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INFORMATION AND COMMUNICATION TECHNOLOGIES IN PROFESSIONAL TRAINING OF FUTURE SPECIALISTS

LAS TECNOLOGÍAS DE LA INFORMACIÓN Y LA COMUNICACIÓN EN LA FORMACIÓN PROFESIONAL DE LOS FUTUROS ESPECIALISTAS

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ABSTRACT

The article proves the importance of the role of information and communication technologies in the professional training of future specialists at the current stage of the existence of the educational space. The main purpose of using information and communication technologies in the professional training of future specialists and the entire information environment of a higher education institution has been clarified. A study was conducted on the formation of students' professional knowledge and skills in the use of information and communication technologies, and the ability of teachers of higher education institutions to use information and communication technologies was investigated. The principles on which the formation of the information environment in the professional training of future specialists is based are highlighted. The conditions implemented in the professional training of higher education applicants to ensure the innovative orientation of the use of information and communication technologies are considered. Aspects of the application of information and communication technologies in the professional training of future specialists are presented, which qualitatively affect the process of education and personality formation.

Keywords:

Information and communication technologies, professional training, future specialists, information environment, institutions of higher education.

RESUMEN

El artículo evidencia la importancia del papel de las tecnologías de la información y las comunicaciones en la formación profesional de los futuros especialistas en la actual etapa de existencia del espacio educativo. Se ha

aclarado el objetivo principal del uso de las tecnologías de la información y la comunicación en la formación profesional de futuros especialistas y todo el entorno informativo de una institución de educación superior. Se realizó un estudio sobre la formación de conocimientos y habilidades profesionales de los estudiantes en el uso de las tecnologías de la información y la comunicación y se investigó la capacidad de los profesores de instituciones de educación superior para utilizar las tecnologías de la información y la comunicación. Se destacan los principios en los que se basa la formación del entorno informativo en la formación profesional de los futuros especialistas. Se consideran las condiciones implementadas en la formación profesional de los aspirantes a la educación superior con el fin de asegurar la orientación innovadora del uso de las tecnologías de la información y las comunicaciones. Se presentan aspectos de la aplicación de las tecnologías de la información y las comunicaciones en la formación profesional de los futuros especialistas, que inciden cualitativamente en el proceso de educación y formación de la personalidad.

Palabras clave:

Tecnologías de la información y las comunicaciones, formación profesional, futuros especialistas, entorno de la información, instituciones de educación superior.

INTRODUCTION

At the current stage of informatization of society, computer technologies are becoming increasingly widespread in various spheres of life, they act as one of the tools of cognition. Therefore, one of the tasks of higher education is the training of a specialist who freely navigates the world's information environment, and who has knowledge and skills in searching for, processing, and storing information using a computer. and computer technologies. This direction is considered promising because in general, education is characterized as a large system, the quality of which is impossible to function without the use of modern telecommunications and computer means of storing, processing, transmitting, and presenting information.

An important place in the distribution of new information technologies is given to computer networks, and the possibility of accessing the Internet, which are the main requirements for training a competitive specialist, connecting him as an innovative type of professional with an image. Modernization of the content line of modern higher education includes information and technical training of all specialists and is a necessary factor in the educational space. The use of information and communication technologies in the educational process provides an opportunity

for professional mobility of the student of education, rapid assimilation of knowledge, and acquisition of practical skills during professional training. For the implementation of innovations, in this process, it is necessary to take into account: the professional training of teachers, the material base of the department, the institution, and educational and methodological tools. In any institution of higher education, the teacher remains the main and guiding figure of the educational process with constant changes in his functions, and his role, which are caused by innovative transformations in the development of education, which are permanent and significant. Improving the knowledge and skills of the teaching staff in connection with the modernization of education, the new paradigm of social development, and the implementation of the principles of the Bologna Declaration comes to the fore in higher education. New requirements of society dictate to a competitive specialist the need to revise his professional training. One of the main and primary conditions for the self-actualization and activity of the person seeking education in a higher education institution is the formation of the need for the application and study of ICT in educational and future professional activities (Ignatova, 2010).

Therefore, in the modern information society, the need to train new competitive specialists who could freely use ICT during self-improvement, self-education, and educational process in a higher education institution and future professional activities and for further professional growth became necessary. At the same time, the formation of the professional competence of all specialists, taking into account the requirements of the labor market and world standards using information and communication technologies, becomes relevant (Matsiuk, 2014).

LITERATURE REVIEW

The processes of informatization of society place increased demands on graduates of higher educational institutions, who must freely navigate in the information environment, search for professionally significant information, and be able to solve professional tasks using modern information technologies.

The problem of training the readiness of future specialists for various types of activities was the subject of research by many scientists. Romanyshyna et al. (2021) determined the role of information and communication technologies in the training of future teachers. In the course of the study, it was found out that the information and communication content of education forms a holistic natural-scientific idea of the surrounding world in the students of education, and increases the role of professional training. During the professional training of future specialists, the

importance of the formation of fundamental skills through the use of ICT for their successful use in professional activities has been proven.

The justification of the general didactic aspects of the use of computers and computer technologies were reflected in the works of Zhyrska et al. (2022) proved the importance of the role of information and communication technologies in professional training of future teachers for distance learning of students. It was established that at the current stage, the professional training of teachers takes place in moral-ethical, socio-philosophical, general scientific, and socio-cultural processes. A model has been created that schematically creates the process of professional competence formation in future teachers. It has clarified the promising ways and factors that are provided to future teachers in modern remote conditions in general secondary education institutions to gain the first experience of online learning and its application in further activities. In the process of forming the professional training of future teachers, it was determined that the most important are problem searches that are adapted to the specifics of learning with the use of information and communication technologies (ICT).

As practice shows, ICT is most effectively used in the process of organizing joint telecommunications projects, tele-conferences, and distance learning. Scientists Braslavska, & Rozhi (2023) characterized the ways of using information and communication technologies in the training of a competitive specialist and singled out the most effective information systems in the training of future specialists. They proposed the main conditions for the professional training of specialists in institutions of higher education, which are aimed at forming the necessary competencies and qualities in students of education, which allow them to carry out professional activities at a high level, create opportunities for visualization of researched processes and phenomena, automation of the necessary calculations, measurements, modeling, manage the activity of external objects of analysis, storage, presentation of information. The main principles ensuring that each specialist has a level of formation of information competence due to the introduction of information technologies are revealed. The relevance of the use of information and communication technologies, which are the main educational factors today, is revealed.

The use of ICT has a worldview aspect because the information collected, transmitted, and processed using automated systems makes an important contribution to the development of the modern informational picture of the world, and therefore the worldview of students. Konivtska (2018) showed the role of information and communication technologies in education and analyzed the ways of their use in the modern system. The advantages of using information and communication technologies during education

in higher education institutions are outlined and the importance of active use of ICT is shown, which is necessary for the development of independence, motivation to study, and creativity of students. The most effective ways of implementing distance learning technologies, which take into account the needs and interests of modern education seekers, make it possible to diversify the presentation of information, and contribute to the rapid and effective assimilation of the material, have been substantiated.

The problem of training specialists to effectively use the possibilities of information and communication technologies, one of the directions of which is accounting for the possibilities of information technologies in professional training of specialists, should be considered as relevant and significant for the theory and practice of professional education. Koval, & Lytvyn (2021) analyzed the features of the information society with the dominance of information and communication technologies and highlighted the urgent problems of the educational field in the professional training of specialists. The importance and strategic role of informatization of the educational space as a leading factor in the modernization of the entire education has been proved. Practical recommendations on quality informational training for future specialists are provided. Lytvyn (2011) conducted a study on the need for informatization of education at the current stage of society's development, proposed measures for the development and practical application of information and communication technologies; the main features of the use of ICT and informatization in the professional training of future specialists were identified and characterized; the system of informatization of the educational space in Ukraine is substantiated; pedagogical conditions of informatization and a model of informatization of the educational process in institutions of higher education are proposed; the concept of informatization of quality training of specialists is considered. Practical methods of using software tools in educational institutions aimed at high-quality training of specialists for the use of ICT in professional activities are presented.

The following scientists were engaged in the theoretical analysis of the problem of research on the informatization of education and the use of multimedia technologies.

Bazylchuk (2017) presents ways of using modern information and communication technologies by teachers of higher education institutions in the organization of the educational process to provide high-quality professional training of future specialists. The need for the development and implementation of information and communication technologies in the educational process of higher education has been proven, to modernize traditional forms of education to improve the quality of the educational process in institutions of higher education. To account for various forms of monitoring the educational achievements of students,

the possibilities of using modern information and communication technologies by teachers of domestic institutions of higher education have been investigated by Moodle technologies and the "Online electronic journal" subsystem.

Polukhtovych (2020), the professional competence of teachers was considered, and the advantages of the electronic document flow of knowledge monitoring were substantiated. The use of electronic resources makes it possible to assess the quality of teaching by teachers and students; and makes it possible to solve the problem of modernization of modern national education through general trends and regularities of educational development with constant updating of knowledge.

Matsyuk (2014) traced the ways of using information and communication technologies in the process of professional training of future specialists. The intensification of the process of formation of the specialist's professional competence and the effectiveness of professional training, which is achieved through the constant and systematic use of information and communication technologies with the use of innovative forms and methods of organizing educational activities, are shown. The importance of the implementation and effectiveness of the use of information and communication technologies at lectures and seminar classes, during the performance of test tasks, and monitoring the knowledge of education seekers is shown. It is noted that the use of information and communication technologies in education enables the implementation of basic functions. The classification of the software, which is the most effective in the process of training future specialists, is shown.

Tovkanets (2018) in the European higher education institution proposed the main aspects of the development of information and communication technologies. The analysis of the documents of the Council of Europe on strategy problems was carried out, and the most effective ways of introducing information and communication technologies at the international and national levels were determined, which allows to ensure the quality knowledge and competence of future specialists for successful competitiveness in the European labor market. The following support is taken as the basis of the modern information environment of the higher education institution in the study: technical, software, informational, methodical, and organizational, which leads to ensuring the interaction of participants in the educational process, makes it possible to implement educational process management algorithms, pedagogical technologies and support innovative activities.

The problem of informatization and computerization of all spheres of human activity is the most important in children's lives every year. The implementation of information and computer technologies in the process of training future specialists is an urgent problem every year. This is explained by the fact that the use of new computer tools and technologies in the educational process of higher education institutions significantly lags behind their rapid development. The problem of electronic educational resources, in comparison with other problems existing in higher education pedagogy, is fundamentally new. The analysis of the psychological and pedagogical literature testifies to the implementation of an insufficient number of the main provisions and developments of the actual introduction of computer equipment and technology into the educational process of higher education institutions.

The purpose of the study: to prove the importance of the role of information and communication technologies in the professional training of future specialists at the current stage of the existence of the educational space.

MATERIALS AND METHODS

In the article, we used the following set of research methods:

- theoretical: analysis and synthesis of philosophical, sociological, psychological-pedagogical, and methodical literature on the research problem; theoretical and methodological analysis of the state of the research problem; modeling and designing the process of training future managers of educational institutions for the introduction of multimedia technologies in management activities;

- experimental: observation, questionnaire, interview, testing, self-analysis, self-evaluation, which establishes and forms experiments;

- methods of qualitative and quantitative analysis of experimental data: statistical processing of received data, interpretation of results.

The goal of quality training is the application of information and communication technologies in the professional training of future specialists at the current stage of the existence of the educational space.

Professional training is implemented during the entire period and is end-to-end during training and at higher education institutions. It consists of the mandatory application of information and communication technologies in the professional training of future specialists at the current stage, in the integration of knowledge in the field of education, in particular, psychological and pedagogical sciences, and experience of practical activities. Continuity of professional training of a specialist implies constant striving for professional and personal development of a person, a reflection of activity results, and self-improvement of a future specialist with mandatory use of information and communication technologies.

Priorities in professional training are the development of independence and activity of students in the application of information and communication technologies, the organization of educational activities with the mandatory use of information and communication technologies to develop the motivational sphere, an adequate future professional activity that directs the personality to creativity, the formation of an individual professional style.

The content of professional training with the use of information and communication technologies includes the following components: activity-operational (skills and experience), cognitive (methodical knowledge), and personal (professional qualities, values, motives of pedagogical activity). Vocational training of education seekers involves the development of each of these components and, as a result, leads to the formation of values, development of competencies, strengthening of methodological literacy of students, methodological reflection, creative abilities, and motivation for professional activity.

RESULTS-DISCUSSION

Information and communication technologies are the main factor of quality education, the main measure of professional training of future specialists – this is our present. Therefore, information and communication technologies are natural in the professional training of future specialists in higher educational institutions to ensure high-quality training of specialists, and it is also a unique opportunity for a higher education institution to take a worthy rating when introducing the latest technologies into the educational process (Polukhtovych, 2020).

The information and communication environment is actively developing in the information society, conditions are created for the effective use of knowledge to solve the complex and necessary tasks of the formation and development of modern society. This is emphasized in the "Strategy for the Development of the Countries of the European Union "EU – 2020", which emphasizes the European strategy for the development of information and communication technologies in the professional training of future specialists, their direction to improve democratic culture, human rights, intercultural understanding, providing opportunities in the professional training of future specialists of open, creative education, innovative technologies, effective knowledge necessary for integration into the society of the 21st century (European Commission, 2007; Ananiadoui, & Claro, 2009).

The formation of the information environment in the professional training of future specialists is based on the following principles:

- the presence of an internal open information and network structure that ensures the joint work of

administrative, scientific, and educational units of the institution of higher education (admissions committee, scientific laboratories, departments, deans' offices, libraries, management, monitoring of the quality of higher education, etc.);

- integration into the network multi-layered global information space;

- compliance with trends in the development of electronic learning (e-learning), world standards, and learning management;

- ensuring compliance with copyright and information security requirements;

- unification of navigation tools to provide future specialists with professional training, and quick and convenient access to all information resources (Koval, & Lytvyn, 2021).

The main purpose of using information and communication technologies in the professional training of future specialists and the entire information environment of a higher education institution is to provide an opportunity in an authorized mode of interactive remote access (oriented to different groups of users) to educational information resources (information is necessary for the completion of the entire educational process and effective organizations with a guaranteed level of quality: normative, organizational, methodical, educational, reference and other) (Polishchuk et al., 2022).

The advantages are the possibility of using in the professional training of future specialists: multimedia components of educational materials; open information resources; flexibility of time parameters of training and trajectory; availability of e-portfolio for integration of learning results; interactive communication with other students and the teacher in the subject context (Tovkanets, 2018).

The basis of professional training of future specialists is not only knowledge, but also a system of personal qualities, the development of which is influenced by information and communication technologies in the professional training of future specialists, trends of transition, and regularities of existence in an information-intellectual society (Shetelya et al., 2023). This transition is possible with the implementation of information and communication technologies in the professional training of future specialists, determines the provision of information services, practical tasks of not only the use, but also the creation of information resources, and the mechanism of information security. Information and communication technologies in the professional training of future specialists of the new generation require the introduction of electronic learning, Internet technologies, the creation of a powerful information infrastructure in institutions of higher education, the introduction of innovative methods, forms, means of professional training of future

specialists; developed information and computer educational environment, communication networks (global, local, national, etc.) (Bazylchuk, 2017).

Scientists Kademiia, & Shakhina (2011) note that "mastering modern information and information and communication technologies, the methodology of their use in the educational process will contribute to the modernization of education – increasing the quality of professional training of future specialists, increasing the availability of education, ensuring society's needs for competitive specialists".

The following tasks were formulated in the professional training of students in higher education institutions to determine the relevance of the problem of ensuring the innovative orientation of the use of information and communication technologies and identifying effective conditions:

1. to reveal students' value attitude towards future professional activities and reveal the ways of using information and communication technologies, as well as the motives for their development;

2. to determine the degree of formation of the application of information and communication technologies among students;

3. to determine the areas of application of information and communication technologies, which to a greater extent contribute to increasing the level of formation of students' professional competitive potential.

To solve the tasks, we used the following methods: questionnaires, testing, and analysis of activity products.

The analysis of the questionnaire material showed that the majority of higher education applicants (up to 83.7%) consider professional potential to be the leading characteristic of a modern specialist. At the same time, they note that the use of modern information and communication technologies allows for increased effectiveness in forming the professional potential of a future specialist. The use of new information and communication technologies in the process of formation of professional potential allows them to be aware of modern scientific achievements in the professional field. At the same time, many students (up to 73.3%) rate their professional potential quite low. As the reason for this state of affairs, students cite dissatisfaction with the method of using information and communication technologies. Thus, 55.0% of students answered that they are not satisfied with the work on the formation of professional potential, and 28.0% of students noted that the existing organization of the use of information and communication technologies only partially contributes to the development of their professional potential, and only 17.0% of students are satisfied the process of using information and communication technologies in a higher educational institution.

In addition, 63.0% of students noted that their educational activities with the use of information and communication technologies are mostly related to the performance of general tasks that do not always have a professional orientation, which does not give the right to a creative approach to solving them. In general, the wishes of students to teachers regarding the use of information and communication technologies are presented in Table 1, where the answers are arranged in order of frequency of their manifestation. It should be noted that we considered the students' critical remarks when developing the main provisions of the formation of professional potential with the use of information and communication technologies and when conducting an experimental study.

Table 1. The wishes of education seekers regarding the organization of the process of application of information and communication technologies to form their professional potential

CONTENT OF ANSWERS	FREQUENCY (%)
the use of information and communication technologies in the preparation of tasks that are closely related to future professional activities	71,4
application of information and communication technologies for professional and interesting conduct of classes (for example, by creating problem situations close to real professional reality)	59,4
to provide unlimited opportunities for education seekers to use modern information and communication technologies to solve educational tasks	57,2
to provide students with access to electronic learning resources from any point (for example, a home personal computer)	52,8
organize the possibility of receiving educational tasks and sending reports on the completed work over the network	48,6
to have the opportunity to communicate with specialists at any convenient time for the student of education	37,7
send more often to the field of study not printed media, but electronic media (a list of sites on specific issues of the subject area)	23,4

Source: Own elaboration

Observation of students, as well as analysis of test material and students' creative works showed that their professional knowledge and skills in the use of information and communication technologies are at a low level.

The results obtained by us indicate that with the existing system of application of information and communication technologies in institutions of higher education, the level of formation of professional potential of students by the end of their studies has little changes, this is explained to some extent by the insufficient provision of information and communication technologies in institutions of higher education.

At the same time, in the theoretical foundations of modern professional training with the use of information and communication technologies in institutions of higher education, there are certain opportunities for higher quality formation of students' professionalism. In connection with this, it became necessary to find out to what extent these possibilities are realized in the practice of work of higher educational institutions.

For this purpose, a survey of teachers was conducted in institutions of higher education as part of the experiment.

The teachers were offered questionnaires, the content of which made it possible to evaluate the following indicators:

• the nature of teachers' knowledge about the essence and content of the use of information and communication technologies in institutions of higher education to form the professional potential of a specialist;

• teachers' use of information and communication technologies in institutions of higher education during the professional training of specialists.

The analysis of the obtained results showed that among teachers there is a significant difference in determining the meaningful characteristics of professional potential. Thus, the bulk of teachers single out only three components: professional knowledge (content component), professional skills (operational-activity component), and professional motivation (motivational-target component). The reflective and evaluative component, which plays a leading role not only in terms of personality formation but also in the self-development of professional potential, is not highlighted at all.

At the same time, a rather low level of knowledge of new information and communication technologies and the ability to use information and communication technologies in their professional activities was noted by the teachers: more preference is given to printed sources of information, the use of Internet technologies is not practiced, the use of expert systems is practically absent, etc.

In Table 2, we present data on the use of information and communication technologies in professional activities by teachers.

Table 2. The use of information and communication technologies in professional activities by teachers.

RESPONDENTS	LEVEL					
	LOW		AVERAGE		HIGH	
	NUMBER	%	NUMBER	%	NUMBER	%
Teachers with 5 years of experience	27	48,2	21	37,5	8	14,3
Teachers with more than 15 years of experience	25	55,6	15	33,3	5	16,1

Source: Own elaboration

In assessing the role of various information and communication technologies for solving this problem:

• the majority of teachers, 76.4% – rightly preferred technologies based on activity-based, person-oriented, and differentiated approaches to education;

• 24.6% of respondents noted adaptive technology;

• 16% integrate pedagogical technologies and information and communication technologies in institutions of higher education.

This fact indicates not so much the weak awareness of teachers about the practical significance of information and communication technologies, but rather the inability to use them in practice.

Based on the obtained data, we can draw the following conclusions:

1. raising the level of the professional potential of future specialists through the use of information and communication technologies in institutions of higher education can be ensured with the help of the development and implementation of a special system focused on the formation of students' professional potential and involves the use of new information and communication technologies;

2. it is necessary to increase the level of competence of subject teachers in the field of using information and communication technologies in professional activities, as the main "mechanism" of forming the professional potential of students in institutions of higher education.

Thus, the meaningful analysis of diagnostic materials and the given data of their quantitative processing show that the problem of forming the professional potential of students in institutions of higher education with the use of information and communication technologies must be solved from new positions (Kravchenko et al., 2022).

Let's reveal these positions.

In the professional training of education seekers in institutions of higher education to ensure the innovative orientation of the use of information and communication technologies, the conditions are implemented if:

*   realized the importance of studying the material, goals, and use of information and communication technologies in the professional training of future specialists;

*   the development and structure of professional and creative needs, future specialists, cognitive motives of future specialists, and scientific and pedagogical interests of individuals are taken into account;

*   an emotionally favorable atmosphere was created during the learning process;

*   organized communication with students based on cooperation and the use of information and communication technologies in professional training;

*   information and communication technologies were used in the presentation of educational material, various learning incentives, and game blocks were included in the professional training of future specialists;

*   organized work on studying, searching, and applying the experience of using information and communication technologies in the professional training of future specialists, aimed at meeting the needs of future specialists and their interests;

*   opportunities have been created for self-education, deepening and expansion of knowledge, and development of initiative through the use of information and communication technologies in the professional training of future specialists (Ihnatova, 2010).

Kremen (2003) notes that in the conditions of the information revolution, "man and society are always dealing with new knowledge and production technologies; new tools and materials; new requirements for the quality of production activity; new regulatory standards and mechanisms; new ways of transmitting information; a new social and cultural environment in which their social and individual life activities unfold".

The use of information and communication technologies in the professional training of future specialists has a significant impact on all areas and aspects of higher education institutions. Visualization tools, cloud computing, the Internet of People, artificial intelligence, virtual reality, the Internet of Things, and many other modern realities significantly change the psychological and pedagogical requirements for the environment of professional training and the structure of the entire education. Services and social networks are developing dynamically, digital technologies create new factors and conditions for the socialization of users and their comprehensive mobility, and virtual communication is growing (Konivitska, 2018).

All this encourages us to consider the use of information and communication technologies in the professional training of future specialists for resource support of professional and general training of specialists, improvement of various functions and structures of the educational institution, for the intensification of the educational process, for the exchange of data on the quality of education (Koval, 2019).

The use of information and communication technologies allows the use of powerful tools in the professional training of future specialists, which contribute to increasing their level of knowledge, and allow future specialists to demonstrate their understanding of the content of concepts with their help. Thus, the use of information and communication technologies in the professional training of future specialists is one of the means of solving professional and pedagogical issues with information in the aspect of the work of applicants (Braslavska, & Rozhi, 2023).

An effective aspect of the educational industry is the creation and use of a virtual environment, which is not a complete replacement for traditional learning, but its addition. Today offers many tools for creating web-based educational experiences that are becoming easier and more powerful for educators to use, and Internet technologies are developing at unexpected levels (Pererva et al., 2022).

Due to the modern complex realities of using information and communication technologies in the professional training of future specialists, they are increasingly used remotely and acquire training online, which becomes a promising way for them to use it in further professional activities. Today, the world education system is faced with the differentiated challenges of the pandemic (COVID-19), and all

educational institutions are forced to switch to distance learning. The most important in the process of formation of professional training of future specialists are problem searches, and general didactic visual demonstrations, which are adapted to learning using distance education tools. The analysis of regulatory documents for the use of ICT and professional standards in the field of education and professional activity showed that future specialists should be proficient in applied educational software. This includes the possibility to use multimedia educational systems, to communicate with students of higher education using special programs (Google Classroom, Moodle, Viber, Zoom, etc.), and to use Internet information resources that contain significant information for professional activities. In institutions of higher education, distance learning facilitates and encourages the use of information and communication technologies in the professional training of future specialists (websites, e-mail, courses, platforms, chats, forums, webinars, and conferences). Distance courses from Vseosvit, TeachHub, Prometheus, and EdEra are aimed at the development of theoretical knowledge, and are very popular in a short period, with the opportunity to acquire practical skills. Video conferencing applications Zoom and Platforms Classroom, Padlet, and Moodle are ideal for distance learning and are the most popular platforms for acquiring education (Melnychuk, 2022). The attitude of teachers to the use of information and communication technologies in the professional training of future specialists plays a big role in the application of online distance learning. A positive attitude allows them to modify the content of education, to attract the attention of education seekers. Therefore, faculty capacity is a critical requirement for technology integration, pedagogy, and content in online distance learning. Distance education includes in its content the technologies of learning development (English TEL), all forms of educational technologies, and multimedia learning, placed on a computer: instructions (English CSI), training (English CBT); computer-generated advice (CAI) or instructions; web training (English WBT); online education (English IBT); virtual education through virtual learning platforms, learning environments (English VLE), digital educational projects, online education, mobile learning (English M-learning) (Prystupa, 2017).

For information and communication technologies to be used most effectively in the professional training of future specialists, it is necessary to improve the organizational structure of the institution of higher education to make appropriate changes to the entire educational system, as well as to provide a teaching-methodical and material-technical base for distance learning of education seekers. The success of the training of future specialists involves their acquiring knowledge of distance learning, the formation of an educational and informational environment in a higher education institution, during the formation of practical skills and self-development (Zhyrska et al., 2022).

The use of information and communication technologies in the professional training of future specialists makes it possible to combine the processes of traditional learning without replacing "paper" information media and contributes to the consolidation and monitoring of knowledge with an information and communication supplement. In all universities of the world, complexes of teaching aids with the use of information and communication technologies are used stably and actively in the professional training of future specialists, which increases the interaction between the teacher and the students of education. A computer can be considered a complex of interactive hardware necessary for high-quality interactive learning, a multimedia projector, an interactive whiteboard, and, for data transmission, communication devices. To participate in the discussion process in class, wireless tablets are used, which help in learning to create a subject-subject dialogue of an interactive nature, which improves the understanding and assimilation of new information and the level of perception of the material.

We offer the use of information and communication technologies in the professional training of future specialists has a qualitative effect on the process of education and personality formation in four aspects:

- formation of information competence and computer literacy of education seekers;

- formation of world understanding and scientific outlook of future specialists;

- formation and development with the help of information and communication technologies in the professional training of future specialists in such mental processes as motivation to work, memory, attention, thinking, and imagination;

- formation of skills in the practical application of software tools in the professional training of future specialists.

During the training of future specialists with the use of information and communication technologies, the conditions of traditional communication are changing:

- the activity of future specialist's increases, and their cognitive process is individualized;

- when using information and communication technologies, the authoritarian style of interaction between the teacher and students is replaced;

- the requirement for the logic and consistency of the presentation of the material, the accuracy of the content formulations is significantly increased, and the reflective value in the professional training of future specialists is improved, which is the basis and professional characteristic of the specialist's components in educational activity: organizational, constructive, gnostic, communicative, projective;

- the personal development of future specialists in their professional training increases, and the initiative and independence in the judgments of education seekers are supported.

Integrative capabilities of information and communication technologies in the professional training of future specialists and printed materials of professional disciplines allow combining different types of information (graphics, text, sound, movement, slides) in one-time period and in one place, which was previously impossible in the educational process. Such a position in the development of cognitive interest and perception of reality ensures optimization and intensification in the development of the creative and intellectual abilities of future specialists (Kuchai et al., 2022).

The online educational environment provides an opportunity in the process of professional training for future specialists to acquire the skills of mastering information and communication technologies, encourages them to solve their goals, search for innovative methods, independently acquire knowledge from an immeasurable space, develop creativity and innovative thinking, increases the ability to analyze, the aspirations of the acquirers of education to self-learn, self-improve, create something innovative, which is a guarantee of further professional success of future specialists (Romanyshyna et al., 2021).

CONCLUSIONS

The new requirements of society dictate the need for a competitive specialist to revise his professional training, therefore we have determined the main goal of using information and communication technologies in the professional training of future specialists. The need for the existence of an educational space of information and communication technologies in the professional training of future specialists is shown.

A study was conducted on the formation of students' professional knowledge and skills in the use of information and communication technologies, and the ability of teachers of higher education institutions to use information and communication technologies was investigated.

The principles on which the formation of the information environment in the professional training of future specialists is based are highlighted.

The conditions implemented to ensure the innovative orientation of the use of information and communication technologies in the professional training of students of higher education are considered.

The main aspects of the application of information and communication technologies in the professional training of future specialists are presented, which qualitatively affect the process of education and personality formation.

The further direction of research will be to find out the conditions under which the effectiveness of pedagogical support in the process of distance learning is achieved.

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