THE PECULIARITIES OF THE USE OF MIND MAPS BY YOUNG LEARNERS AT THE "I EXPLORE THE WORLD" LESSONS

Miroshnyk Iryna,
Candidate of Pedagogical Sciences (Ph.D.), Associate Professor,
Head of the Department of Languages and Teaching Methods
T.H. Shevchenko National University «Chernihiv Colehium»
Chernihiv, Ukraine

Zavodenko Mariia,
the applicant for the second (Master's) level of higher education
T.H. Shevchenko National University «Chernihiv Colehium»
Chernihiv, Ukraine

The strategy of modernization of education in Ukraine makes new requirements that determine the main goal of a modern school – the formation of a creative and active personality of a student. Nowadays, a pupil must be able to acquire knowledge independently; apply them in practice in order to solve various problems; work with various information, analyze, generalize; think critically and independently; look for rational ways of solving problems.

Today, primary school is the foundation of further education, and the success of this period largely depends on the effectiveness of learning at the next levels of comprehensive school, and therefore it is extremely important to form an effective and comprehensive application of innovative technologies.

The modern educational system orients teachers to the use of technologies in their work, which give them the opportunity to optimize and intensify the educational process. At this stage, there is a number of them, and each teacher can choose those that will contribute to the effectiveness of teaching pupils, as well as develop their cognitive activity and stimulate their productive thinking. The use of various methods and methodological techniques (both traditional and new) is important at all lessons of the "I Explore the World" course, as they contribute to the formation of a holistic ecologically competent personality.

One of the modern technologies that are effectively used today by teachers in primary school and beyond is mind maps.

Mind maps are a fairly convenient and effective technique for visualizing thinking. The mind mapping technology can be used to generate new ideas and record them; to analyze and structure information. This is not quite traditional, but a natural way of reflecting thought, which has undeniable advantages over conventional recording methods.

The theory of mind maps appeared in the early 70s of the 20th century thanks to the famous English psychologist Tony Buzen [1]. He decided to "make his brain work". By combining this experience with the achievements of modern psychology in

the field of memory and thinking, Tony Buzen developed the technology of thinking and memorizing information, which he called “mind maps”. The most interesting thing is that the method of associations is the basis for making mind maps. Tony Buzen wrote 82 bestsellers on the subject.

As Tony Buzen points out, in the ontogeny of a child there are neural formations that appear in parallel with the acquisition of language skills; a child forms a kind of internal associative branched connections, which he calls “mind maps” in order to simplify understanding [2].

A. Naidonova notes that the idea of a mind map is based on the method of condensing text, when a large textual material is presented in a condensed form. Today, the problem of the need to implement a visual presentation of theoretical material is relevant. A mind map is an implementation of the method of condensing text using the principles of infographics [3].

Mind maps are a representation of information in pictures. Memorizing new information in this form is much easier than in any other, according to U. Lutsanych and V. Lavrenova [4].

Before starting the creation of a mind map, it is necessary to determine its purpose and the goal that we want to achieve as a final result. After fulfilling these conditions, one can start working. It is necessary to remember that a mind map starts from the center of the worksheet. The so-called central node is the basis of the mind map. It should be made bright and noticeable. For this, one can use bright colors, large images and large font. The next step is to write down all the tasks, questions, and ideas on a separate sheet. This means that everything that comes to mind should be written down. After writing down all the thoughts and ideas, one need to create a mind map structure. Everything that was noted down on paper should be grouped, combined with similar, of the same type and common tasks [5].

At the lessons, mind maps are worth using for: the development of the projects of varying complexity in practical classes, creating presentations, using “brainstorming”, the development of pupils’ intellectual abilities during their preparation for the Olympiad, etc. Mind maps can be used in the educational process in the self-educational work of the subject teacher, for preparation of the material on a certain topic, solving creative tasks, training creative thinking, creativity, the development of creative imagination, etc.

H. Khimichuk singles out the following possibilities of using mind maps at different stages of the lesson when studying the “I Explore the World” course in primary school:

- homework check (an oral survey to determine the level of pupils’ knowledge using mind maps);
- actualization of basic knowledge, abilities and skills (filling in the missing knowledge of pupils, recollecting the necessary basic knowledge using mind maps);
- formation of a conceptual apparatus, new knowledge and practical skills (assimilation of new educational material using mind maps in the form of a reference summary);

- control and registration of knowledge (control and registration of knowledge using mind maps) [6].

The goal of the lesson can be approached through the actualization of knowledge using the graphic means of the mind-map method. For example, start the lesson by posing a problem, offering the pupils to exclude an extra word from a number of others placed on the maps on the board: peat, hard coal, oil, natural gas, granite (the topic of the lesson is "Why are fuel minerals important for humans?"). When solving the problem, the pupils come to the conclusion that the word "granite" is odd, because it is a non-mineral (building) useful mineral, and the rest of the words belong to fuel minerals. So, the lesson will be about fuel minerals and their importance in human life. So, the topic is determined, and in order to fix it, it is necessary to choose the appropriate graphic image for it.

Thus, simultaneously with the actualization of knowledge, their systematization and generalization is carried out. The mind map shown in the figure clearly demonstrates this (Figure 1).

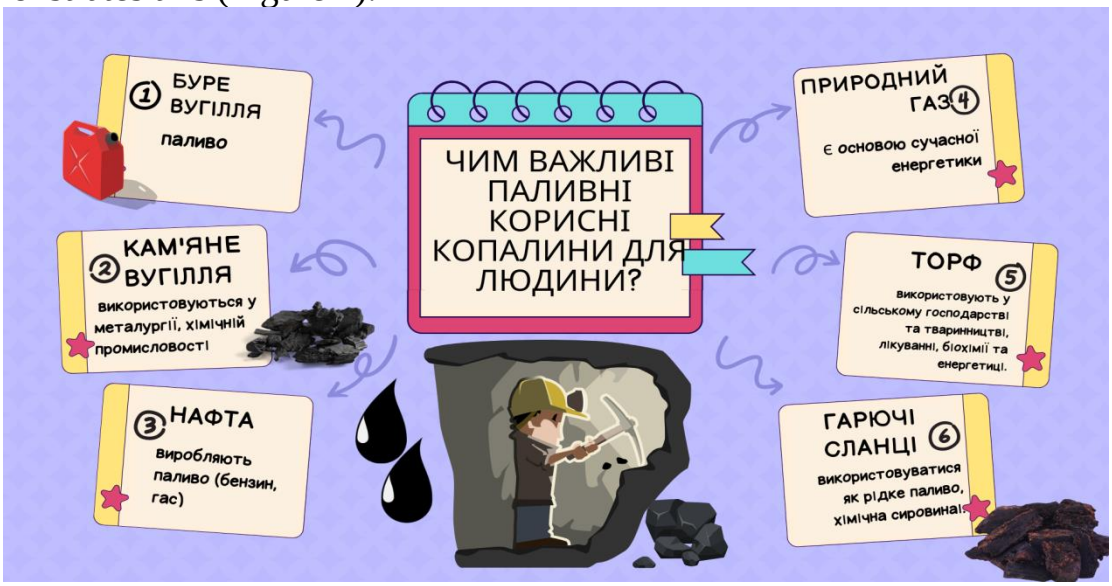

Fig. 1. Mental map "Why are fuel minerals important for humans?"

The method of mind maps develops logic and the ability to summarize all educational material to the most important, increases the quality and intensity of learning, trains memory and stimulates pupils to automatically consolidate the acquired knowledge on environmental culture and forms the environmental competence. In addition, a knowledge map can be built while taking notes on large topics – instead of long summaries and spending time on recording materials, the pupil makes only one block diagram.

Studying of the topic "Water in human life. Protection of water bodies" it is very important to tell children about the positive impact of water on all living organisms, about protecting water bodies from the pollution by people. We also note that water can carry a huge destructive force (rising the water level, heavy downpours, floods). It will be appropriate to apply the mind map "Protection of water bodies from pollution".

In order to activate educational and cognitive work, it is advisable to offer pupils to independently compile certain parts of the mind map that relate to the studied

theoretical material. This practice develops pupils' memory, stability of attention, and arouses interest. A mind map encourages the learning of the material in such a way that all the blocks of the material studied at the lesson are connected. After making mind maps, pupils should comment on their actions, try to use the map in order to reveal the essence of the topic material.

Thus, one of the modern methods of structuring information are mind maps, which are used for generating ideas, making decisions, organizing information and processing it. The use of mind maps will be effective for the formation of the environmental competence at the lessons of "I Explore the World", because this method primarily performs the function of an axis around which the content of integrated classes is integrated, and certain contents of educational and cognitive work are emphasized.

The use of mind maps at the lessons of "I Explore the World" forms an ecological culture in children, stimulates the development and formation of the environmental consciousness of the individual, develops the ability to classify nature based on observation and analysis of the way of life in nature.

References:

1. Buzen, T. (2014). *Superintelligence.* Minsk : Popurri.

2. Buzen, T. (2004). *Teach yourself to think.* Minsk : Popurri.

3. Naidonova, A.I. *Mind maps as a tool for efficient work with information*. Retrieved from: http://ru.calameo.com/read/004373434dec4e2bf2b83.

4. Lutsanych, U.V. & Lavrenova V.V. (2017). *Using mind maps at primary school lessons.* MSU.

5. Ozerian, O. *Tony Buzen's Tips on Mind Mapping Techniques*. Retrieved from: http://sonyah.blogspot.com/2011/11/blog-post_6964.html.

6. Khimichuk, H. *Mathematical meridian.* Retrieved from: https://galinahimichuk.webnode.com.ua/storinka-uchitelya/vchitisa-nikoli-ne-pizno/mentalni karti/