



## СЕКЦІЯ 6 СУЧАСНІ ПЕДАГОГІЧНІ ТЕХНОЛОГІЇ

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### **THE TECHNOLOGIES AND THE STRATEGIES OF THE STUDENTS' CRITICAL THINKING DEVELOPMENT IN TEACHING FOREIGN LANGUAGE FOR SPECIFIC PURPOSES**

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У статті піднімається питання розвитку навичок критичного мислення студентів немовних вищих навчальних закладів засобами іноземної мови. Розглядаються технології та визначаються стратегії активізації комунікативних, пізнавальних і творчих здібностей студентів. З'ясовується ефективність проектної методики у навчанні іноземної мови в контексті фахово-орієнтовних завдань та технології розвитку критичного мислення через читання та письмо. Даються практичні поради щодо реалізації цих технологій на заняттях з іноземної мови.

**Ключові слова:** *технологія, стратегія, прийом, таксономія, критичне мислення.*

В статье поднимается вопрос развития навыков критического мышления студентов неязыковых высших учебных заведений на занятиях по иностранному языку. Рассматриваются технологии и определяются стратегии активизации коммуникативных, познавательных, и творческих способностей студентов. Выясняется эффективность проектной методики при обучении иностранному языку в контексте профессионально-ориентированных заданий и технологий развития критического мышления посредством чтения и письма. Даются практические советы реализации этих технологий на занятиях по иностранному языку.

**Ключевые слова:** *технология, стратегия, метод, таксономия, критическое мышление.*

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The article reveals the development of the students' critical thinking of nonlinguistic higher education institutions by means of foreign language. We consider the technologies and determine the strategies of activating communicative, cognitive and creative skills of students. We clear up the effectiveness of project methods in foreign language study in connection with career orientated tasks and development of the critical thinking by means of reading and writing. We give some practical advice as for implementation of these technologies on the foreign language lessons.

**Key words:** *technology, strategy, method, taxonomy, critical thinking.*

**Target setting.** In time of reforming of the higher education in Ukraine it is impotent the necessity of having skilled personnel, which is competitive not only in our country but also in Europe and all over the world. The process of European integration gives the ample opportunities for employment of graduates, that is why the second-language skills for specific purposes is the urgent necessity. But now it becomes impotent not only when recent graduate has some professional skills or some personal skills and efficiency, but the ability of the critical thinking and the ability to implement those skills in their work.

**Analysis of the latest research studies and publications.** Everyone may come across many definitions of the critical thinking in the modern methodological literature. Some scientists research this matter as the philosophical problem (H. Albert, D. Kahneman, K. Foster, G. Soryna and others), other scientists consider it as the psychological phenomenon (D. Halpern, A. Ellis, S. Plous, S. Whalen, I. Zagashev and others). Some scientists develop the technology of the critical thinking for pupils of different age. They are John Dewey, Y. Guschyn, A. Fedorov,



S. Bakhareva and others. Many methodists use in their works the technology of the critical thinking by means of reading and writing, which was developed by American researchers Ch. Temple, K. Meredith, G. Steele, D. Ogle and Bloom's taxonomy of aims and goals, which provide the studying results of low and high (critical) level of thinking.

**The research objectives.** The idea of the article is in searching of such methods of teaching, which may activate communicative, cognitive and creative activity of students giving them knowledge and skills that are necessary for use of foreign language in their professional career and at the same time inducing them to creativity in solving problems, independence and autonomy in their study.

**Presentation of basic materials of the research.** We consider the critical thinking as the system of speculation that is used for analyzing the problem tasks, their reasonable assessment and interpretation or for appropriate use of definite results as an occasion requires. The critical thinking is necessary as the instrument of any problem researching [6]. D. Halpern believes that the critical thinking is the process of assessment or definition in the terms of earlier received basic skills. It is the composition of factual knowledge and thinking skills [3, p. 52]. One of the most famous model that describes the process of thinking formation is the B. Bloom's taxonomy. According to this model the goals of studying directly depend on ranking of thinking processes. B. Bloom developed six levels of studying results. What is more, the first three levels such as the knowledge, the understanding and the use he put to the thinking of low level. But the analysis, the synthesis and the assessment he called the critical thinking or the thinking of high level [5]. The thinking of high level is the employment of cognitive skills and strategies based on logical conclusions, making up collective and creative models, appropriate decision making for achieving the final result [3, p. 231]. Students get not only communicative experience but also develop their skills of critical thinking by means of foreign language on their foreign language lessons.

Since in technical institutes the language teaching is conducted in connection with career-orientated tasks, project work is considered to be an effective technology for that purpose. This project work should be directed to the reasonable final result, that may be used in their future career. We agree with E. Polat that on foreign language lessons to solve the problems which are in the core of any project, students need to know not only the foreign language, that is the main subject of their study, but also have intellectual, cre-

ative and communicative skills which continue to improve in the process of project's implementation [2]. The intellectual skills provide for search, analysis, arrangement and consolidation of different information sources. The ideas of project implementation are produced and the repercussions of one or another decision foreseen due to creative skills. Communicative skills help to keep discussion, give reasons for personal point of view, take the middle path resolving conflicts.

Usually the project's implementation consists of four successive steps. They are the preparation, the performance, the presentation and the summarizing. Let us distinguish the position of the critical thinking in the process of each step.

On the preparation step a teacher may offer students choosing the interesting part of a topic or encourage them to distinguish it on their own. As a rule, the problem or the complex topics generate the great students' interest inspiring their learning, intellectual and researching activities. E. Polat believes that only the method of projects may change the foreign language learning into disputable and research club, where interesting and practical problems are solved [2].

The performance step consists of accumulation of the researched information and its reviewing, the processing of reference and supporting data or the preparation of career-orientated tasks. According to the chosen topic, the following method of research may be drawn: the interview, the questionnaire, the experiment etc. Students discuss and synthesize the collected materials, correct and complete them in the form of the report or the record. The concept of "synthesis" is the building of structure from different elements, it is creation of the new thing with different qualities, which is equal to the creativity according to Bloom's successors [4]. Just on that stage the critical thinking is developing most of all, at the same time the skills in four types of language activities are developed. They are the reading, the writing, the speaking and the listening. Moreover, such practical activity enriches the vocabulary size and develops the communicative skills.

For project presentation students have to choose the ways of information submission, prepare all necessary visual materials, technical facilities, think over the ways of their presentation. The way of presentation depends in a greater degree upon the kind of a final product. It may be a video screening, an oral presentation, a booklet or a diagram, etc. On this stage the creative skills of students are revealed in a greater degree. In the process of presentation, the mechanism of form-



ing of the critical thinking skills is eminently implemented. It is the session question-answer. Answering a question students analyze and interpret the information, put forward assumptions, learn to defend their point of view. According to B. Bloom's taxonomy the question as for assessment or the judgment is considered to be the brain work of high level.

No less important is the concluding stage, which consists of the discussion of the presented results of project activity as well as their analysis and assessment. Students should learn to think over the final result, analyze its benefits and drawbacks, the scientific sense and the further perspectives of using it in their future career. This stage is considered to be more complicated since it demands to distinguish the criteria of assessment.

The development of the critical thinking by means of reading and writing is the effective and the popular technology in foreign language learning. Within this technology the critical thinking is considered as the process of correspondence of the external information with the man's knowledge, making decisions as to accept, add or reject the information [1, p. 5]. The structure of this technology consists of three stages: the invoking, the perception and the reflection. On the stage of the invoking the realization of the students' knowledge as for the particular topic, their motivation and the incentives for cognitive activity are taken place. On the stage of the perception the collected information is processed and correlated with the existing knowledge. On the last stage the material is classified and analyzed, the strategies as for its further learning are determined.

In this case the foreign language for specific purposes is the goal as well as the meaning of learning. The distinctive feature of the modern science's development is the point that English language has got the position of the language of scientific and technical literature. That is why it is important to teach the future professional to find out the special sources in foreign language, select the works of the particular subject, work with reference literature. It contributes to his professional development and helps to achieve his career goals. The material for reading may be the text from scientific and technical literature. It is distinguished by complexity of information, the complexity of its presentation caused by usage of some specific grammar technics, making the narration looked compressed and consistent, but at the same time making bulky and syntactically complicated constructions. Reading the professional texts students should first understand and logically imagine its main idea, point out the problem and think over the ways

of its solving by means of their knowledge in this area and choose the additional information that is necessary for making conclusions and forming their own point of view as for this matter. To solve these tasks students should have skills of the critical thinking, intellectual and creative skills, which should be created on all stages of foreign language learning. Each stage is implemented by means of different methods and strategies. The choice of them depends from the topic and the goal of the lesson and the level of students' language skills. Let us see how that works.

The method called "The brainstorm" is famous among teachers and does not need the detailed description. That is why we specify only some points of its implementation. The main aim of this method is development of critical and creative thinking. The choice of the topic depends on the quantity of ways of the problem's solving. It is reasonable to divide students in several groups and carry out "The brainstorm" in two steps. During the first step the suggestion box as of possible way of problem's solving is made. Any propositions are accepted, which are not discussed or criticized during this step. During the second step the proposed ideas are discussed, analyzed and synthesized, the optimal decision is searched. The final decision is accepted collectively.

The method "The reading with pauses" is widely used by the foreign language teachers. The peculiarities of this strategy is in metered reading of the text. After each semantic part the pause is made for discussing the information or the problem point or performing the tasks individually, in pairs or groups. The question is the method of stimulation of the thinking of different kinds on different levels of complexity. Putting a question in order to memorize belongs to the lowest level of thinking. Using the question of the high level by a teacher for the analysis, the synthesis or the assessment enables effective development of the students' critical thinking.

The ability of writing essay is the program requirement of the foreign language study in higher education institutes. It is the effective strategy of the critical thinking's development. It is the free flow of thoughts on the proposed topic and getting across the core of the problem, its analysis using analytical tools. Notwithstanding the small size and the creative features of the essay, when writing it a student makes a lot of work, meets not only the proposed problem but its other neighboring tasks. When working with the necessary literature he not only selects the needed paragraphs of the text but also analyses, compares and assesses the possibilities of their



implementation. The arguments are produced as for the used facts, the scientific data, the conclusions are narrowed down, which are based on the personal beliefs and views. A student has the opportunity to display his individuality, creativeness and originality in solving a problem. It is the method of the high level thinking's development, since it includes the analysis, the synthesis and the data assessment.

The implementation of the above strategies and other methods of the critical thinking's development demands intellectual and time spending from a teacher as well. The necessity not only to teach but also to develop the students' critical thinking demands from a teacher the modern view on the lessons' construction, their thorough and perspective planning. In order to provide the forming of the thinking skills of high level, a teacher should understand which processes of the students' thinking have to be activated on each stage of the work. He should teach them to put questions and analyze the causes of some events, operate arguments and evaluate the results of their activity. To achieve this thing, it is necessary to determine the goals of study appropriately, define problems and ways for their solving, choose adequate assessment according to the goals, organize speculations as of working results, videlicet determine which difficulties have arisen on performing these or those tasks. But along with this a teacher should not impose his own ideas on students or propose them ready-made solutions. He should only draw them to their independent choice of the researched object, the information search and the ways of the problems' solving.

**Conclusions.** Summarizing all above we should notice that in process of the foreign language study not only the creation of the communicative skill in foreign language is realized, but also the students' critical thinking is developed. Educational technology of creating the critical thinking in the process of learning is the combination of different pedagogical methods, which induce students to research and creative activities actuating their intellectual, creative and communicative skills, improving their language skills and deepening

the knowledge of their main subject. Within the strategy of the critical thinking's development by means of reading and writing it is important to teach the future professional to find out the special sources in foreign language, select the works of the particular subject, work with reference literature. It contributes to his professional development and helps to achieve his career goals. One of the effective technologies of the critical thinking's development is the project work. According to B. Bloom's taxonomy it is correlated with the thinking of high level including the analysis, the synthesis and the assessment. The implementation of the project method in the process of foreign language study for specific purposes gives a teacher the opportunity to optimize this process, realize efficient, problem comprehended and differentiated approaches in the study, which have priority on the modern stage of development of methods of teaching languages in higher education institutions.

The performed research does not comprise all the aspects of the mentioned problem. It induces to the further search of the new methods of the students' teaching of the critical thinking, creativeness and independence.

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