PROBLEM-BASED LEARNING IN THE EDUCATIONAL SPACE OF A MODERN PRIMARY SCHOOL

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The article analyzes the problem of implementing a problem-oriented approach in the educational process of modern primary school. The purpose (formation of pupils' ability to find and use knowledge that is relevant and can be applied in practice in the future), the essence and content of problem-oriented approach are studied, the peculiarities of its implementation in the educational space of modern primary school are revealed. A comparative analysis of the problem-oriented approach and the traditional approach to learning is made, as well as the role of teacher and pupil in the first case is demonstrated (a teacher creates a problem situation, organizes classroom work, encourages children to discuss the problem, evaluates pupils' work; a pupil forms a problem that needs a solution, puts forward and tests the hypothesis in the process of solving the problem situation, analyzes the results). Technologies of problem-oriented approach are considered (case technology, game technologies, storytelling, brainstorming, discussion). The content of teacher's work in the context of the use of problem-oriented approach in teaching primary school pupils is characterized and methodical recommendations for primary school teachers on the use of problem-oriented approach during lessons are developed (organic combination of traditional and problem-oriented approach in the organization of primary school lessons; involvement of all participants in the educational process; formation of pupils' ability to analyze the problem situation, to highlight the main thing; formation of a problem situation that corresponds to the age capabilities of pupils; ensuring the principle of sustainable learning; the use and combination of different forms of activity: pair, group, frontal, individual; development of communicative skills and abilities to work in a team by using group forms of work in the classroom; implementation of problem-oriented approach starting from the first grade; involvement of all participants of the educational process in discussions on a given problem situation).

Keywords: problem-oriented approach, traditional approach, technologies of problem-based learning, methods of problem-based learning, problem situation.

One of the priority tasks of modern education is to create conditions for upbringing and training of fully developed, creative and active personality. It is important to create appropriate conditions that would ensure the formation of that personality at each level of education. An essential stage in the formation of such individuality is the period of studying at school, in particular primary school.

For the development of cognitive activity of pupils, the reform of education provides the modernization of the lesson at primary school. It is referred to the use of new learning technologies, integrated lessons, non-traditional methods, overcoming the monotony of pedagogical influences on pupils' personality in teaching and upbringing.

The urgency of this problem is caused by the fact that problem-oriented approach to learning is a very effective means of forming and supporting external (support of the communicative process outside the classroom, school) and internal (establishing cooperation, the ability to work in a team) communications and ensuring the development of all competencies. The use of problem situations during the lesson in a classroom contributes to the formation of a positive attitude to learning, the development of research skills and creative abilities.

Research of the outlined problem was carried out by the following scholars: Yu. Savelieva, O. Vasylyk, Ye. Kaliuha, N. Herlun, S. Kovalova and others.

The aim of the article is to comprehensively analyze the peculiarities of the implementation of problem-based learning in the educational space of a modern primary school.

Problem-based learning is defined as a method of organizing the learning process in which real complex problems are used as an educational tool. Study based on problem solving stimulates the application of critical thinking skills and problem-solving skills during a limited time [1, p. 44].

For the first time problem-based learning was used in universities of Canada and Australia, and later in the Netherlands.

The problem-oriented approach significantly differs from the traditional approach, because it promotes an active way of learning. Such approach also activates and motivates pupils to study, encourages them to learn subjects which are studied at primary school and thus forms important skills and competencies [2].

Problem-based learning "allows an individual to form his/ her own positions based on the available multifaceted information, to correlate them with the views of others, to find among them those that intersect with their own views, and to develop their attitudes to different points of view, i.e. to create an informational worldview that is open to clarification, deepening and change" [6, p. 8].

The main purpose of problem-based learning is to form in pupils the ability to find and use knowledge that is relevant and can be applied in practice in future life. This approach is to form independence in learning and to create such didactic situations that will help to awaken the intellectual abilities of the pupil. It is

important not only to transmit ready-made information, but also to gain knowledge and skills by solving theoretical and practical problems. The philosophy of the problem-oriented approach is fundamentally different from the traditional approach to the organization of the educational process; it offers a different perspective on the role of a teacher and pupils.

The key issue of problem-based learning is the "problem situation", which is created by the teacher and includes a learning goal. The solution of the problem situation by pupils provides the acquisition of knowledge, their identification with real life. The "problem situation" is based on a real problem. At first, the teacher creates a problem; then pupils are looking for a solution applying knowledge, skills and, most importantly, their own experience.

The main difference is that during the traditional approach the material is studied by memorizing and reproducing information, and the problem-oriented approach to learning involves finding information that will help the pupil to solve the given problem.
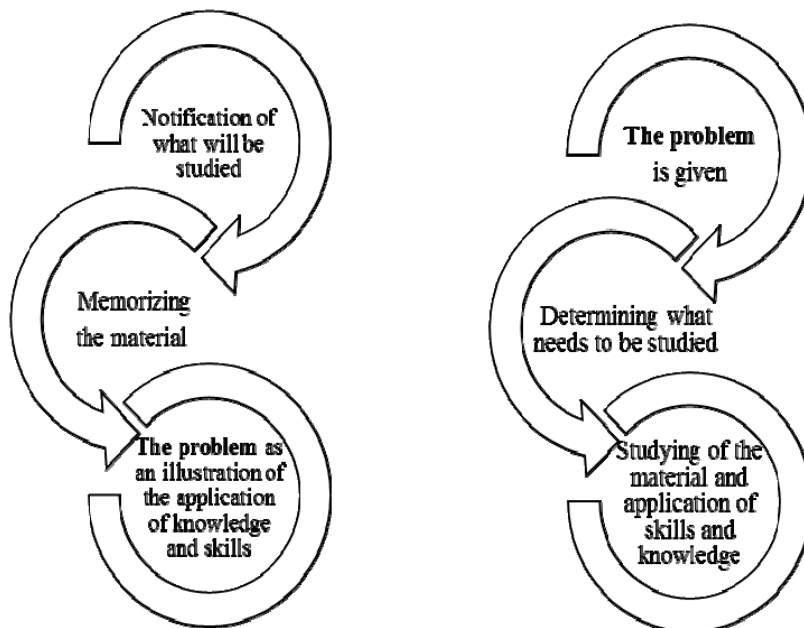
Traditional approach   *Problem-oriented approach*

In the traditional approach the teacher acts as an expert who transmits knowledge, and in the problem-oriented approach the teacher is a mentor who encourages children to work independently.

In the center of the problem-oriented approach is the pupil who manages the process of acquiring knowledge and realizes the significance of this process and

his/ her responsibility for the outcome. In this case, pupils' interests and motivation to study are the most important for the teacher.

The role of pupils during the lesson where a problem-oriented approach is applied is that they work on all aspects of the problem in order to find the best solution (Fig. 1).

Teacher's activity	Pupil's activity
Creating a problematic situation for pupils.	Understanding of contradictions.
Organizing reflective activities on the given problem in a classroom.	Answering the question "What needs to be solved?" Formation of a problem to be solved.
Organizing testing of a hypothesis.	Making a hypothesis that allows to solve a given problem.
Encouraging children to discuss their decisions in a team.	Checking the hypothesis in the process of solving the problem situation.
Organizing the principle of sustainable learning.	Analyzing the results.
Organizing group work.	Drawing conclusions.

Fig. 1. The role of teacher and pupil in problem-oriented approach

The problem-based learning provides such type of a lesson that integrates several teaching methods, namely the game, discussion, storytelling, case method, aquarium, etc. They are applied in various forms of educational activities (new and traditional ones), which can be used in the learning process of primary school pupils, such as master classes, round tables, group trainings, independent and individual work.

The value of the game is that during gaming activity the educational, developmental and upbringing functions are interconnected. Game as a method of learning promotes organization, development of pupils, expands their cognitive abilities, and educates the individual. To provide a problem-oriented approach during lessons at primary school the following types of games are used: exercise games, game discussions, game situations, role-playing and business learning games, computer business games [7, p. 32].

The purpose of the next technology of problem-based learning – the discussion – is to teach pupils to understand the opinion of others, to take into account the positive aspects of opposing views, to express their own positions clearly and to defend them in situations when there is a different opinion on the situation [8, p. 295].

The essence of a case technology (case study) is that to organize learning, children are asked to comprehend a real life situation – a "case", the description of which actualizes a set of knowledge on the topic that children are learning during a

lesson. Case technology helps to develop analytical, practical, creative, communicative, social, introspection skills [5, p. 94].

The essence of the following technology is learning through telling stories. Thus, storytelling "is the telling of stories or the art of telling and transmission the necessary information in order to influence the listener's emotional, motivational, cognitive spheres" [4, p. 134].

Most often in the process of applying problem-based learning working with primary school pupils such difficulties arise as: ignorance of the content of the approach; inability to apply methods in practice; misunderstanding of the place of methods in the structure of the lesson; distrust of the effectiveness of methods in the process of teaching [3, p. 187].

Based on the analysis of qualitative survey data, methodological recommendations for teachers, students undergoing pedagogical practice and parents are offered. The following recommendations are designed to avoid the above-mentioned difficulties.

Recommendations for teachers to implement a problem-oriented approach in the educational process of primary school:

1. Organic combination of traditional and problem-oriented approach in the organization of primary school lessons.

2. Involvement of all participants in the educational process.

3. Formation of pupils' ability to analyze the problem situation, to highlight the main thing.

4. Formation of a problem situation that corresponds to the age capabilities of pupils.

5. Conducting consultation on the use of problem-oriented approach and technologies in the initial stages of its use.

6. Ensuring the principle of sustainable learning.

7. Compiling a problem situation, rely on the real experience of children or on familiar topics.

8. Application of various technologies and methods of problem-oriented approach.

9. The use and combination of different forms of activity: pair, group, frontal, individual.

10. Development of communicative skills and abilities to work in a team by using group forms of work in the classroom.

11. Involvement of all participants of the educational process in discussions on a given problem situation.

12. The implementation of problem-oriented approach starting from the first grade.

The problem-oriented approach to learning is based on problem situations that the teacher offers to the pupil in the classroom. This teaching approach is not

typical for primary school in Ukraine. Such learning completely complements the traditional approach, encourages pupils to think, find answers to complex real life questions and to make independent decisions.

Technologies of problem-oriented approach include case technology, game technologies, storytelling, brainstorming, discussion. Thanks to the technologies of problem-oriented approach, the cognitive capabilities of the pupil are expanded; the learning process takes place under the condition of constant active interaction of all pupils.

As a result of the organization of such educational activity in a classroom the atmosphere of interaction, cooperation that positively influences educational process of pupils of primary school age is created. This helps the teacher to form all the competencies of the primary school pupil, proposed by the Concept of the New Ukrainian School.

For the successful application of the problem-oriented approach during the lessons at primary school, methodological recommendations for teachers have been designed, which give an opportunity to organize the work in the classes methodically correctly. Adherence to our recommendations will improve the work of primary school pupils during lessons in the classroom, strengthen the development of communicative and creative abilities, increase motivation to learning, help to organize classes for students undergoing pedagogical practice, and assist parents to organize learning process at home.

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ПРОБЛЕМНО-ОРІЄНТОВАНИЙ ПІДХІД В ОСВІТНЬОМУ ПРОСТОРІ СУЧАСНОЇ ПОЧАТКОВОЇ ШКОЛИ

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Проаналізовано проблему впровадження проблемно-орієнтованого підходу в освітній процес сучасної початкової школи. Досліджено мету (формування в учнів уміння знаходити і використовувати знання, які є актуальними і можуть бути застосовані у практичній сфері в майбутньому), сутність та зміст проблемно-орієнтованого підходу, розкрито особливості його впровадження в освітньому просторі сучасної початкової школи. Подано порівняльний аналіз проблемно-орієнтованого підходу та традиційного підходу у навчанні, а також показано роль вчителя та учня у першому випадку (вчитель: створює проблемну ситуацію, організовує роботу в класі, заохочує дітей до обговорення проблеми, оцінює роботу; учень: формує проблему, яка потребує розв'язку, висуває і перевіряє гіпотезу в процесі вирішення проблемної ситуації, аналізує результати). Розглянуто технології проблемно-орієнтованого підходу (кейс-технологія, ігрові технології, сторітеллінг, мозковий штурм, дискусія).

Охарактеризовано зміст роботи вчителя в контексті використання проблемно-орієнтованого підходу у навчанні дітей молодшого шкільного віку і подано розроблені методичні рекомендації для вчителів початкових класів щодо використання проблемно-орієнтованого підходу на уроках (органічне поєднання традиційного та проблемно-орієнтованого підходу в організації уроків початкової

школи; залучення в роботу всіх учасників освітнього процесу; формування в учнів умінь аналізувати проблемну ситуацію, виокремлювати головне; формування проблемної ситуації, яка відповідає віковим можливостям учням; забезпечення принципу наскрізного навчання; застосування та комбінування різних форм діяльності: парної, групової, фронтальної, індивідуальної; розвиток комунікативних умінь та навичок працювати в колективі за допомогою групових форм роботи в класі; впровадження проблемно-орієнтованого підходу починати від першого класу; залучання всіх учасників освітнього процесу до дискусій щодо заданої проблемної ситуації).

Ключові слова: проблемно-орієнтований підхід, традиційний підхід, технології проблемно-орієнтованого навчання, методи проблемно-орієнтованого навчання, проблемна ситуація.