity. As a result, the problem areas of the central nervous system and children's deviant behavior are corrected. Eidetic performs a dual developmental and educational function. Due to its application, such mental processes of personality as attention, imagination, memory, different types of thinking are developed, and thus the mastery of educational material is activated. Thanks to the methods of Eidetic, all the child's analyzers are involved, which allows him/her to see, hear, touch, smell, taste, and perceive something new and unknown through the channels of learning about the surrounding reality available to the child with SEN.

Keywords: cognitive interests, children with special educational needs, educational technology, Eidetic.

1. INTRODUCTION

In the current conditions of globalization and integration into the international educational space, it is important to introduce pedagogical innovations in the educational process [1]. The problem of management of educational innovations, in particular in the field of providing quality services is actualized. Mostly it concerns inclusive education institutions [3].

An important direction in the organization of educational activities of preschool children with special educational needs is the introduction of effective methods of developing their cognitive interests. Such methods include Eidetic, which ensures the humanization of the educational process and the implementation of a child-centered approach to its organization.

“The growth of crisis phenomena in society is, in our opinion, not so much of an economic nature as a decline of spiritual and human values. These factors affect negatively the attitude towards children with special needs, who require constant informal attention and care of parents, teachers, public and religious institutions. The reality of life itself raised the question of introduction of inclusive education” [7].

Eidetic, as an innovative educational technology, aims to improve a person's ability to remember, reproduce and actively use the information received. Even though Eidetic has originated relatively recently, the history of its application dates back to the distant historical past of human civilization. The use of Eidetic for educational purposes began in antiquity - the term “eidōs” came from ancient Greek – “look”, “image”, “picture”, “idea”. Among the ancient Greeks, it was widely believed that people think using eidōs – images, the loss of which causes forgetfulness. In the following historical and cultural periods, Eidetic was described in scientific works and practical applications of many classics of philosophical thought.

“Eidetic model of growth (EMG) is a form of psychotherapy developed for people with intellectual disabilities (ID). EMG is based on the theoretical tenets of eidetic psychotherapy of Akhter Ahsen, which uses eidetic imagery as its major therapeutic tool” [6].

The concept of “eidetics” was introduced into the scientific circulation of the modern era by the Viennese physician V. Urbanchych. In 1907, he first described the existence of humans’ subjective vivid images. However, a thorough scientific study of this phenomenon was carried out by German professor E. Jensch later – in the 20- the 40s of the twentieth century. Together with a group of like-minded people, he began researching the phenomenon of eidetic. The essence of his scientific concept is that a human can reproduce a vivid visual image of the object, even when it has ceased to act on the senses. Researchers have shown that all children are eidetic, while 40% of them are explicit and 60% are latent [2].

In modern Ukraine, the introduction of Eidetic is carried out by E. Antoshchuk – the founder of the Ukrainian School of Eidetic “Mnemosyne”, the author of such manuals as: “8 lessons of effective memorization”, “Meet your memory”, “Let’s learn to remember and recall” etc. The following effective methods of Eidetic have been practically proved: chain, acroverbal, pictographic, phonetic associations, the method of loci (based on visual associations), nonverbal associations, paradoxical verbal transformations, and enlarged structuring of educational material. Ukrainian researchers argue the effectiveness of Eidetics to solve various educational tasks: 1) the child’s personal development (O. Senina, L. Lebedenko) 2) development of preschool children’s cognitive sphere (A. Besedina); 3) preschool children’s memory development (M. Nelina); 4) preschool children’s speech development (G. Vatamanyuk); 5) intensification of educational activities while studying Ukrainian literature (V. Ulishchenko); 6) development of primary schoolchildren’s creativity while learning a foreign language (K. Anikienko); 7) development of students’ memory and literacy at lessons of German (O. Lisova); 8) optimization of the study of mathematics (O. Masyuk, L. Titarenko, N. Sinopalnikova), etc.

2. RESULTS AND DISCUSSION

In modern classification, there are about thirty methods and techniques of Eidetic, which are based on the child's figurative thinking, the use of various graphic images, games, and exercises. The application of these methods with children is a creative and free process, and at home – a pleasant, interesting and useful form of family leisure. Each of the methods of Eidetic is based on a set of rules: 1) a person does not have a bad memory, but there are insufficient skills of using it; 2) although memory will not replace the mind, but contributes to its development; 3) multiple repetitions are the stepmother of learning; 4) it is better to see once than to repeat a hundred; 5) do not paint yourself in gloomy colors, because the attitude to yourself is similar to drawing, etc. [5].

The most famous and therefore the most widely used methods of Eidetic in the educational process are Cicero's method (the method of loci), the pictogram method, sequential associations, animation, phonetic associations, the entry method, figurative hooks, graphic improvisations, abbreviations, and others.

The Cicero method or the method of loci is based on the mechanism of effective memorization. Its essence is that the recollection of information is closely related to the place of its origin. Ancient orators and philosophers never gave speeches with notes, because they were guided by the method of loci when memorizing. Visual associations are actively used in this method. To do this, you need to have a clear idea of the subject to remember. Then its image must be combined with the image of a specific place that is easy to remember. Writing educational material on the board, posters, and diagrams on the walls of the classroom allows you to easily remember the information.

The name of the method "Pictogram" has developed from the concept of "pictogram" (from the Latin "pictus" – drawn and the Greek "γράμμα" – a written sign, dash, line). This is a schematic drawing depicting certain actions, phenomena, objects, etc. In ancient times, representatives of different civilizations used icons in writing instead of words. In modern teaching, this method is effective when you need to master a large amount of information in a short period. This creates a schematic representation of objects and actions.

Related to the above mentioned is the *method of letter-based icons*. It involves shortening each word in a poem or text that needs to be memorized so the first letter of every word can be drawn in the form of pictograms.

The *method of consistent associations* is based on the ability to create associations for each unit of information quickly. The next step is to build a series of consecutive associations from the first word to the last. The main requirement for them is fun and dynamism, which creates a holistic imaginary picture.

Using the *method of revival* activates the natural ability to fantasize. Thanks to this method, they learn to model imaginary illustrations of texts, historical events, everyday situations, pictures of rules, tables. As a result, a child becomes an imaginary participant in these events. As a result, visualization skills are developed, the boundaries of memorization are expanded, and endless possibilities for the use of image memory are created.

The *method of entry* is characterized by an imaginary action when a person becomes a participant in the plot of a picture, story, or movie. At the same time, thanks to your imagination, you can change the course of events. By reviving the picture, the person himself becomes a participant in the event. Although it is a bit more difficult to imagine yourself as a participant, the result will be better, because what happens directly to a person is not forgotten. Psychological research shows that it is thanks to long-term memory that information is stored firmly.

"Phonetic associations" organically complement the method of entry. It helps to avoid distractions, extraneous stimuli. The method of phonetic associations is aimed at finding consonant associations to a particular word. This method is effective while memorizing vocabulary, last names, first names, and patronymics of people (especially foreign ones). Phonetic associations

make it easier to remember terms difficult for pronouncing. However, among its drawbacks, experts note errors in the pronunciation of foreign words. At the same time, they can be overcome if you practice confidently.

The *method of figurative hooks* is characterized by the fact that information seems to be suspended on the structural components of the drawing, and then it is removed. The mechanism of information reproduction while using this method is implemented at two stages. The first one recalls a picture, and the second one recalls information related to its objects. Therefore, the picture serves as a kind of hook on the hanger of human memory. This method is recommended for memorizing digital information, letters, words, texts, poems, and so on.

A characteristic feature of the *method of graphic improvisation* is that the elements of information that need to be memorized (numbers, letters, signs) form arbitrary lines in different directions, combining in a picture. For example, to memorize a phone number, first name, last name, you need to depict a person's face using lines. The arbitrary nature of graphic improvisation with continuous lines has a positive effect on the development of creative imagination and thinking. Due to this, a person discovers creative abilities to write poetry, drawing, which until now may have been unknown to her/him.

The *method of abbreviations* is widely used for the convenient abbreviation of words as a component of the speed reading technique. According to the requirements of this method, the word is abbreviated in such a way that individual letters can convey their meaning. The method of abbreviations should be used to study the rules and definitions. It is recommended to use in work with children with insufficiently developed imagination. Optimizing the perception of verbal information is due to the child's creative understanding of the meaning of the word in abbreviated form. During this time, its contents are subconsciously etched in memory [4].

Determining the characteristics of methods and techniques of Eidetic, it is advisable to identify three key techniques of this method;

- visual drawing, which is the link between the real object and the symbol. These two components are connected visually. By drawing, you can transform a letter or number into a specific object in the environment. Naturally, it is difficult for children to remember numbers, but if you connect visual images, this process is significantly optimized. For example, one is a tree, two- a goose, eight - glasses, nine - a balloon, and so on. The same method is applied to memorizing letters.

- imaginary drawing - a technique that can evoke associations with objects and allows you to describe their outlines. Immersion in the atmosphere of the event, the imagination of its smells and sounds, helps to memorize poems and texts. Thus, to optimize the study of the poem about autumn and its reciting, it is necessary to use various sensory channels, including remembering how the rainmaking noise, yellow leaves falling from the tree, cranes flying away to warmer lands.

- techniques of learning detailed information, which includes mnemonics, chain, and acro verbal techniques are effective for memorizing formulas, foreign language vocabulary, tables, etc. Mnemonics provide changes in the type of information flow. The chain technology allows you to select associations consistently (in a chain). The essence of the acroverbal technique is to turn information into humorous and fascinating phrases (texts, poems).

All eidetic methods and techniques are aimed at the development of memory, reproduction, and active use of various knowledge. At the same time, eidetic methods allow the child to overcome different levels of difficulty while performing several tasks, forming positive self-esteem. Eidetic methods and techniques reduce learning time and develop figurative memory, language, and observation. Thanks to these techniques, tasks become easy and accessible for children, and a positive atmosphere of cognitive activity is created, preventing fatigue.

The methods and techniques are based on the combination of components such as children's imagination and positive emotions. Their synthesis promotes the assimilation and subsequent

reproduction of a variety of verbal and digital information. Thanks to this, a cheerful atmosphere is created in the classroom. Learning material becomes mobile and accessible, information is distributed taking into account the educational needs and capabilities of each student. Pedagogical experience in the use of methods and eidotechnics has proved that they enhance the development of various types of attention and thinking, imagination, memory. Their use helps translate information that is incomprehensible to children with SEN into an accessible and understandable format. Due to Eidetic, various analyzers are involved in cognitive activity at the same time. The child can see and hear and touch, smell, and even taste. At the same time, children's acquisition of new knowledge is based on already well-known images. Thus, Eidetic creates a boundless play space for the development of children's imagination [2].

Children with SEN may have a partial visual and auditory perception, lack of planning and performing complex movements, which negatively affects their cognitive interest. In addition, the pathogenesis of significance in this process is the lack of formation of spatial representations, which are directly related to constructive thinking. Thus, children have difficulty completing the task with geometric shapes and patterns. They cannot define the shape, they cannot establish symmetry, and they have problems connecting parts of figures. At the same time, children with SEN can perform tasks that involve assembling pictures from parts without special effort when it comes to depicting one object.

However, it should be noted that when working with complicated tasks they make mistakes. Experts emphasize that when performing tasks, children need an adult's help, at all stages from organizing their cognitive activity to a visual demonstration of the sequence of performance [8, p. 49-57].

Eidetic promote the harmonious development of both hemispheres of the brain, the child becomes more active and his/her psyche more stable. The introduction of Eidetic into the educational process takes into account the peculiarities of the psychophysical development of a child with SEN, his/her character, behavior style. All child's functioning analyzers are involved in the cognitive process using Eidetic, thanks to which a child can not only see but also touch, hear, taste, smell. The child acquires new knowledge using well-known images, which create comfortable conditions for him/her to learn about the surrounding world.

3. CONCLUSIONS

Thus, the methods and techniques of Eidetic are effective factors in shaping children's cognitive interest. The basis of these methods and techniques are free associations connected with subject images; geometric shapes; color, tactile, subject, sound, and taste associations. Their main conceptual principles are that memorizing verbal and digital information should be quick and easy to remember, including positive thinking and a good mood. All methods and techniques of Eidetic are aimed at the development of language, figurative thinking, memory, imagination, and attention. Their use creates a psychological situation of success, improves the neurodynamics of brain function, enhances children with SEN cognitive activity, and mastery of a variety of verbal and digital information.

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У статті акцентовано, що ейдетика є однією із ефективних методик формування пізнавальних інтересів дітей дошкільного віку із особливими освітніми потребами (ООП). З'ясовано, що до методів ейдетики належать: ланцюжковий, акровербальний, піктографічний, фонетичних асоціацій, метод місць (базується на зорових асоціаціях), невербальних асоціацій, парадоксальних вербальних перетворень, укрупненого структурування навчального матеріалу. Доведено, що завдяки ейдетичі в пізнавальній діяльності одночасно залучаються різні аналізатори – дитина не тільки може побачити й почути, але й торкнутися, понюхати і навіть скуштувати; водночас, опанування новими знаннями ґрунтується на основі вже добре знайомих образів, таким чином ейдетика створює безмежний ігровий простір, в якому дитяча уява має широке поле для розвитку. Автори зазначають, що характерною особливістю пізнавального інтересу дітей дошкільного є вибіркова спрямованість у зацікавленості

явищами, об'єктами та процесами довкілля. Для вихованця з ООП предметом пізнавального інтересу, як і для їх однолітків із нормотиповим розвитком, є не все довкілля, а тільки окремі його елементи, які особисто для нього відзначаються актуальністю, привабливістю, цінністю. Обґрунтовано, що пізнавальний інтерес дошкільників одночасно може мати ситуативний, так і стійкий характер; він виникає в процесі виконання певної дії, проте може зникнути одразу ж після її завершення. Водночас, при систематичному педагогічному супроводі може стати відносно стабільною особистісною якістю дитини з ООП. Окреслено, що важливим позитивним аспектом використання ейдетики в роботі з дітьми дошкільного віку з ООП визначено те, що створюється психологічна ситуація успіху, активізується нейродинаміка мозкової діяльності. Внаслідок цього корегуються проблемні ділянки центральної нервової системи та девіантна поведінка дітей.

Ключові слова: пізнавальні інтереси, діти з особливими освітніми потребами, освітні технології, ейдетика.