INFORMATION TECHNOLOGY IN THE CONTEXT OF DEVELOPING CRITICAL THINKING THROUGH FOREIGN LANGUAGE LEARNING

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In the modern society of information technologies, the task of studying their influence on the further development of students’ personal characteristics, in particular, the formation of critical thinking, during their educational activity of students remains relevant.

The American scientist R. Paul considers critical thinking as the basis of reforming education in the information society of the XXI century [1]. From his point of view, one of the leading characteristics of a modern competitive specialist is critical thinking. The advantage of information and communication technologies (ICT) is that they: expand the field of communication with colleagues online; diversify forms of educational activity through participation in electronic seminars, conferences, symposiums; provide the opportunity to update information from different regions of the globe in the field of professional interests; allow access to electronic software archives for professional computers. During the educational process by means of ICT, their potential is realized towards the actualization of critical and creative thinking as a factor of professional development of the person, increase of interest and willingness to self-development, mastering the ways and methods of systematic professional advancement which is provided through various forms of educational activity. Future professionals should be aware that mastering the methods of using ICT in educational work greatly facilitates and increases their efficiency as professionals. IT technologies in educational activities become more effective if they are used as: a means of interaction with sources of information, which optimizes acquiring new knowledge and developing individual learning style; the subject of study, i.e. mastering the methods of search, processing and use of information, awareness of its specifics in creating an educational environment and stimulating opportunities for self-development and self-expression in the professional field; tool for solving educational problems that ensures the advancement of future specialists in the information educational environment.

Analysis of ICT applying experience demonstrates that they effectively contribute to the formation of critical and creative thinking skills of students if their actions are aimed at developing information, research, intellectual and creative skills. The result and method of solving educational tasks in the process of learning a foreign language is achieved by relying on information obtained by students independently from different sources (verbal and electronic) and its use while modeling communicative situations in the learning process. The formation of critical and creative thinking skills involves students’ mastering the knowledge and skills of finding and processing the necessary foreign language information from various sources. The modern virtual environment offers many tools for finding, separating
false, incomplete and outdated information. The effectiveness of applying tools is provided if they have a clear purpose, are based on different sources of information, provide a set of different ways and methods of work on selecting, structuring and applying information to solve educational problems.

Critical thinking causes the activation of such mental processes as discernment, analysis, evaluation when perceiving information aimed at its understanding and evaluation [2]. Compared to the traditional form of learning, the use of IT technologies for teaching and learning is based on other mechanisms. We believe that critical thinking comes from the ability to apply higher-order cognitive thinking, which is the result of an effective learning process. Higher-order cognitive abilities also include problem solving, research, creative development of new ideas, as well as the ability to work in a team through communication skills, coordination of group work, which are developed during the implementation of communicative situations while learning a foreign language.

Analysis of modern research shows that there are several definitions of critical thinking which have the following features: identifying and determining the causes of problems, using effective research methods, predicting own actions and behavior of others, flexible use of reasoning, interpretation of information, rational evaluation of assumptions, facts and results of activities. Many studies of critical thinking have focused on the development of tools for objective measuring acquired skills, taking into account the differences in the understanding of critical thinking of different scientists. Research is still ongoing and there is no consensus on the impact of learning content and technology on the development of critical thinking. The tools for measuring critical thinking are too complex and time consuming to implement.

We have not found a single opinion on the methods and forms of improving the development of critical thinking in the modern scientific literature. It is widely believed that in the virtual environment there are more significant obstacles to the development of critical thinking compared to the traditional form of learning due to lack of experience in the practical implementation of active learning methods, teamwork through electronic means. On the other hand, the benefits of online learning for students should be emphasized due to the created conditions for individualization of learning, eliminating time constraints of the learning process, determining one’s own pace of learning information, conducting online discussions in a convenient virtual group or other community, etc. Halpern argues that critical thinking is directional thinking because it focuses on getting the desired result [3]. She believes that critical thinking is characterized by a willingness to plan, consider new options, ways of working, new ways of thinking, review old problems, as well as persistence and control of the results of one’s own activity with its subsequent correction.

Among the characteristic features of a highly developed critical thinking, the following ones should be identified: clarity of thought; correctness and objectivity of statements; accuracy and relevance to the researched problem; significance, impartiality and depth of analysis. Based on the experience of educational work and the above approaches, we can identify the following criteria that differentiate the stages of critical thinking: level 1 - inability to clearly analyze problems, provide information, select relevant information, and identify important hypotheses and conflicting views; lack of sufficient thinking and problem-solving skills; level 2 - periodic use of critical thinking skills and accurate analysis of problems; clarity of the submitted information; determining important hypotheses for testing, contradictory points of view and providing justifications; periodic practical application and identification of possible consequences; level 3 - sufficient awareness of the essence
of critical thinking; the presence of certain skills of critical thinking; awareness of one's own ideas, assumptions, consequences, as well as self-assessment of mental activity; accurate analysis of problems, identification of important hypotheses, effective disclosure of essential concepts; level 4: awareness of critical thinking essence; a range of significantly developed critical skills; ability to solve problems effectively.

In our study, special attention was paid to the criteria and indicators of critical thinking when learning foreign language, including: work independently with different sources of information, use subject knowledge and information skills in a communicative situation, transform knowledge and skills into new ones, find non-standard solutions based on various sources of information. To analyze the impact of increasing IT technologies use on the effectiveness of critical thinking formation, a survey of students was conducted. More than a half of the respondents do not see correlation between such factors. We found that the formation of critical thinking is not accompanied in the minds of students by the introduction of effective ICT in the educational process. According to the students' answers, it can be noted that with each year of study and gaining experience in educational online activities, the share of Internet users is growing but its use is not always productive.

At the foreign language online course, we proposed criteria for students to evaluate Internet information resources in order to gradually develop the skills of critical analysis and evaluation during the project research work. The parameters of the resources concerned their authorship, experience and worldview; structural and substantive features of resources and tasks defined for them; parameters and format of online publications, their compliance with the areas of one's own research; validity and objectivity of the data presented on the site.

Conclusions. Processing foreign language information from different online resources and its use during various communicative situations when learning foreign language with consideration of individual characteristics and needs of students, provides a motivational component for learning and developing critical thinking.

The students' willingness to apply information and communication technologies, as well as strengthened communicative and motivational components of learning, result in the interest of learners to acquire information on methods and technologies for improving critical thinking while learning a foreign language. A noticeable transformation can be traced in the cognitive activity of students, their desire to take a non-standard approach to solving educational problems.

References:
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