

Learning a Foreign Language Using Information Technologies for Comfortable Implementation of the Professional Position of a Future Specialist in a Foreign Language Environment

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Summary

At the present stage, the main directions of the professional position of a specialist in the implementation of English-language Education are to improve and spread the practice of learning languages throughout a person's life by involving information, communication and digital technologies in the educational process. Computerization of the educational process in Higher Education Institutions is considered as one of the first and most promising areas for improving the quality of education in Higher Education Institutions. The necessity of ensuring timely training and retraining of specialists of various profiles (in particular teachers) on the effective use of domestic and foreign electronic resources with the help of modern information technologies for the implementation of the professional position of a future specialist in a foreign-language environment is noted. The main goal of teaching a foreign language (the formation of students' communicative competence, which means mastering the language as a means of intercultural communication) is defined. The types of speech activity that cover the content of teaching a foreign language are highlighted. The main types of assessment in a foreign language are shown – current (non-classroom), thematic, semester, annual assessment and final state certification. The task of the teacher is drawn, which is to create conditions for practical language acquisition for each student, to choose such teaching methods by means of information technologies that would allow each student to show their activity, their creativity; to activate the cognitive activity of the student in the process of learning a foreign language.

Keywords:

information technologies, foreign language, professional position, future specialist, foreign language environment, teacher, communication.

1. Introduction

At the present stage, the main directions of the professional position of a specialist in the implementation of English-language Education are to improve and spread the practice of learning languages throughout a person's life, increase the effectiveness of language education, create favorable conditions for learning foreign languages, involve information, communication and digital technologies in the educational process of a modern school [10] therefore, the professional position of the future specialist in the implementation of English-language Education in a modern Ukrainian school is aimed at.

The formation of the labor market in Ukraine, its integration into the global economic space is accompanied by an increase in competition between highly qualified professionals. In such harsh conditions, modern youth who strive to get a good profession immediately after graduation, dream of rapid professional achievements, materialized in the external attributes of a successful person, and at the same time do not want to fully work on themselves, improve their personal and professional level, develop professionally important qualities necessary for the chosen profession [13].

The main direction for the formation of a child's personality is the use of educational opportunities using Information Technologies. Through its means, develops intelligence and increases the level of competence of a person in any field of activity [25]. Therefore, the issue of

restructuring education, improving the entire education system and training specialists to work in it is acute in Ukraine. To this end, it is necessary to solve the problem of modernizing the content of education of school students and improving the effectiveness of training and upbringing of future teachers.

Despite the achievements that exist in Ukraine, English-language education of students and preparation of students by means of multimedia technologies for teaching English in modern conditions is not sufficiently covered both at the level of the subject and at the level of pedagogical activity. In the process of preparing and conducting a lesson, a modern teacher not only focuses on its content, but also at the same time thinks about how to do it with the greatest benefit for the development of children's personality, preserving their emotional well-being, optimism, developing a positive attitude to learning, the ability to learn [22]. The lack of development and at the same time the practical need to solve such a problem determined the relevance of the problem and determined the choice of the research topic [5].

The gradual introduction of early learning of one of the foreign languages, starting from primary classes, is one of the characteristic features of a modern general education school. The practical purpose of teaching a foreign language in primary school is to lay the foundations for foreign language proficiency in younger schoolchildren. To form the beginning of phonetic, lexical, grammatical and spelling skills and listening, speaking, reading and writing skills within the program requirements by means of multimedia technologies, which precedes the formation of a professional position of a specialist in the implementation of English-language Education in a modern school [20].

The purpose of the article is to consider learning a foreign language by means of information technologies for comfortable implementation of the professional position of a future specialist in a foreign language environment.

2. Analysis of recent research and publications

G. Korsun emphasizes the need to create favorable conditions for learning foreign languages by involving information, communication and digital technologies in the educational process of a modern school [10].

Ya. Tsekhmister sees the main direction of the formation of a child's personality in the use of educational opportunities by means of Information Technologies [25].

A. Kuzminsky, O. Kuchai, O. Bida highlighted the general goal of continuous training of a foreign language teacher - training of a specialist-practitioner, in particular, for professional activity in the context of informatization of society and mass global communication, able to use the entire arsenal of ICT tools to implement the main directions of informatization of Education [14].

O. Savchenko points out the need for English-language Education of students and preparation of students by means of multimedia technologies for teaching English both at the level of the academic subject and at the level of pedagogical activity [22].

G. Boyko describes the internalization of learning that is taking place today in Europe, encourages teachers to unite not only in order to develop common standards of Higher Education, determined by the Bologna Process, but also to define common goals of organizing individual training in the interests of building a global civil society based on universal democratic values [7].

Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., Kuchai O. light up that the use of multimedia technologies in the educational process of higher education institutions allows to move from a passive to an active way of implementing educational activities, in which the student becomes the main participant in the learning process. Multimedia technologies must meet the goals and objectives of the course and be an integral part of the learning process [11].

Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., Kuchai, O. study the effectiveness of the use of network and multimedia technologies in the training of future teachers depends on the level of conceptual development of pedagogical tools used in the organization of educational and cognitive activities of students; from the degree of adaptability of the educational and information environment of training a modern specialist to his professional environment; from the level of readiness of students to perform professionally-oriented tasks with the help of network and multimedia technologies. [24].

Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N., Necheporuk, Y., & Rezvan, O. inspect the role of multimedia education in the progress of the information society. The information range is accomplished both as a separate sector of the economy and as a factor in the modernization of education [12].

Biletska, O., Kuchai, T., Kravtsova, T., Bidiuk, N., Tretko, V., & Kuchai, O. characterize the essence of the activity approach in the aspect of learning foreign languages. An analysis of foreign scholars' recommendations on the implementation of the principle of activity approach to learning was made. The essence of teaching in higher educational institutions, that is to help the teacher to acquire speech competencies for learning foreign languages. The essence of the activity approach principle, which consists of integral training with the active student, is found out. The teacher acts only as a guiding partner, providing advice on the way to achieve the goal. The disadvantages of the activity approach to teaching a foreign language are highlighted: time constraints, insufficient level of students' basic knowledge and their unwillingness to study entirely student-oriented, during which the student is given full

independence in choosing a way to effectively achieve the goal [6].

D. Prima's outstanding professional position of the teacher, which is a formed personal and professional quality, which is based on the development of value-semantic relations to the teaching profession and determines the individual style of professional activity of the teacher [21].

S. Kurish, N. Blazhevskaya, T. Virsta, K. Khudik, I. Lopatyuk developed methodological recommendations for teaching foreign languages [16].

A. Kuzminsky, O. Kuchai, O. Bida, A. Chichuk, I. Shigetiy, T. Kuchai consider the features of distance education from the point of view of communication between a foreign language teacher and a student, determine its characteristic features [15].

3. Research methods

To achieve this goal, the following research methods are used: theoretical (analysis of philosophical, pedagogical, psychological literature), which allows us to justify the initial provisions of the study; interpretative and analytical method, on the basis of which sources are studied using synthesis, analysis, systematization and generalization.

4. Results and discussion

The formation of the labor market in Ukraine, its integration into the global economic space is accompanied by an increase in competition between highly qualified professionals. In such harsh conditions, modern youth who strive to get a good profession immediately after graduation, dream of rapid professional achievements, materialized in the external attributes of a successful person, and at the same time do not want to fully work on themselves, improve their personal and professional level, develop professionally important qualities necessary for their chosen profession [13]. This approach determines the relevance of the research problem – learning a foreign language by means of information technologies for comfortable implementation of the professional position of a future specialist in a foreign-language environment.

The new Explanatory Dictionary of the Ukrainian language interprets the concept of "position" (from Latin *positio* – position) – as a status, posture; location of something; point of view, attitude to something that determines the nature of behavior, actions; behavior, the nature of actions caused by this point of view [19].

D. Prima defined the professional position of a future teacher as the attitude of a specialist to the profession and to himself in it, which is manifested in the activity. Professional position is a formed personal and professional quality, which is based on the development of value-semantic relations to the teaching profession and

determines the individual style of professional activity of the teacher [21].

Among the paradigmatic changes in teacher education, European scientists distinguish first of all three, which are described below.

1. Refusal to train a teacher only as a monopoly carrier of knowledge, whose only and leading task is to broadcast such information that students cannot receive outside of school without attending lessons and using textbooks. It is obvious that in the conditions of the loss of the ability of the older generation to control the flows of information on which the formation of children and young people takes place, the teacher cannot claim to be exceptional. A modern teacher does not have the opportunity to track scientific news in his discipline in a timely and complete manner (the reasons are the rapid accumulation of new information, discoveries and the teacher's overload with official duties). His chances of winning competitions with students to master more and more new models of computer equipment and other information sources are even lower. With this in mind, it is proposed to prepare teachers for the role of a stimulator of cognition and development of students in the learning process. This approach is logical, but requires restructuring the content and methods of activity in the system of pedagogical education by means of information technologies for the formation and preparation of such a "cognition stimulator".

2. The performance of complex and indistinctly defined functions is possible only if the teacher-robot turns into a free and autonomous professional who gets the right to modify the programs of subjects, choose the means of presentation, freely structure the material, emphasize those aspects and issues that are relevant for his students. If previous generations of teachers were required to unconditionally comply with clear state standards and detailed work plans recommended by a small group of methodologists, the "teacher-stimulator" must be such a qualified professional as to be able to improvise non-standard solutions and actions. It should be noted that the highest level of professionalism requires not only a long time of professional activity and accumulation of individual skills, but also an extension of the time of basic training and improvement of pedagogical practice or internship by means of Information Technologies.

3. The most controversial proposal is the rejection of individual pedagogical activity characteristic of the past practice and the transition, if not to pedagogical collectivism, then to coordinated cooperation of teachers with other teachers to improve teaching and learning. In theory, this idea looks like each teacher will use multimedia technologies to perform only the part of educational and functional tasks that they do best (for example, from two physics teachers at school, one can be assigned a theory presentation, the other – demonstrations and laboratory work). But in practice, such options are appropriate at a

University where there are dozens of teachers with excellent individual capabilities, and not at a school where several teachers with the same characteristics can work at the same time, or just one teacher who is simply forced to be a universal.

In schools in some developed countries, the above-mentioned practice is now partially implemented through informal meetings of all or part of teachers working in the same class and with the support of the institution's management have the opportunity to exchange information and experience by means of Information Technology. However, there are certain difficulties in coordinating the programs of various subjects and agreeing on which teachers will teach certain material and how they will do it. For the effectiveness of the school in the context of the electronic computer revolution, the information "explosion" and unprecedented rapid socio-economic changes, teachers are called upon to perform complex and diverse duties:

- constantly develop yourself, improving your knowledge and teaching skills by means of Information Technologies;
- be aware of what values and worldview guidelines are a priority for a healthy human society;
- take an active part in the affairs of the local community and the whole society;
- ensure effective management of the learning environment and resources;
- link school curricula to the needs of society;
- formulate advice for individual children and manage groups of children;
- choose and use various pedagogical methods by means of Information Technologies;
- understand various research methodologies [27].

The content of teaching a foreign language covers the following types of speech activity: receptive, productive, and interactive. To participate in them, you need the following skills: listening, speaking, reading and writing. Speech skills are the basis for implementing a system of control over the course and quality of students' assimilation of the content of teaching a foreign language.

Students should know from the very beginning of their studies what results are expected of them. This is also a certain incentive to improve the quality of your knowledge and skills.

The main types of assessment in a foreign language are current (non-classroom), thematic, semester, annual assessment and final state certification. During the training of students, the teacher should take into account the lack of previous educational experience in a small student, and therefore, rely on the experience acquired by him in the preschool period (the ability to look at and discuss what is depicted in drawings; the ability to paint, carve, glue, sculpt, sing, dance, tell poems, perform physical movements, act out short scenes, etc.).

Play, as you know, is a natural means of communication for children. To acquire a primary foreign-language communicative experience, you should apply a variety of game tasks: situational, competitive, rhythm-musical and artistic, realizing their potential in foreign-language learning. Using the game in the classroom, the teacher needs to clearly understand the didactic result that is planned to be obtained. But this result cannot be a motive for the child's activity. The game should change the relationship between children and the adult teacher: it is advisable for the teacher to look for an opportunity to participate and play together with the child, because the atmosphere of the game collapses under the eye of an outsider.

For effective foreign language teaching of students and for the development of various abilities of the child by means of a foreign language, it is necessary to take into account the needs of students with different styles of perception: audials, verbals, visuals and kinesthetics. Therefore, the teacher is encouraged to use a variety of learning strategies and learning styles that help each student realize their potential and express themselves.

Learning through direct experience (total physical response) is an adequate approach for foreign language training of six-year-olds, because children at this age do not understand abstractions. This approach assumes that the child must actually make or portray with pantomime what he says or hears.

The method of telling stories provides an opportunity for children to "immerse" in a foreign-language atmosphere, to get acquainted with the world. Working on stories in elementary school develops the habit of listening and then reading, and thus lays the foundation for classes at further stages of learning a foreign language.

For better assimilation of words, phrases, and the entire text of the "story", it is suggested to color the plot, draw it on a layout, make it out of plasticine, paper, and play it out with dolls. At the same time, nothing is specifically memorized by heart. Children reproduce as much as they can: first with the help of adults, and then independently. There are many types of theater for children (shadow, table, finger, toy, etc.) and usually theater techniques provide an opportunity to play out a variety of elementary communication situations in accordance with the age of the child.

Before you start reading and writing, you need to create the necessary base: teach the child to articulate and recognize sounds, so that there is something to indicate with letters, teach a certain number of English words, so that there is something to read and write down. Therefore, the training of letters and the formation of primary writing skills should begin after the introductory oral course [16].

Information technologies provide great opportunities for the development of professional skills and intellectual potential in future specialists. It is necessary to use these advantages as much as possible [8].

The general goal of continuous training is to prepare a specialist practitioner, in particular a foreign language teacher, for professional activity in the context of informatization of society and mass global communication, able to use the entire arsenal of ICT tools to implement the main directions of informatization of Education [14].

M. Zhabolenko and N. Zhdanova note that currently computerization of the educational process in Higher Education Institutions of Ukraine is considered as one of the first and most promising areas for improving the quality of education in Higher Education Institutions. Much attention is paid to this problem, both at the level of Ministries and at the level of Higher Education Institutions themselves. However, full-scale computerization of the educational process in Higher Education Institutions is a complex problem that requires long – term purposeful work and constant attention [28].

Informatization and powerful technical equipment of the educational system significantly contribute to the humanization of education and the humanization of the educational process. Telecommunications systems, information service systems, reference and information systems, automated development and decision-making systems, modeling and simulation systems, training systems, etc. play an extremely important role in this process [29].

S. Abasova emphasizes the need to ensure timely training and retraining of specialists of various profiles (in particular teachers) on the effective use of domestic and foreign electronic resources with the help of modern information technologies for the implementation of the professional position of a future specialist in a foreign language environment [1].

In determining the content of education for the implementation of the professional position of a future specialist in a foreign language environment, a differentiated approach plays an important role as a mandatory principle of its functioning. It is provided in different ways depending on the type of school and the level of readiness of children for learning and can manifest itself in the fact that schools achieve the same goals on different materials.

As noted by Boyko Galina Olegovna, the main goal of teaching a foreign language is the formation of students' communicative competence, which means mastering the language as a means of intercultural communication, the development of skills to use it as a tool in the dialogue of cultures and civilizations of the modern world. This goal provides for students to achieve such a level of communicative competence that would be sufficient for communication in oral (speaking, listening) and written (reading, writing) forms within certain communicative spheres, the subject of situational speech and on the basis of the studied language and speech material [7].

The educational goal of teaching a foreign language is to form positive personal qualities and character traits of

students and allow them to feel comfortable in a foreign – language environment. Thus, in foreign language lessons, already in primary school, the teacher should educate students in tolerance, openness, readiness for communication, respect for the people whose language is being studied and its culture, a positive attitude to a foreign language as an element of the culture of the people and a means of transmitting it to others, a sense of patriotism – love for their homeland, which is associated with the awareness of their own national identity and willingness to represent the Ukrainian national culture in the dialogue of cultures, benevolence, cordiality, politeness, attention and respect for the interlocutor as components of the culture of communication, by means of multimedia technologies.

Education, training and development of students in foreign language lessons are provided by selecting educational material (texts for reading/listening, speech samples, visibility, communication situations); organizing the educational process – setting problem tasks, using modern teaching methods and techniques, creating an atmosphere in which students would feel free to express their thoughts and feelings, views and assessments on the proposed topics of communication. The goals of teaching foreign languages are specified for intermediate purposes at all stages of the school course, and their clarification also depends on the specifics of the educational institution (School, Gymnasium, Lyceum, College, children's leisure center). Computerization of the educational process helps to achieve these goals [17].

The developmental goal of teaching a foreign language involves the development and improvement of such mental processes and abilities of students [3]: a) speech abilities of students (flexibility of the articulatory apparatus, phonemic (intonation) hearing, the ability to imitate, speech guessing, logical presentation of thoughts, a sense of language and style, etc.); b) mental processes related to speech activity (the amount of long-term and operational memory, attention, imagination, thinking operations); c) intellectual abilities of the student (the ability to carry out problem-finding activities, transfer knowledge, skills, the ability to translate from their native language into a foreign language from some types of speech activity to others, from known (worked out) situations of communication to new ones; the ability to draw analogies, classifications, generalizations); d) social abilities of students, that is, the ability and readiness of students to communicate at the intercultural level (the ability to overcome feelings of fear and uncertainty when meeting with someone else, unusual; the ability to see common features that unite all people, and specific national characteristics, to tolerate cultural values of other countries, according to them, independently plan their speech actions) by means of multimedia technologies; e) educational motivation of schoolchildren through awareness of the relevance and prestige of learning a foreign language, the importance of educational activities,

through positive emotions, various active methods and techniques of teaching, the use of problematic issues and tasks, the creation of communicative situations, interesting educational material and its novelty, the possibility of applying knowledge acquired earlier by means of computer technologies [3].

The task of the teacher is to create conditions for practical language acquisition for each student, to choose such teaching methods that would allow each student to show their activity, their creativity and activate the cognitive activity of the student in the process of learning a foreign language. [26], therefore, the professional position of the future specialist in the implementation of English-language education in a modern Ukrainian school is aimed at.

The school creates conditions for early communicative and psychological adaptation of schoolchildren to the new language world and for overcoming further psychological barriers when using a foreign language as a means of communication; for the development of motivation in further mastering a foreign language. Elementary communicative competence (language and speech) is formed and, accordingly, elementary communicative skills are developed in the main types of speech activity (speaking, listening, reading, writing), as well as elementary linguistic representations and general educational skills that correspond to the level (A1) according to the "pan-European recommendations on language education".

In the modern methodology of teaching a foreign language, the learning situation is defined as a unit of teaching content, as a way of organizing material in the lesson, and as a criterion for organizing a system of exercises. In the case of communicative-oriented teaching of a foreign language, the incentive of learning is situations, namely: the basis for the selection and organization of speech material, the condition for the formation of speech abilities and the development of speech skills [9].

Intensive use of information and communication technologies in the life of modern society and for the implementation of a high-quality professional position of a future specialist in a foreign language environment has led to a rethinking of the content of education and professional training of future specialists in a foreign language. The main role is played not so much by the information itself, but by the ability to work with it, critically comprehend and produce new knowledge; the main thing is not the amount of information, but its quality; information is needed for further practical application and transformation into knowledge, and the ability to work with information becomes one of the important competencies of a modern specialist in the new transformation of society: from information to knowledge society. In this context, one of the main forms of training is distance learning, which is able to respond to the challenges of society [18].

The role of the teacher and the implementation of his professional position in a foreign-language environment are also significantly changing in this educational process. It is responsible for such functions as coordinating the cognitive process, adjusting the course being studied, and advising students when organizing an individual curriculum, managing their educational projects, and so on. It helps students in their professional self-determination. If we consider the features of distance education from the point of view of communication between a foreign language teacher and a student, then we can determine the following characteristic features. Self-education as the basis of distance learning, which implies the student's own motivation for their own learning, as well as a certain level of self-organization of the individual; communication between the teacher and the listener on the principle of "one to one", which corresponds to the form and content of individual consultation. Communication and interaction "one to one" does not exclude the interaction of "one to many", since the teacher, according to a pre-made schedule, works with many students at once. This form of interaction is similar to traditional classroom learning; "many-to-many" interaction means that multiple students can communicate simultaneously, sharing experiences and impressions with each other. Based on this, distance learning has a number of advantages over traditional learning: advanced educational technologies, availability of information sources, individualization of training, a convenient consulting system, democratic relations between student and teacher, convenient schedule and place of work.

In Ukraine, to realize the professional position of a future specialist in a foreign-language environment, there is support for distance learning and training, and certain measures have been implemented. First, support for distance teaching and learning began with broadcasting video lessons on television and using online distance learning platforms [15]. Substitute services-online courses – are gaining more and more strength. Educational platforms such as Coursera, edX, and FutureLearn have grown significantly in popularity. Only for 2020 almost 32 million new users have registered on these platforms, which is more than twice as much as in 2019 (14.3 million) [2].

Today, there are a large number of platforms that provide access to open educational resources from various fields of knowledge. Where a teacher, in particular, in a foreign language will be able to use new technologies in education. The mass share of courses in the IT industry on open educational resources in relation to all offered is quite large: on the Intuit resource, computer science courses occupy 70% of all courses, on Udemy – 43%, UoPeople – 28%, Edx – 24%. A large proportion of courses are offered not only in programming and software development, although these courses have the largest relative weight (38.6% of the courses considered), but also in areas related

to the study of specialized software in a particular scientific field (philology, mathematics, physics, biology, finance, etc.), with methods of processing multi-format information content, with cloud computing, etc. This suggests that today's young people have a variety of requests that are met by author's courses from the world's leading teachers [23].

Conclusions

Modernity confidently requires the introduction of early learning of one of the foreign languages in primary schools, which is one of the characteristic features of modern primary schools. This is what the professional position of a specialist in the implementation of English-language Education in a modern Ukrainian school is aimed at. [4].

The main goal of teaching a foreign language is to form students' communicative competence, which means mastering the language as a means of intercultural communication. The school creates conditions for early communicative and psychological adaptation of schoolchildren to the new language world by means of multimedia technologies and for overcoming further psychological barriers when using a foreign language as a means of communication; for the development of motivation in further mastering a foreign language; elementary communicative competence is formed [5].

The theoretical foundations of the introduction of English-language Education in schools in modern Ukraine are considered. The educational goal of teaching a foreign language is revealed. The practical purpose of teaching a foreign language at school is highlighted. The developmental goal of teaching a foreign language provides for the development and improvement of the mental processes and abilities of students highlighted in the article. The task of the teacher is drawn, which is to create conditions for practical language acquisition for each student, to choose such teaching methods by means of multimedia technologies that would allow each student to show their activity and creativity. To activate the cognitive activity of the student in the process of learning a foreign language, which is aimed at the professional position of the future primary school teacher. The types of speech activity covering the content of teaching a foreign language are identified: receptive, productive, and interactive.

The prospects for further scientific research on this problem will be to reveal effective innovative approaches to teaching a foreign language at school, which are based on a creative approach, help to fully unlock the potential of students and contribute to the development and self-improvement of the educational and communicative process.

References

- [1] Abasova S. (2006). Computer science and software engineering in education. *Telecommunications and informatization of education*. 4. 84-87..
- [2] Bakirov V., Ogarkov M. (2020). A pandemic can forever change higher education. *Mirror of the week*. January 16. URL: <https://zn.ua/ukr/EDUCATION/pandemija-mozhe-nazavzhdizminiti-vishchu-osvitu.html>
- [3] Bida O., Kuchai T., Kuchai O. (2019). Implementation of English-language education in primary school in modern Ukraine. *Scientific journal of the National Pedagogical University named after M. P. Dragomanov. Series 17. Theory and practice: Education and training*. 31. K.: Logos. 13–17.
- [4] Bida O., Sopivnyk R., Kuchai T. (2019). The professional position of a specialist regarding the implementation of English-language education in a modern Ukrainian primary school. *Pedagogical journal of Volyn: scientific journal*. Lutsk: Lesya Ukrainka SNU. 4 (15). 25–30.
- [5] Bida O.A., Kuchai T.P., Kuchai O.V., & Chychuk A.P. (2019). English language education of primary school students is a necessity today. *Scientific Bulletin of the East European National University named after Lesya Ukrainka*. 11 (395). 27–31.
- [6] Biletska, O., Kuchai, T., Kravtsova, T., Bidiyuk, N., Tretko, V., & Kuchai, O. (2021). The Use of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. *Revista Românească pentru Educație Multidimensională*, 13(2), 243-267.
- [7] Boyko G.O. (2015). Trends in the development of modern primary education (Ukrainian and international aspects). *Problems of modern pedagogical education. Series: Pedagogy and psychology*. 49 (2). 63–69.
- [8] Klepko S. (1998). Integrative Potential of Informatics and Computer Science in the Educational Process. *Pedagogy and psychology of professional education*. 2. 35-43.
- [9] Kmit O. (2008). The main modern trends in the development of English-language education of younger schoolchildren in Ukraine. *Primary school*. 5. 13–15.
- [10] Korsun, G.O. (2015). Ways to improve the quality of professional English language teaching in technical universities of Ukraine. *Pedagogical sciences: theory, history, innovative technologies*. 2. 343–349.
- [11] Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., Kuchai O. (2022). Possibilities of Using Multimedia Technologies in Education. *IJCSNS International Journal of Computer Science and Network Security*, 22(6), 727-732.
- [12] Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. *IJCSNS International Journal of Computer Science and Network Security*, 22(4), 797-803.
- [13] Kulakov R.S. (2010). Professional self-determination of the individual: criteria and indicators of its formation in early youth. *Problems of modern psychology. Collection of scientific works*. To: Ivan Ohienko PSU, Institute of Psychology named after H.S. Kostyuk, APN of Ukraine. 8. 555–565.
- [14] Kuzminsky A. I., Kuchai O. V., & Bida O. A. (2018). Using the Polish experience of training IT specialists in the

- pedagogical education system of Ukraine. *Information technologies and teaching aids*. 68(6). 206–217.
- [15] Kuzminsky A. I., Kuchai O. V., Bida O. A., Chychuk A. P., Sigetii I. P., & Kuchai T. P. (2021). Distance learning in the training of specialists in institutions of higher education. *Modern information technologies and innovative teaching methods in the training of specialists: methodology, theory, experience, problems: a collection of scientific works*. Vinnytsia: "Druk plus" LLC. 50-58.
- [16] Methodological recommendations for teaching foreign languages in the 2018/2019 academic year, Compilers: S.M. Kurysh, N.V. Blazhevskva, T.S. Virsta, K.G. Hudyk, I.I. Lopatyuk / Chernivtsi Regional Council, Institute of Postgraduate Pedagogical Education of Chernivtsi region. Chernivtsi, 2018. 8.
- [17] Methods of teaching foreign languages in general educational institutions: a textbook / L. S. Panova, I. F. Andriyko, S. V. Tezikova and others. K.: VC "Academy", 2010. 328.
- [18] Murasova G.E. (2012). Features of professional training of future specialists in the conditions of distance learning. URL: http://www.confcontact.com/2012_10_04/pe2_murasova.htm
- [19] New explanatory dictionary of the Ukrainian language [comp. V. Yaremenko, O. Slipushko]. 2nd ed., corrected. T. 3. K.: Aconite. 2008. 862.
- [20] Organization and provision of the foreign language learning process in secondary educational institutions. URL: http://bookwu.net/book_metodika_1127/9_tema-7-organizaciya-ta-zabezpechennya-procesu-navchannya-inozemno-movi-v-serednih-navchalnih-zakladah
- [21] Prima D. (2019). Professional position as a scientific phenomenon. *Scientific Bulletin of V.O. Chukhomlynskyi MNU. Pedagogical sciences*. 2 (65). 233–236.
- [22] Savchenko O.Ya. (1997). The modern lesson in elementary school. K.: Master-S. 256.
- [23] Semenikhina O.V., Yurchenko A.O., Sbruyeva A.A., Kuzminskyi A.I., Kuchai O.V., Bida O.A. (2020). Open Digital Educational Resources in IT: A Quantitative Analysis. *Information technologies and teaching aids*. 75(1). 331–348.
- [24] Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., & Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. *IJCSNS International Journal of Computer Science and Network Security*, 22(6), 739-746.
- [25] Tsekhmister Y.V. (2002). Pre-professional training of students in a medical lyceum: theory and practice: Monograph. K.: Scientific opinion. 620.
- [26] Yakovleva T. V. (2011). Use of innovative technologies in learning English. URL: http://osvita.ua/school/lessons_summary/edu_technology/21519/
- [27] Yurchuk L. M. (2003). The state and trends of the development of the postgraduate pedagogical education system in Poland: dissertation. for obtaining sciences. candidate degree ped. Sciences: specialist 13.00.04. Kyiv. 194.
- [28] Zhabolenko M. and Zhdanova N. (2007). Innovations in the field of using information and communication technologies in the educational process. *The Strategy of Innovative Development of the Higher Education System in Ukraine: Materials International. science-practice conf. / Heads Ed. S.V. Smerichivska*. Donetsk: Publishing House "Kalmius". 57-161.
- [29] Zhaldak M. (2002). Pedagogical potential of informatization of educational process. *Development of pedagogical and psychological sciences in Ukraine 1992-2002. Zb sciences Works for the 10th anniversary of the Academy of Pedagogical Sciences of Ukraine / Academy of Pedagogical Sciences of Ukraine*. Kharkiv: "OVS".1. 371-383.