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THE METHODOLOGICAL FOUNDATIONS FOR DEVELOPING CRITICAL THINKING SKILLS USING MODERN PEDAGOGICAL TECHNOLOGIES.

МЕТОДОЛОГИЧЕСКИЕ ОСНОВЫ РАЗВИТИЯ НАВЫКОВ КРИТИЧЕСКОГО МЫШЛЕНИЯ С ИСПОЛЬЗОВАНИЕМ СОВРЕМЕННЫХ ПЕДАГОГИЧЕСКИХ ТЕХНОЛОГИЙ.

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Abstract: This article examines the importance and application of project-based and problembased activities in modern teaching methods. It explores the similarities and differences between these approaches, emphasizing their role in encouraging active learning and developing critical thinking abilities in students.

Аннотация: Эта статья исследует важность и применение проектно-ориентированных и проблемно-ориентированных деятельностей в современных методах обучения. Она рассматривает сходства и различия между этими подходами, подчеркивая их роль в стимулировании активного обучения и развитии критического мышления у студентов.

Key words: Project work, multi-level task, intra-class, cognitive, interdisciplinary; learnercentered approaches,

Ключевые слова: Проектная работа, многоуровневая задача, интра-классовая, когнитивная, межпредметная; подходы, ориентированные на обучающегося.

In line with the idea that active involvement leads to deeper understanding, modern education features two main types of pedagogical approaches. While similar in many respects, they also have distinct differences. These approaches are project-based learning and problem-based learning. As a component of modern teaching methods, the project method is widely used. It is employed in foreign language education at different levels, for students of various ages, from different countries, and different cultures. [1,70]

Project work is continuous and interconnected actions: planning, implementation, control, formation, and achievement of goals. [2, p 151]. Project work is also a mixed activity that includes elements of role-playing, cognitive, value-oriented, transformational, educational, communicative, and creative activities. Project work allows students to master all components of educational activities and develop the necessary skills for general types of activities. [3, p 371,372]. Students' project activities are a multi-level task of a special kind that develops their creative potential, cognitive activity, and the ability to independently acquire new knowledge.



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[4, p168] Project activities are based on the development of cognitive interests, independent monitoring of one's own knowledge, searching for direction in the information space, developing critical and creative thinking, as well as on identifying and solving emerging problems. A characteristic of project activity is the emphasis on achieving specific practical results and visual representation of the product.[4]

There are many categories of project activities, and the classification of projects is mainly based on the following criteria: [3p52]

According to the leading activity of students: practice-oriented, research-oriented, informational, creative, and role-playing;

Depending on the complexity: subject-specific and interdisciplinary;

Depending on the project level: intra-class, university, internal, international;

Depending on the project duration: short-term (4 to 6 lessons), medium-term (from six months to one year), long-term (multi-year);

Based on the number of project participants: individual, pair, team, collective. All project activities are carried out in stages. According to the most common and concise statement, a project can be divided into the following main stages: project definition, project planning, project implementation, project closure, and project evaluation. [4, p153] Polat E.S. describes project activities as the "five Ps" model: problem - project design/planning - information search - product - presentation.[2p53]

Antonova E.S. divides the project into five other stages according to specific student tasks:[2p369]

Research stage. At this stage, students first have a clear understanding of the project activity topic, choose the target product and presentation format, and their own role in the group.

Technical stage. Students describe the target product, select materials and tools to complete the work stage, and establish standards for evaluating the product.

Practical stage. Students carry out planned actions and regularly reflect on them.

Corrective stage. Students compare the obtained products with expectations, reflect on methods, and make necessary changes to the products.

Final stage. Demonstration of project products, completion process, and means.

Problem-based learning is a method of organizing the learning process. This method requires students to actively and independently solve problems in a situation constructed by the teacher. Key components of problem-based learning include the problem situation, often constructed within one discipline, an open question (Openness means that the question may have mic problem solving.[5]. In general, problem-based activities can be broken down into the following procedures: students encounterultiple correct answers simultaneously), and systemat a problem situation. With the help of the teacher, they clarify the problem, gather and analyze information, independently explore solutions and paths, establishing a hypothesis, formulate or discuss methods to test its validity (conduct experiments or surveys, observation, analysis of results, etc.), draw conclusions, and demonstrate them. The procedures of problem-based activities can be expressed as: understanding the problem situation – gathering and analyzing information – discussing the problem – proposing hypotheses – testing hypotheses – proposing systematic solutions to the problem. Problem-based activities include: asking questions, heuristic discussions, problem discussions, role-playing in problem situations, research work, complex experiments on problems, and problem-solving tasks. The problem-based method is often considered part of the project method. This is because there is much in common between



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them. First of all, the guiding principles and starting point of these two methods are Dewey's idea of "learning through activity." Secondly, both methods are learner-centered approaches and require a significant amount of independent work from students aimed at enhancing their cognitive independence and integrating knowledge with experience, theory with practice. The subject of both teaching methods is the learner, and personalization and differentiation are valued in the educational process. [5] .Thirdly, the research problems and tasks of these two methods are closely related to reality in order to increase students' research interest. However, ultimately, these are two different methods. The biggest difference between them is that the result of problem-based learning is a unique, reasoned systematic solution to a problem, while the result of project-based learning is a tangible final product that can be visually represented. The second difference is that problem-based learning is usually conducted within a single discipline, whereas project-based learning is conducted in interdisciplinary fields. The third difference lies in the fact that the biggest challenge for a teacher when organizing problembased activities is creating a problematic situation, while when organizing project-based activities, it's selecting a project topic that aligns with students' personal and professional interests. Fourthly, problem-based activities are more oriented towards investigation, while project-based activities are about designing, because at the end of a project, students must create and present a new product. Students need to design many details, whereas in the entire process of problem-based activities, students simply focus on research. Fifthly, the main forms of problem-based activities are dialogue, discussion, comparison, and argumentation of different solutions; and the main forms of project-based activities are design, experiments, practice, and product creation. Compared to problem-based activities, project-based activities have the following advantages: firstly, project-based activities offer greater enrichment. Students have more freedom and opportunities and can showcase all their creative abilities, initiative, and imagination; secondly, since they encounter a greater variety of interaction situations in project-based activities, students can learn more expressions in a foreign language; thirdly, due to clearer role divisions in project-based activities, students have a better sense of the future professional atmosphere, understand the mechanisms of project work and the positions of various types of workers, and consider employment from different perspectives; fourthly, thanks to the interdisciplinary nature of project-based activities, students can acquire more knowledge from various fields. In this paragraph, the procedures of project-based and problem-based learning models were described. Then, the similarities between project-based learning and problem-based learning were identified: 1. Both follow the principle of "learning through activity"; 2. Both are learner-centered technologies aimed at developing the student's 3. Both require close personality; connection with the student's reality specialization.Differences between them:

The outcomes of the two approaches are presented in distinct ways: problem-based learning results in a systematic solution to a problem, whereas project-based learning produces a tangible product. Problem-based learning typically focuses on a single subject, while project-based learning often integrates multiple disciplines. The challenges faced by educators also vary: in problem-based learning, the task is to create a problematic situation, while in project-based learning, the challenge is selecting a topic that resonates with the student's personal and professional interests. Problem-based learning emphasizes investigation, while project-based learning is more centered on design. Additionally, the main forms of the two approaches differ. In summary, project-based learning offers several advantages, including enriching experiences,



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a wider range of activities to foster critical thinking, enhanced development of communicative competence, and a better understanding of the professional communication environment.

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