МЕДИЦИНСКИЕ НАУКИ

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MEANS OF FORMING THE PROFESSIONAL COMPETENCE OF STUDENTS OF TEI

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Abstract. The paper studies the process and means of forming the professional competence of students of TEI, which are an important structural element for the formation of effective activities at relevant institutions. The interpretation of the concept of the categories "personality competence", "competence" and "web-quest" is analyzed. Problem quests concerning theoretical and practical training of students, and procedures of internship practice on professional specialization are investigated. The pedagogical conditions of creation of professional competence of students in the preconditions of professional and practical training are studied. The model of organization of professional competence of the perspective specialist-graduates of TEI is formed and the ways of reorganization of educational process and organizational-methodical insurance are defined. It has been established that the quality of education at TEI largely depends on the method of formation of the educational process, the chosen forms and methods. The role and basic objectives of the preliminary preparatory work on the part of the teacher are formed. It has been investigated that the web-quest is unanimously recognized as a motivational, resource-oriented technology that forms the course of creative potential of the student, which guarantees the effectiveness of all types of educational process and ensures the creation of appropriate professional competence of students.

Key words: professional competence, TEI (tertiary educational institution), student, professional training, educational process, information and communication resources.

Outlining of previously unsolved parts of the overall problem. However, despite the large number of original and meaningful scientific works of both foreign and domestic scientists on the subject, it should be noted that there are virtually no studies on the analysis of the means of forming the professional competence of students of TEI.

The purpose of the academic paper. The purpose of the academic paper is to study the means of forming the professional competence of students of TEI in order to form effective activities at relevant institutions. To achieve the goal outlined, the following tasks are defined, namely:

1. to determine the basic processes and means of forming the professional competence of students of TEI;

2. to describe the current process of formation of professional competence of students of TEI;

3. to analyze the content of modern innovative learning technologies that promote the development and self-implementation of students of TEI.

During the study, general scientific and special research methods have been used, including analysis and synthesis, comparison, generalization, system-structural analysis.

Presentation of the basic material. It is generally accepted both at national and international level that the alternative that dominates in the standards of the second generation of subject-knowledge model of training should be a competence-based approach, which provides new approaches to the professional qualities of graduates, basic skills, adequate perception of the interdependent world. The system of professional education, focused on competences, requires a change in the entire paradigm of vocational education, including changes in teaching methods, assessment, ways to ensure its quality. Changes in approaches to learning affect primarily the transfer of emphasis from the process to learning outcomes, the roles of teacher and student in the learning process, the organization of learning, the dynamics of curricula, assessment methods, etc. [1, p. 941].

There are many definitions of the concept of "competence of the individual" in domestic and international scientific thought, where among the others, the most accurate, in our opinion, is the following one: a specially organized set of knowledge, skills and abilities acquired in the learning process, which gives the individual the opportunity to formulate, that is, equate and solve, regardless of the circumstances, the issues inherent to the relevant professional activity [2, 3].

In modern conditions, domestic researchers use the concepts of "competence" and "competency (capacity)". The analysis of scientific research on the concept of "competency" is sacramentally used in the quintessence of "scope of powers and rights", where the interpretation of the concept is mainly interrelated with erudition, influence, skills, or a congruence of the necessary knowledge and qualities of the personality, which gives the right to adapt to the solution of quests in the relevant professional activity" [4].

When investigating professional competence in the opinion of acmeology, it is necessary to highlight

the following main varieties: special professional competence, which ensures mastery of professional activities at a high level and the ability to plan further personal professional development; social competence, which determines the mastery of collective professional activity, rational way of communication, pedagogical interaction; personal competence, which guarantees the possession of means of personal self-development and self-expression, counteracting the professional deformation of the person. The presence of the above mentioned types of competences marks the maturity of the individual in professional activities, communication, in the installation of the professional personality and in the creation of his skills. There is also a possibility that all these types of competences may not be combined in one person [5].

Forasmuch as a person can be an excellent professional, however, he will not be able to communicate or will not be able to follow the guidelines for self-development. In this case it is possible to state a higher special competence and a lower one - social, personal. However, distinguishing primitive competencies (capacities) in relation to professional competence, it should be noted that professional competence is not a general recruitment to the relevant primitive competencies (capacities), it represents a hierarchical structure of interdependent primitive competencies (capacities), which have the property to change over time. This approach focuses on the final result of the educational process; it is aimed at future specialist's formation of willingness to productively use potential opportunities and external resources to achieve the goal. The interpretation of the concept "formation" in pedagogy is considered as a result of human development associated with purposeful changes through upbringing, education and training. It is important to study the professional development of the personality in the unity of its operational and consumer-motivational components [6].

Professional development is a multilevel process consisting of four basic stages, which are schematically depicted in Figure1.
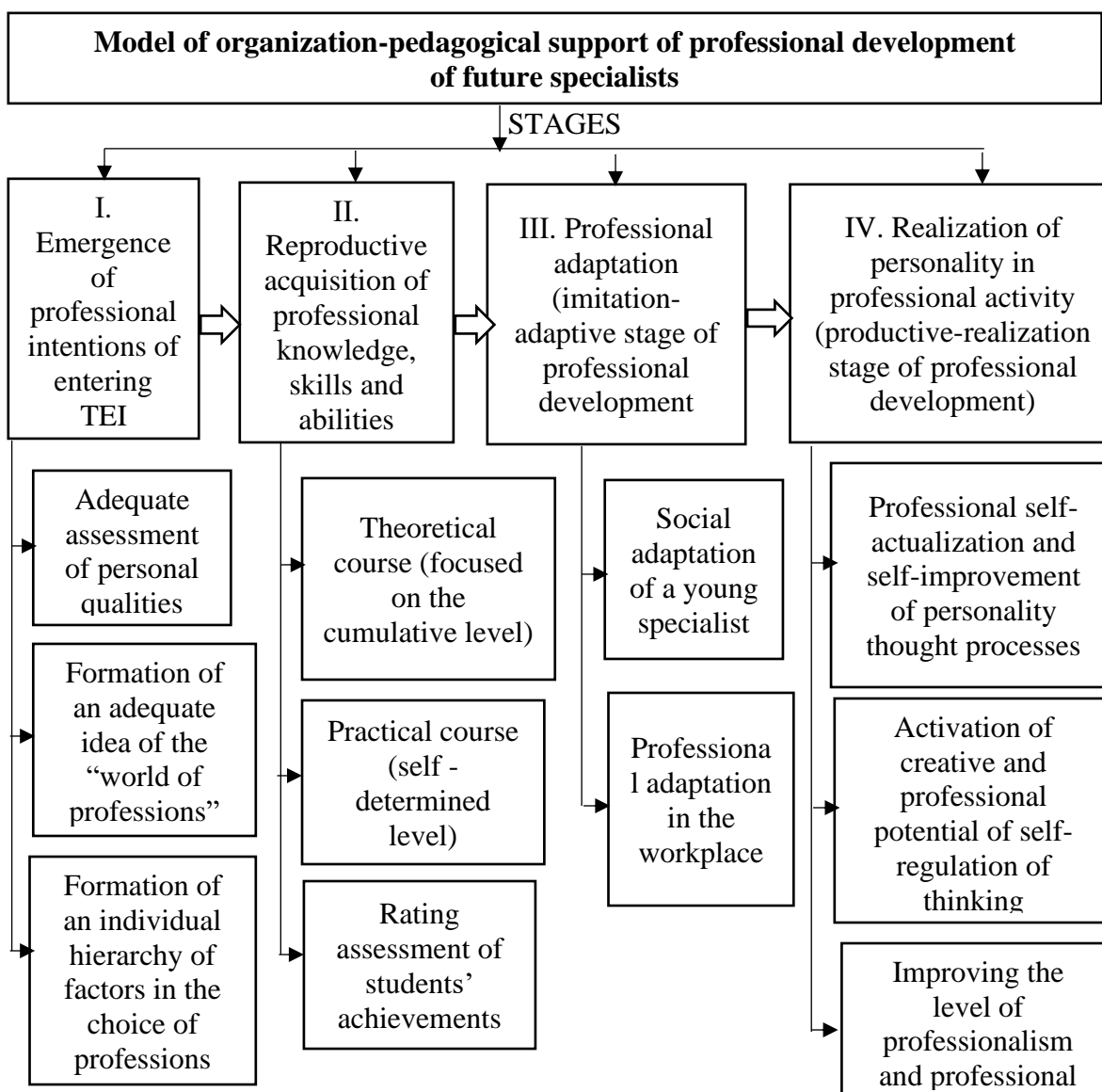

Figure 1. Block diagram of organizational and pedagogical support for the professional development of young professionals

The training of qualified specialists is completed primarily due to the educational process of tertiary educational institutions (hereinafter - TEI), which should be investigated as a set of system-forming structural elements. Depending on the basic didactic purpose of professional training, the educational process can be divided into theoretical and practical training. The defining purpose of theoretical training - theoretical mastering of professional disciplines, and practical - creation of structural professional abilities and skills, that is, practical mastering of professional activity. The process of theoretical training is basically created in accordance with the logic of knowledge acquisition, and practical - to the logic of the formation of skills and abilities.

A promising specialist should be ready to delve into interdependent professional activities, to feel convincing in this professional space, which requires organized professional qualities of the person and the practice of social and exclusively professional communication. A crucial component of studying at TEI is a subject as the means of functioning. In professional training, the skills of implementation of activities are the main function of the relevant disciplines [7].

Training of specialists at TEI provides two stages: the first one – deep, fundamental, and the second one – wide, professional training, the basic element of which is practical training of students on the basis of undergoing industrial work-related practice. Such a wide technical and deep fundamental training makes it possible for graduates of TEI to quickly adapt to the dynamic development of equipment and technology, without lagging behind their achievements. Empirical revenue of students is an instructional component of the educational-professional curriculum for obtaining a qualification level; it includes the purpose of their accumulation of professional skills and abilities [8].

The basic purpose of the practice is to master the latest methods, forms, means of promising professional activities by students, as well as its organization, arrangement of professional skills and abilities, acquiring of the requirements of systematic renewal, as well as training future professionals for professional activities. One of the difficult new pedagogical and psychological hardships is to motivate the importance of prerequisites for the organization of professional readiness of students. The structural elements of professional readiness are cognitive and operational elements (see Figure 2).
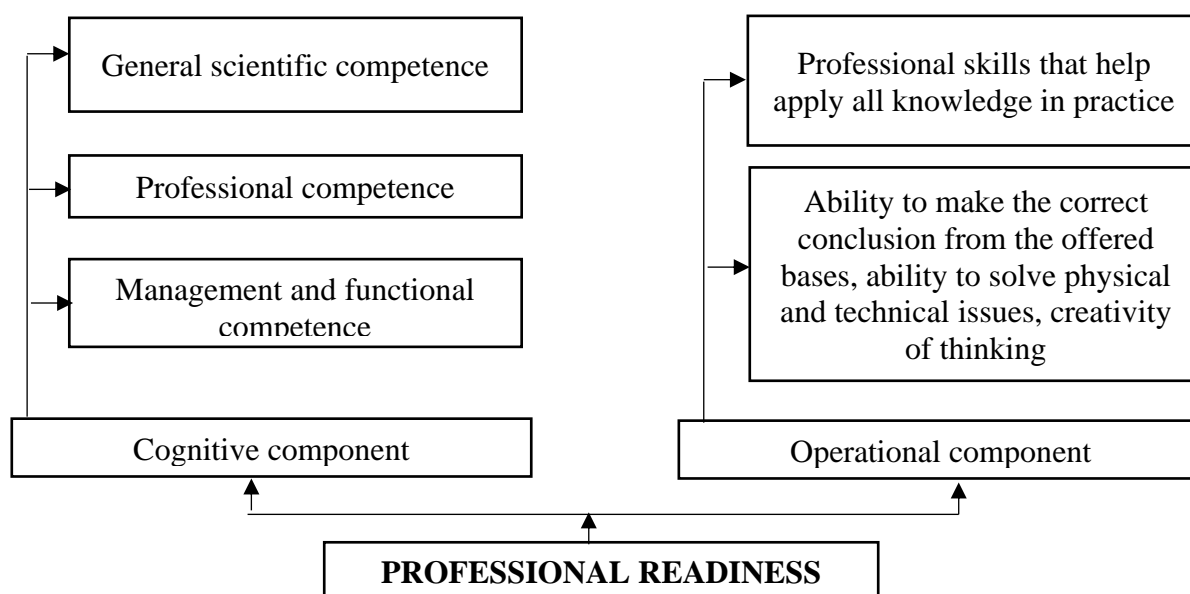

Figure 2. The structure of readiness of a young specialist for professional activity

An important condition of the organization of readiness for professional activity of the future specialist is the correspondence of subjective properties, personality traits to the nature of the profession. The formation of the structure of professional activity should be provided both within the educational and extracurricular activities of the university.

Forasmuch as educational activities differ significantly from professional ones in terms of

motives, goals, means and results, it is necessary to look for ways and means of transforming educational activities into professional ones. Internship practice can be considered as monolithic of these tools; it is an element of the educational process, and it will obviously be able to solve this issue. Internship practice is carried out as off-job training and it is structurally related to the future profession as shown in Figure 3.
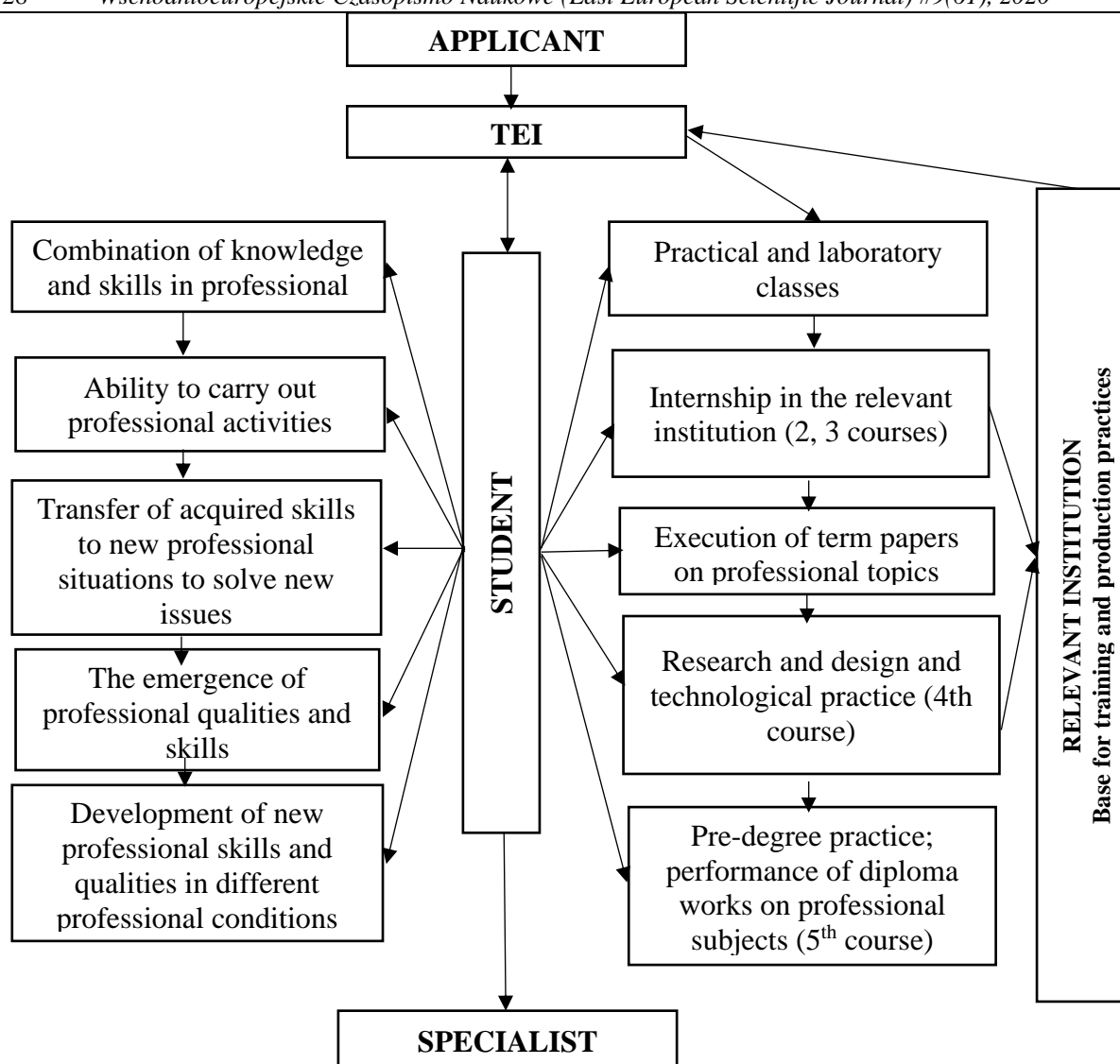
Figure 3. The process of formation of professional development of a student in the system of education at TEI

The educational process within the framework of internship practice should be carried out in effective conditions, completed in the subsystem of training, education and development of the student, which in the future guarantees the indivisible and coordinated creation of a competent specialist. Practical training forms conditions for gaining professional experience, expanding social contacts of the student, organization of experience of self-management. While communicating in the staff of specialists, taking part in solving the issues of the institution, the student demonstrates, forms and records professional abilities and important moral skills. Moreover, during the internship practice students directly master the outlined system of norms, principles, social roles and ideals, which in the future will be useful for implementation as qualified professionals in the relevant field. In general, the mechanism of formation of professional training of future specialists is a method of development of their professional qualification.

Organizational and methodological support of professional and practical training of students provides: conducting purposeful, systematic career guidance work with young people throughout the training period;

optimization of ways of constructing learning activities on the basis of the activity approach; orientation of the content of educational material from cycles of disciplines concerning professional activity of the specialist to development of professional motivation; insurance of interdependence of theoretical and practical training of students; systematic creation of motivational attitudes for unique work in mastering the future profession by students.

The basic factors that promote the organization of professional competence of students are as follows: professional and cognitive interest and professional orientation and values of the student; material and technical base of TEI; training technology of young specialists at TEI; professional competence of teachers; cognitive and special abilities of the student; the content of practical training; forms and methods of practical training, etc. [9].

Responding to numerous challenges that arise in the functioning of society and the development of education, the Council of Europe has identified five key competences of the Young European, which provide information on competences. They are caused by the integration and intensification of informatization of

society, which involves human mastery of technologies, understanding the peculiarities of their use, strengths and weaknesses, the ability to critically assess information promoted by advertising and the media. Information and digital competence covers a crucial place in the structure of professional competences, which is the foundation for professional implementation in various fields, a defining recommendation for the formation of a promising specialist; they are defined by the ten competences prescribed in the Concept "New Ukrainian School", which are recognized as the main competences of modern human [10].

Innovations in education center around creation, introduction and distribution of the newest ideas, approaches, receptions and methods, technologies in educational activity, which are directed on updating, modernization, transformation of educational process according to requirements of time. Forasmuch as modern latest technologies are an integral tool in today's learning process; they are components of an innovative approach to teaching students of TEI, including in the process of learning foreign languages.

Scientists have established that with the help of computer information processing systems the spiritual and cultural space of life is changed, the newest type of thinking appears, because the computer has become a non-standard continuation of the personality, completing his potential and promoting his implementation of various issues [11, c. 3]. The quality of education at TEI largely depends on the form of organization of the educational process, the chosen forms and methods.

Scientists distinguish the formation of cognitive activity through modeling; effective training of knowledge, skills and abilities; automated verification of intermediate learning outcomes; imitation of real professional situations using multimedia; intensification of the educational process by increasing the pace, individualization of learning and increasing the active time of educators and students; the possibility of combining visual and audio forms of information in curricula, etc. [12, c. 12].

Investigating the benefits of using information and communication resources in the process of learning a foreign language, scientists emphasize the expansion of the context of the lesson, the formation of international cooperation, organization of virtual language groups and communities, forums and chats, access to modern up-to-date authentic materials, communication with native speakers and deepening of linguistic knowledge [13, c. 113].

Increasing the amount of information and its general availability leads to the intensification of the learning process, its acceleration, rapid change of educational material and approaches, which requires flexibility in teaching a foreign language. The interest of information and communication resources in comparison with other teaching aids lies in the fact that they are mostly designed for intensive self-study of students, improving skills and abilities, however, no one teaches students to apply these resources in practice. As a result, a significant number of educators make mistakes, expecting that only the use of innovative information resources will instantly increase the motivation to acquire knowledge and significantly improve the quality of their acquisition. The learning process should be carried out gradually, from the level of knowledge - acquaintances to the level of knowledge - skills. The driving force of this process is the endogenous motivation of the student, a conscious desire to explore the latest educational material.

In this regard, R. Hurevych notes that "a completely specific level of intellectual and personal development is expected from a student, namely: the ability to learn, the need to obtain and supplement their own knowledge, stable skills of self-education; activity; mental and physical capacity; professional orientation, career motivation; sufficient level of work with computer and means of information and communication technologies (hereinafter - ICT)" [12, c. 13]. Another factor that determines the effectiveness of individual work of students with ICT, in our opinion, is the previous work of the teacher, who should identify the necessary amount of information submitted for individual processing by students, select its content according to didactic properties and capabilities of information technology teaching. Consequently, under the clear guidance of the teacher, the scope, form and time of individual educational work of students should be determined; the choice of ways of integration of information technologies of teaching with traditional methods and teaching methods should be made. In addition, the educator provides methodological assistance, predicts the possible impact of ICT on the nature of thinking and behavior of participants in the educational process, as well as contributes to the consolidation of the studied material by monitoring and assessing the results of individual work of students.

Thus, the teacher takes responsibility for the personal learning activities of students by creating appropriate final test tasks, which serve as an indicator of the knowledge acquired by students. However, in this case, the student ceases to be the object of study and the recipient of prepared educational information; the shift of emphasis makes it possible for him to choose a personal educational path and become an authorized persistent subject of the educational process. Scientific developments of both domestic and international researchers are focused on finding ways to design the optimal educational environment based on the latest approaches and principles designed to ensure the integration of innovative and information technologies in the educational process in order to form professional and personal development and self-development of students.

The latest technology of web-quest is one of such motivating and resource-oriented innovative technologies; it determines the process of formation of creative potential, acquisition of skills in search activities, expansion of worldview, acquisition of skills of processing, systematization and analysis of information that guarantees the effectiveness of all

types of educational activities and supports the process of professional competence formation.

Interpretation of the concept of "web-quest" is defined as "web search" or "Internet search". In scientific schools of thought, there are many definitions of the concept of "web-quest", where among them, the most accurate are as follows:

1. a problematic task with the components of a role-playing game, for the implementation of which Internet resources are used [14, c. 34].

2. web pages on educational issues, which have hyperlinks to other web pages on the network on the required topic; they are an additional incentive to individualize the learning process of students, deepening their horizons and supplementing with supporting knowledge.

3. innovative personality-oriented learning technology, the main purpose of which is an independent searching for information by students, necessary for learning.

The originators of the web-quest V. Dodge, T. March saw it as a research reference-oriented activity; it is based on the principle of support, which uses links to essential Internet resources and an authentic task to motivate students to perform a research task with an ambiguous solution, developing their ability to work both individually and in a group in the process of searching for information and transforming it into more difficult task.

Basically, we can characterize the web-quest as a modern innovative technology based on the project method of teaching, which involves the search for activities of students using modern ICT, based on the support provided by the teacher. The universality of web-quest technology is defined as follows: it can either embrace a separate quest or topic within one discipline, and at the same time have an interdisciplinary tendency, building close ties with disciplines in the specialty, contributing to the development of professional competence of students.

On the other hand, this technology serves as an additional means of encouraging students to speech cooperation and gives the teacher the opportunity to select unique, popular educational materials of professional profile. As of today, there are numerous free platforms online that contain relevant templates or step-by-step instructions for creating your own web quests or recommend a number of ready-made web products on any topic and varying levels of complexity [15].

Thus, as the experience of using ICT in the educational process shows, web-quests are one of the modern effective project technologies, which allows teachers to successfully form motivation and interest in learning, constantly replenish and update learning materials, thereby improving students' speaking skills, their intellectual abilities and creative potential.

Conclusions and suggestions. Thus, the formation of professional competence of students is the basic objective of TEI. Tertiary educational institutions should create all the necessary conditions for the implementation of this process. One of the most important components of quality training of specialists who meet today's demands is practical training, as it contributes to a deeper perception of the chosen engineering specialty and intensive adaptation of graduates of TEI to the working conditions in the relevant institutions. The formation of organizational and methodological insurance of professional and practical training of students in the current economic conditions for the revival and increase the effectiveness of practical training of students requires significant reorganization.

At the same time, students get the opportunity to independently organize their own learning, regulate its pace and direction, improve the skills of using Internet resources for educational purposes, gaining experience in teamwork. Multimedia content and hypermedia system of the Internet, the authenticity of materials create a sense of presence of students in the language environment and freedom of choice. We see the prospect of further research in the development of a holistic set of multimedia technologies aimed at developing professional foreign language competence of students.

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