Theoretical substantiation of the conceptual model of project technology

Voronova Yelizaveta Mikhailivna¹,
Gerasymchuk Tatiana Volodymirivna²,
Gubareva Olga Semenivna³

¹ Associate Professor VAL, Associate Professor;
Department of Philosophy and Pedagogy of Professional Training,
Kharkiv National Automobile and Highway University; Ukraine

² PhD, Associate Professor;
Department of Philosophy and Pedagogy of Professional Training,
Kharkiv National Automobile and Highway University; Ukraine

³ PhD, Associate Professor;
Department of Philosophy and Pedagogy of Professional Training,
Kharkiv National Automobile and Highway University; Ukraine

Abstract.
The proposed article stresses that learning a foreign language by students of technical specialties of the higher school is associated with difficulties which are primarily of a socio-psychological nature. It’s shown that the project methodology here is an effective development tool of critical thinking for future technicians.

Keywords:
project technology
foreign language
creative learning
psychological
Learning a foreign language on the basis of project technology is possible only on the basis of creative development of imaginative thinking of students their attention, memory, ability to see facts, compare them, analyze, generalize, specify and abstract, that is, on the basis of one's own reflection of reality, since all human activity is formed on a psychological basis. At the same time, it is most logically in psychological and pedagogical sense to use the project methodology taking into account the specifics of foreign languages as a subject for teaching a foreign language to engineering. students.

The development of communicative competence skills of higher education students schools of engineering specialties on the basis of project activity takes place in the process of their formation as individuals and requires mandatory consideration of psycholinguistic properties of the mechanisms of foreign language speech and communication thinking and speaking in the process of communicative interaction of speakers.

The analysis of psychological and pedagogical scientific works gives reason to do the conclusion that the implementation of the project methodology of teaching a foreign language is especially relevant in senior years. This is explained psychologically features inherent in students as subjects of a certain age group.

Research on age psychology shows that mental development and the formation of students' personality is characterized by certain changes in emotional, regulatory and cognitive spheres. There is a desire and the ability of students, especially seniors, to express themselves, self-assertion and independence in learning. In the context of professional self-determination and self-awareness in senior students renewed interest in learning a foreign language.

Based on the study of research on age psychology and pedagogy we can determine the following psychological and pedagogical prerequisites for the implementation of the project technology when teaching a foreign language in higher education technical schools:
- complex learning motivation;
- focus on the specifics of students' professional specialization;
- personal and active approach to learning;
- difficulty and individualization of education.

Methodical prerequisites of the project methodology of teaching a foreign language determine the following general characteristics:
- orientation of foreign language learning;
- interconnected learning of all types of speech activity and nature of foreign language learning, which involves the involvement of knowledge,
- skills and abilities of students in other educational subjects.

Empirical studies show that learning a foreign language by students of technical specialties of the higher school is associated with difficulties which are primarily of a socio-psychological nature. On the one hand, the status of the English language significantly increases the motivation to study it. In addition, in recent years, there has been a trend towards earlier awareness by students of the importance of acquired knowledge for further successful professional growth.

Senior students want to see a direct connection of acquired knowledge of English with their future professional and personal life. As a result, it seems impossible and unacceptable to communicate with students of senior courses of non-philology (engineering, natural sciences, etc. industries), which mostly already have experience in professional activity, only as with objects of educational activity. In this case, the optimization of the educational process is facilitated by involvement students to actively participate in the organization of educational activities with the help of innovative technologies [1].

The basis of scientific research in order to develop communication skills competences of students of engineering specialties made up ideas of psychological significance (M. Dobrynin, C. Rubinstein), personal content (O. Leontiev), personality personalization (O. Petrovsky), leading (V. Davydov, M. Leontiev, D. Elkonin) and determining (V. Mukhina) types of activities, fundamental theories of personality and activity: about integral characteristics personalities (B. Ananyev L. Bozhovych, O. Kovalev, V. Myasishchev, K. Platonov); about mechanisms of personality
personalization and its development in activity (K. Abulkhanova-Slavska, L. Bueva, O.M. Leontiev); on mastering activities (L. Vygotskyi, Davydov, P. Halperin, N. Talizina) and its subject (B. Ananiev, O. Asmolov, S. Rubinstein); on the unity of theoretical and practical thinking (S. Batishchev, O. Bruslinskyi, O. Matyushkin, B. Teplov, H. Kostiuk); about individuality and its development in activity (E. Klymov, B. Merlyn, B. Teplov). Together, they allowed:
- to determine the specifics of modern education, in particular the use of project education technology of teaching foreign languages to students of technical higher schools new orientations of society regarding the professional training of an engineering specialist;
- to substantiate theoretically the conceptual model of project activity for the purpose of developing the communication skills of engineering students’ specialties in the field of foreign language education;
- to formulate the principles of a new didactic system based on design methodology, determining the conditions and limits of its optimal application;
- to determine the pomological and pedagogical foundations of the use of project methodology with taking into account the specifics of foreign languages as an educational subject in higher education of the technical direction are based on the following provisions:
  - define the role of a foreign language as a subject in modern education system;
  - to show specifics of foreign language learning for engineering students
  - to formulate main goals and objectives;
  - to use of project methodology taking into account the specifics of training of a foreign language in higher education.

The modern higher school faces tasks related to creation conditions for intellectual and spiritual and moral development of students, for training of an intelligent person for education in every future specialist in the needs of self-education, self-education and self-development, for the formation of students with a broad and humane view of the world. The system of classroom and extracurricular work in
the higher education institution for all educational disciplines should be aimed at solving the specified tasks. A foreign language is an active educational subject that has an educational and developmental potential that creates a solid foundation for formation of an intelligent person [2].

The main component of the scientific-theoretical and practical basis is motivation, the other most important component is, in our opinion, an active, personally oriented approach, as well as communication, culture and educational competence. Project activity here contributes not only to broadening one's horizons, but also forms students' critical thinking skills. Students cease to be passive recipients of knowledge. They actively participate in the process of learning by asking questions and finding answers to them. Students don't just receive information, they process it, compare sources, analyze facts, highlight important and minor, establish causal relationships. Knowledge does not become finite, but the starting point, the basis for reasoned and logical thinking is based on personal experience and verified facts. Formation of critical thinking in the period of expansion of information space acquires special relevance. It allows students to achieve such educational level which results in the ability to work with information flow in various fields, constantly increasing and regularly renewed knowledge; the ability to express their thoughts (verbally and in writing) clearly, convincingly and correctly; ability to produce own opinion based on understanding various experiences, ideas and perceptions, solve problems, the ability to study independently (academic mobility), the ability to cooperate and build constructive relationships with other people [3].

Project technology allows to create an environment necessary for full-fledged study of a foreign language, professional foreign language with the purpose of the formation of global thinking, the development of personal activity, which becomes especially relevant during the transition to the European system of education, which poses new problems for pedagogical science and practice widely introduces the project methodology into the educational process - one of these technologies:
Thus, the project methodology is an effective development tool of critical thinking for future technicians. Therefore, the main goal of learning a foreign language is non-language (technical) university is to master all components of a foreign language, which becomes the main condition for implementation intercultural communication in general. The object of learning a foreign language is foreign language communicative competence activity as the most important means of intercultural interaction in general. So, the project methodology as a modern pedagogical technology ensures success, formation of all components of foreign language communicative competence, the development of a secondary language personality, formation of a modern specialist in the chosen profession.

References: