



SUSTAINABLE DEVELOPMENT: MODERN THEORIES AND BEST PRACTICES



THE PROBLEM OF FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE INFORMATION TECHNOLOGIES SPECIALISTS

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The main task of the modern system of higher education in the field of information technology is to train a qualified, competitive specialist who not only has a certain level of knowledge, skills and abilities, but also can practically apply them in their professional activities. Under conditions of qualitative change, large-scale technological innovations taking place in modern society, economy, industry, professional education in information technology should provide a set of integrated knowledge, skills and personality traits - professional competence of the specialist, including future information technology specialist.

The problem of forming the professional competence of future specialists in information technology occupies a significant place in the development of modern professional education in the field of information technologies, as it includes all components of the study of theoretical and applied aspects of this issue. Transformational processes have led to growing demands for information and communication activities in the field of information business as one of the powerful tools of society, due to the need for rapid processing of information flows, rapid response to changes and current requirements that require flexibility and speed of professional thinking, the direction of professional action on the advanced development of the field of information technology.

It is clear the need to increase the level of professional competence of future specialists in information technologies, which generally stimulates the improvement of organizational and pedagogical, didactic conditions for training specialists in the field, resulting in rethinking methods, tools, techniques, forms, principles also forces to adjust them, taking into account the specifics of distance and resource-oriented training of future specialists in information technologies.

The obvious urgency of this problem, the inadequate degree of its elaboration in pedagogical theory and practice, the scientific needs in solving urgent issues, the identified contradictions led to the choice of research topic. Analysis and generalization of the processes of reforming higher IT education, scientific sources and pedagogical practice of forming the professional competence of future specialists in information technologies allowed to resolve isolated groups of contradictions that need to be resolved, namely in the context of social order, in the context of pedagogical science, and practice, in the context of increasing the level of informatization and technologicalization of professional training of future specialists in information technology.

The leading idea of the study is based on scientific analysis and understanding of

the phenomenon of "professional competence of future specialists in information technologies" as an integrative personality trait of a university graduate, which demonstrates his ability to work effectively with information, modern software, hardware, telecommunications to find the most effective and the best option for solving professional problems, in accordance with the requirements of educational standards, society, the global market of information and communication services, the labor market, future professional activity in the information business.

The purpose of the study is theoretical justification, development and experimental verification of the effectiveness of the system of formation of professional competence of future specialists in information technologies. The object of the research is the professional training of specialists in information technologies in universities, and the subject of the research is the system of formation of professional competence of specialists in information technologies.

It should be noted that there is no doubt that the formation of professional competence of higher education in the field of information technologies is a leading direction of improving the system of professional IT education in the information educational space. The implementation of the author's scientific research on the formation of professional competence of future specialists in information technologies consists of four interrelated components: methodological, theoretical, technological, methodological. Thanks to the conducted thorough theoretical and comparative types of analysis of the conceptual and categorical apparatus of the scientific problem, the pedagogical aspects of formation and development of the declared topic are singled out, the semantic analysis of features of professional competence of future IT specialists abroad and in Ukraine is performed.

Theoretical and practical significance of the results, which is to develop and implement in the educational process of author's special courses for higher education "Information Technology", and for university teachers, teaching materials for special courses, professional practice programs, author's site, textbooks, and also improving curricula. It should be noted that the results of this work can be used in the development of curricula for training specialists in the field of knowledge "Information Technology" and educational programs, textbooks, manuals, teaching aids, distance learning courses, as well as university teachers.

Considering vocational education as an educational process aimed at acquiring students' professional knowledge and skills to prepare for life and professional activity in a world of information diversity, the paper highlights the main approaches to interpreting the professional competence of future information technology professionals, namely: axiological, competence, activity, integrative, resource-oriented, systemic.

The author's concept of formation of professional competence of future specialists in information technologies is developed, covering methodological, theoretical, technological, methodical components which promote realization of the outlined tasks and the purpose. The basis for the development of the model was the concept, as well as the selected pedagogical conditions for the formation of professional competence of future specialists in information technology. Structurally, the professional competence of future specialists in information technology, according to the author covers cognitive-informational, motivational-value, professional-activity and interpersonal components. The pedagogical conditions for ensuring the effectiveness of the formation of professional competence of future information technology specialists were substantiated.

The effectiveness of the use of innovative pedagogical technologies, methods, forms, modern teaching aids is evidenced by the implementation of selected pedagogical conditions.

In the course of the work the range of directions of formation of professional competence of future specialists in information technologies was expanded, recommendations and directions of improvement of the system of formation of professional competence of future specialists in information technologies were substantiated. In the course of the work the range of directions of formation of professional competence of future specialists in information technologies was expanded, recommendations and directions of improvement of the system of formation of professional competence of future specialists in information technologies were substantiated. The results of experimental verification of the effectiveness of the implementation of reasonable pedagogical conditions for the formation of professional competence of future information technology professionals show that high and medium levels of professional competence in students have increased and low has decreased, which undoubtedly confirms the effectiveness of the author's system of professional competence. information technology in universities. The component composition of the system of formation of professional competence of future specialists in information technologies is determined, the organizational-methodical and software system of formation of professional competence of future specialists in information technologies in educational practice is developed and implemented.

The developed model of the system of professional competence formation of future information technology specialists consists of five components: conceptual-target, motivational-axiological, procedural-technological, personal-developmental, criterion-diagnostic, which are interconnected.

The use of software for the creation of electronic educational and methodological complexes of disciplines studied by future specialists in information technology is substantiated. CRM-solutions for increasing the level of professional competence of future information technology specialists have been developed and tested, its advantages have been described. The set goals and objectives were gradually solved by specially selected and adequately applied research methods. The work is performed in a logical sequence, covers the solution of the problem, but we consider it necessary to pay attention to further, more thorough study of the proposed third pedagogical condition for the formation of professional competence of future information technology professionals through CRM-systems.

According to the results of the research, the proposals on the prospects of improving the professional training of future specialists in information technology at universities are substantiated. Theoretical and practical results of scientific research are the basis for further study of the problem in terms of identifying specifics of ways to organize effective cooperation with firms, companies working in the field of information technology (enterprises, organizations), with foreign universities that train future IT professionals for studying the areas of implementation of resource-oriented learning, professional practice, networking of universities in the process of forming the professional competence of future specialists in information technology.

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THE USE OF MODERN INFORMATION TECHNOLOGIES IN TEACHING ENGLISH

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In modern society, the role of foreign languages is increasing. Knowledge of a foreign language gives young people the opportunity to join the world culture, use the potential of the vast resources of the global Internet in their activities, as well as work with information and communication technologies and multimedia teaching aids.

The purpose of teaching a foreign language is the communicative activity of students, that is, the practical knowledge of a foreign language. The task of the teacher is to activate the activity of each student in the learning process, to find the right environment for their creativity. The main goal of teaching a foreign language to students is to educate a person who is willing and able to communicate, and who is willing and able to receive self-education. Participation in various international programs, the opportunity to study abroad presuppose not only a high level of foreign language proficiency, but also certain personality traits: communication skills, the absence of a language barrier, knowledge of international etiquette, a broad outlook, the ability to what is called "present" oneself. As a rule, when performing various tests when entering a higher educational institution or participating in competitions and Olympiads, a strict time limit is set for each task, which requires a special type of preparation. In order to achieve all these goals, of course, effective assistance to the teacher is provided by the use of computer technology and Internet resources in teaching English.

Today, the use of a personal computer, multimedia technology and the global information computer network Internet affects the education system, causing significant changes in the content and methods of teaching foreign languages. The modern teacher faces the problem of finding a new pedagogical tool. In modern conditions, students pay