The features of independent work for future specialists in conditions of distance learning

Особливості самостійної роботи майбутніх фахівців в умовах дистанційного навчання

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Abstract

The peculiarities are clarified and the importance of independent work in the conditions of distance learning is emphasized. The definition of independent work is given, which is necessary for the formation of those qualities in the students of education, which are manifested in the ability to consciously determine the purpose of the activity at each stage of its achievement. The possibilities of the Moodle platform in organizing the independent work of education seekers in the conditions of distance learning are shown. According to the method of distribution of educational content, educational modes are proposed. The positive features of distance education that reveal its essence are indicated. Distance learning modes are analyzed: synchronous (all participants of the educational process are in the web environment at the same time); asynchronous (the educational process is carried out according to a convenient schedule for teachers and students), and mixed. Different types of distance learning for education seekers

Анотація

З'ясовано особливості та підкреслено важливість самостійної роботи в умовах дистанційного навчання. Дано визначення самостійної роботи, що є необхідною при формуванні у здобувачів освіти тих якостей, які проявляються в здатності свідомо визначати мету діяльності на кожному етапі її досягнення. Показано можливості платформи Moodle при організації самостійної роботи здобувачів освіти в умовах дистанційного навчання. За способом поширення навчального контенту запропоновано навчальні режими. Зазначено позитивні особливості дистанційної освіти, що розкривають її сутність. Проаналізовано режими дистанційного навчання: синхронний (усі учасники освітнього процесу перебувають у вебсередовищі одночасно); асинхронний (освітній процес здійснюється за зручним для педагогів та здобувачів освіти розкладом), змішаний. Подано різні типи дистанційного навчання здобувачів освіти, які відрізняються за ступенем дистанційності, індивідуалізації і

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are presented, which differ in the degree of remoteness, individualization, and productivity. The principles of organizing students' independent work in the conditions of distance learning in institutions of higher education are formulated.

Keywords: distance learning, independent work, information technologies, educational environment, modernization of education.

продуктивності. Сформульовано принципи організації самостійної роботи студентів в умовах дистанційного навчання у закладах вищої освіти.

Ключові слова: дистанційне навчання, самостійна робота, інформаційні технології, навчальне середовище, модернізація освіти.

Introduction

The most essential task of increasing the efficiency of the educational process is the formation of the skills of independent work of the students of education. It is possible to achieve high results in education under the condition of using various methods, techniques, and forms of organization of educational activities of education seekers during the educational process, taking into account the individual qualities of education seekers as a necessary condition for the success of education.

Today, the new methodology of the educational process, which is based on the constant use of information and communication technologies, without which the educational process is impossible, is confidently included in the practical activities of all educational institutions of the education system.

Nowadays, the educational process with the use of distance technologies in education (from the English "distant" means "distant, remote") is becoming more and more relevant. There are disputes among participants in the education process. This is the difficulty of adapting to distance learning – for some, and for others who gladly accepted such an approach, distance education is an effective alternative to the traditional format (Pavlovska, 2022).

In the article, we would like to emphasize that in the process of distance learning, students acquire not only self-education, but also the ability to organize independent acquisition of knowledge and its practical implementation. Students have the opportunity to determine for themselves the place, schedule, sets of learning aids and methods of contact with teachers. An important element of this type of education is the ability to choose a form of education. The main advantages for students of education are dynamic presentation of materials, freedom of choice of equipment and methods of its application, differentiated process of distribution of materials, individual style of teaching, flexible learning paths, freedom of time and place. Along with this, there are also advantages for people conducting classes: great freedom in choosing the place and time for teaching, easier tracking and storage of information about individual progress in learning, no restrictions on equipment and used programs.

Distance learning is a method of conducting didactic processes in conditions when the teacher and students are separated from each other (sometimes significantly) and are not in the same place during the transfer of information, therefore, in addition to traditional means of communication, modern telecommunication technologies are used, which are used to send voice, video, computer data and printed materials. The latest technologies largely provide direct contact in real time between a teacher and a student using audio or video conferences, regardless of their distance. This emphasizes the special role and importance of innovative technologies and forms a new perspective on distance education.

This article reveals the purpose of independent work of future specialists in distance learning conditions. Forms of distance education are described. The main communication mechanisms are implemented in the Moodle system. The main modes of education are considered according to the method of distribution of the content of education. The positive features of distance education, which reveal its essence, are noted. Distance education is considered as a factor of the global process of informatization of education or an educational subject.

Various types of distance learning of education seekers, which differ in the degree of remoteness, individualization and productivity, are highlighted.

The factors that ensure the organization of independent work of education seekers in the conditions of distance learning are determined.

Purpose: to find out the specifics and emphasize the importance of independent work in the conditions of distance learning.

Literature Review

S. Dotsenko (2021) shows the content and reveals the significance of independent work, which is considered one of the main components of the professional training of specialists in the higher education system. The advantages of independent work of education seekers during distance learning are substantiated. Approaches to the organization of independent work when using the possibilities of Moodle – a remote platform are revealed.

O. Osaulchyk, (2020) the main positions of distance education of education seekers as a modern basis for their independent work were clarified. The advantages of distance education, its significant opportunities, and its further promising directions of development are highlighted; the disadvantages of distance education are listed (lack of live communication, the poor activity of students, lack of emotional contact, insufficient control in student self-organization, reduced variability of options and choices, etc.) and the possibilities of their reduction during the organization of independent work of education seekers are shown.

O. Tamarkina (2020) considers distance education as the extra-curricular independent work of students, substantiates the meaning, and defines the extra-curricular independent work of students (a form of education that solves educational tasks under specific conditions in a specific educational situation, produces in the student a psychological orientation to replenish knowledge independently, provides skills in the process of solving set tasks, contributes to the formation of students of education in a sufficient amount of knowledge, skills, abilities, which is necessary for the improvement of mental activity, is the main basis for self-organization, self-discipline of the student of education, provides professional support for independent educational and scientific activities of the student of education in the process of learning.

N. Dyka, & O. Glazova (2021) considered the features, prospects, and advantages of using distance technologies in the educational process, substantiated the research and showed ways to eliminate problems that may arise during the introduction of distance education into the educational process of secondary general education.

Yu. Bogachkov et al., (2012) developed, substantiated, and proposed methodological recommendations for the use of educational multimedia; showed the positive and negative aspects of its use; submitted recommendations for the development of components: graphics, educational text, video, audio; developed recommendations on the organization of independent work of education seekers during distance learning; singled out the most essential and effective Internet resources for distance education.

O. Tsis (2018) collected and analyzed the best experience of educational and methodical work of teachers of higher education institutions to improve the organization of independent educational activities of education seekers, the introduction of information and communication technologies into the education process; the main directions of the content, essence, and assessment of the quality of the independent work of students of technological and pedagogical specialties are revealed; developed and substantiated methods of electronic educational content; models of blended learning and combined learning are presented; the most essential forms, methods, technologies, organization of independent educational activities of education seekers with the use of information and communication technologies are disclosed.

Methodology

Following the tasks of scientific research, a complex of interconnected and complementary research methods was used, including:

– theoretical: analysis, synthesis and generalization of the main provisions of scientific works and normative state documents, reports on issues related to the problem of independent work and distance learning, and prospects for improvement; reforming higher education and improving the professional training of future specialists; induction and deduction – to establish cause-and-effect relationships between pedagogical, political, social and cultural phenomena from the problem of independent work and distance learning; application of the system approach as a complex phenomenon, schematization of the

structure of research elements, with the aim of theoretical substantiation of the problem; terminological analysis – to determine the main basic concepts of the study; logical and epistemological analysis of empirical data and individual theoretical propositions, the method of scientific identification – for the analysis of scientific sources in order to ensure the reliability of the obtained results; component-structural, system-structural, system-functional methods – with the aim of highlighting the main components of the system of independent work in the conditions of distance learning, substantiating regularities and identifying features of its development;

– empirical: diagnostic (conversations, interviews), observational (pedagogical observation), prognostic (expert assessments, modeling) methods – to identify the state of development of the problem in pedagogical theory and practice and establish the possibility of using independent work in distance learning conditions.

The methodological basis of the research is the historical and system-complex principles of scientific and pedagogical research, the position of the theory of knowledge (in particular, the interdependence and mutual influence of the phenomena of objective reality), the principles of scientificity, integrity, continuity, social conditioning, objectivity, cultural conformity, unity of national and universal, as well as provisions regarding the goals of the development of the system of independent work in the conditions of distance learning.

Results and Discussion

Any educational activity cannot be without the work of education seekers, which is carried out independently, but the organizer of this work is the teacher. The educational process will not be perfect if the cognitive activity of the student is not ensured, his education is not made creative, and active work is not offered at all stages of the educational process. With such an approach, the desire of the student to learn the essence of the phenomena presented and substantiated by the teacher during teaching is of great importance.

Independent educational work is an active position of education seekers organized by the teacher, which is aimed at the realization of the set goal: the search for meaningful knowledge, its consolidation, the formation and constant improvement of skills and abilities, the constant

systematization of knowledge and their improvement in the education process. If we approach independent work as a didactic unit, then: on the one hand, it is an educational task (what the student of education must accomplish), on the other hand, it is a form that manifests itself by the activity of thinking, memory, creative expression when performing the learner of the educational task (the result is the acquisition of new, previously unknown knowledge, expansion of the acquired knowledge).

Concerning the educational activities of students, the term "independent work" has a conditional character. We propose such reasoning because the cognitive activity of education seekers is organized with the help of special tasks and is based on their skills, acquired knowledge, and acquired experience.

To increase the efficiency of the educational process of education seekers, one of the most important levers is the permanent organization of independent work of education seekers, which is used to form education seekers such qualities that would be expressed in their ability to determine the purpose of educational activity during a specific stage of education and skillful application of a set of measures regarding the achievement of the programmed goal, a responsible attitude to activities, the ability to be proactive by the conditions that have developed in the educational process.

When students are provided with innovative methods and methods of independent work, the share of the teacher's direct influence on the process of learning in the educational field is reduced. But at the same time, the amount of influence of the teacher on the independent work of the students of education increases (Biletska et al., 2021).

Let's write the purpose of independent work:

– acquisition of new knowledge, abilities, and skills by education seekers;
– updating the knowledge of education seekers;
– monitoring and assessment of knowledge and skills of education seekers;
– repetition, and thus consolidation of knowledge and skills of education seekers (Pavlovska, 2022).

When conducting independent work, distance learning is one of the main areas of modernization of higher education. By distance learning we mean an innovative form of

organization of the education process, during which all classes or part of them are carried out with the condition of using modern telecommunication technologies, information technologies and with the remoteness of the teacher and the student of education (territorial remoteness), which is important in independent work (Yakubov, 2015). That is, the student learns information, understands, remembers, reproduces.

We will write out forms of distance education:

– online webinars and their recordings;
– use of an interactive platform for classes;
– correspondence by e-mail;
– video conferences;
– audio conferences;
– social networks.

In the conditions of distance education, the organization of independent work of students is of great importance. It acts as an essential type of educational activity, in which the teacher is the guiding principal and all this work is carried out under his supervision. Today's realities provide an opportunity to organize the educational process in a higher education institution in a digital environment. With such an approach in the educational field, the main issue is the quality of the organization of independent work using digital technologies. In the conditions of distance learning, the capabilities of the Moodle platform are important when organizing the independent work of students (Kuchai et al., 2021).

Independent work can be offered using the "Task" element. The teacher offers students tasks for independent work, which can be found on the educational portal in the form of the "File" resource. On the site, the teacher can post not only the main tasks, but also methodological recommendations for completing independent work tasks, dictionaries, additional material in the form of regulatory documents, study guides, and textbooks for each topic of discipline. These suggested additional materials for education seekers are also placed on the platform as a "Folder" or "Book" resource.

We will reveal the advantages of the "Book" resource, which allows us to place minimal methodological developments on the site, materials that are large in volume (it is possible to flip through the developments as a book), a list of mandatory and additional literature, which is appropriate to use when performing independent tasks. The advantage of this portal is that it

enables interaction between the learner and the teacher in offline mode.

It is appropriate to use the "Lecture" resource for organizing independent work. The teacher can organize an interactive lecture precisely with the help of this resource. The learner is allowed to study the lecture in separate fragments, and this is the main advantage of this form of organizing independent work. Answers to the proposed questions are possible when the theoretical foundations of a separate question of the lecture have already been considered. What is valuable and significant in this position is that until the learner gives the correct answers to all the proposed questions and achieves a positive result, he will not proceed to the next part of the lecture. This approach to education allows not only to control the process of completing the task but also to monitor the level of assimilation of the material by the student. This form can be considered a system of self-control.

Let's consider another effective form of organizing independent work on the educational portal. This is the "Forum" element. Applying this element, it is possible to organize a class-discussion, a class-discussion. Such work should be carried out in an offline or online system. The teacher is given the right to organize a forum on a selected topic of current issues, which is programmed. Education seekers need to independently master selected aspects of the given problem and at a certain time "go" to the forum and take part in the discussion. This form makes it possible to organize contact independent work with students.

Let's note the importance of the "Test" element, which is used in the organization of checking the independent work of education seekers. Using the "Test" element, the teacher offers tests and a bank of questions. The Moodle system provides an opportunity to create questions of various types. A significant positive unit of this element is quick monitoring, evaluation, and issuing of results to students of education. The Moodle system implements the main communication mechanisms:

– perceptive (responsibility for each other's perception);
– interactive (responsibility for organizing interaction);
– communicative (responsibility for information exchange) (Dotsenko, 2021).

Let's consider the main educational modes by the method of distribution of educational content (Skabelko, 2021; Order No. 1115, 2020):

– synchronous (ensure synchronous participation in the training of the teacher and students);
– asynchronous (in real-time mode, they do not provide simultaneous training of all participants in the educational process);
– mixed (an educational path that provides for the use of both systems of synchronous elements and systems of asynchronous elements).

Synchronous mode enables educational cooperation for students in real time. The advantage of this regime is the involvement of any participant in the educational process at any time.

The asynchronous mode is used more when using forms and methods of online learning. An example of such a mode is the recording of video lessons (fragments of lessons: instructions for the comprehensibility of self-explanatory work) or tasks for self-fulfillment by students of education. The advantages of this mode are the possibility of viewing such material at a time convenient for the students of education, if necessary, repeatedly, processing the application at a pace convenient for the student of education (educational videos, slide shows). The proposed materials can be sent to the student by e-mail, posted on social networks, and Viber can be used. Synchronous mode is suitable for educational consultations. Synchronous and asynchronous modes of education, depending on the material offered, and the use of types and forms when performing independent work, may coincide in time and take place in a certain sequence.

When combining modes: synchronous and asynchronous, a hybrid, mixed mode is formed. This regime, depending on the level of preparation and the pace of work of the students, is easily changed by increasing or decreasing the offline or online components.

The main advantage of distance education is clear monitoring of the success of all students. In the future, distance education will provide an opportunity for the development of an individual trajectory for the acquisition of knowledge for each student of education. And such an approach to education will make it possible to create a basis for creating a personal program for the student of education, which will depend on what

classes are desirable and interesting for him. This approach is mainstream in world education systems. It is distance learning that has such significant technical capabilities for the process of applying this approach to the educational process (Shunkov et al., 2022).

Online tests with automatic feedback are promising and effective tools for monitoring education and assessing the knowledge of education seekers, which are adapted for self-monitoring of education seekers and are indispensable for individual classes (Dyka & Glazova, 2021).

Let us note the positive features of distance education that reveal its essence:

– flexibility: working in the distance education system, students do not attend regular classes, which are presented in the form of lectures, and seminars, but study at a time that is convenient for them, in a place that suits them, which has a significant advantage for those who work and studies.
– modularity: the modular principle is used in distance education programs. At the same time, distance courses create a complete picture of the subject field. This approach makes it possible to form an educational program from a set of individual courses (modules) that will satisfy individual or group needs;
– parallelism: the educational process can be carried out simultaneously in several specialties in addition to the main one;
– long-distance: the distance from the location of the student to the educational institution, which does not interfere with the effective educational process, provided there is a quality connection;
– synchronicity: in the process of education, the teacher and the student use educational technology and the learning process regardless of time according to such a schedule and pace for each person involved that it is convenient for everyone;
– coverage: this property is called "massiveness". The number of students has access to many sources of information in the distance education system and this is not a critical parameter. For example, the following sources of information in the distance education system are offered: electronic libraries, databases, etc. Students can communicate with the teacher or each other without any restrictions through communication networks, information technology means;

– profitability: economic efficiency of distance education. It has been proven that foreign and domestic educational systems are approximately 10-50% cheaper than traditional ones (Zastelo, 2012).

With the help of distance education, young people can get an education while working and studying at the same time, combining study with work. This type of training is suitable for students who live in remote areas of cities; managers; military personnel; students; businessmen who want to get an education in parallel with work. Distance education is suitable for everyone, makes it possible to combine education and everyday life, and makes it possible to get an education abroad with minimal financial costs (Yasulaitis, 2005).

Distance education increases the efficiency of independent work, provides an opportunity for students of higher education to easily use non-traditional sources of information, provides opportunities for acquiring and consolidating various professional skills, creative self-expression, and allows teachers to implement innovative forms and methods of the educational process, using mathematical, conceptual modeling of processes and phenomenon (Tamarkina, 2020).

Distance learning involves the delivery of educational material via the Internet, in which all participants in the educational process are in interaction, which is ensured by the use of software, administrative, and technical means of the Internet network (Kuchai et al., 2022).

Distance education, as a factor of the global process of informatization of education or an educational subject, can be considered as:

– system unit;
– educational environment;
– technology that ensures the creation of specific methodical methods of teaching disciplines, which includes the rethinking of traditional methods;
– the communicative field, in which the effectiveness of pedagogical interaction is carried out, in particular, operational and regular interaction between a network teacher and a student of education, as well as between students of education; ensures an active position of all participants (students of education, teachers, parents of students of education) in the educational environment;
– a means of educational self-realization of the learner: distance education creates all the conditions for building an individual trajectory of the educational space (on the one hand), provides conditions during which the learner takes responsibility for progress in education (on the other hand);
– a means of forming ICT competence, the ability to work independently, and the development of cognitive activity in students;
– means of professional improvement of the teacher: development of ICT competences, and methodical competences.

At each level of education, distance learning should be carried out taking into account the characteristics of qualitative and personal formations that are formed at any age stages of personality development. The distance education system cannot replace face-to-face education. Its best use is to use it as an additional position. Distance learning technologies are used in external and correspondence education (Kotiash et al. 2022).

Let's consider different types of distance learning for education seekers, which differ in the degree of remoteness, individualization, and productivity.

1. Students of education, together with the teacher, use remote Internet resources during full-time studies at the educational institution. There is interaction with students of other educational institutions and specialists in fields related to the educational programs. Here there are parameters of the communicative space: communicative distance, and indirectness, which are variable in nature. This type of distance learning technology is the most popular. The problem when using it can only be the limitation of the capabilities of the educational server and the lack of appropriate technical means in educational institutions.
2. Training takes place in the form of distance educational projects. Representatives are students and teachers of various educational institutions in the same country and different countries. Any educational institution can be the organizer of such a project. Participation in such a project is a means of additional education in which communication between teachers and students of education is not systematic, but there is a dense information exchange, an information resource is involved, but the goals of the event are not necessarily the goals of the educational process.

3. The educational process is carried out with participation in web seminars and counseling, with the help of distance courses. Distance learning is used as a supplement to face-to-face learning. the teacher works with the student remotely, episodically, or permanently. Such pedagogical interaction is carried out with the help of dense communication using communicative distance. In this case, distance learning can partially replace face-to-face learning and provides corrections to face-to-face learning. Training can perform the function of a tutor if it is built according to the scheme: the student of education – the Internet – the teacher and reduces the problem of the shortage of qualified educational personnel.

4. The distance learning resource center assumes the role of organizer and coordinator of learning. This type of distance learning technology provides complete distance learning (without face-to-face) for learners with psychophysical disabilities who spend long periods in hospitals or correctional facilities. This type of education is valuable for gifted children.

5. Distributed distance learning is learning when a curriculum is developed for an individual student and is created in such a way that different subjects are studied by the student in different educational institutions, the education process is provided by different teachers, taking into account the individual characteristics of the goal of the student. The coordinator is the educational institution (full-time or distance learning), the parents of the student (Bogachkov et al., 2012).

We will describe the principles of organizing the independent work of education seekers in the conditions of distance learning in institutions of higher education, which affect the quality of training of a competitive specialist:

1. The principle of close interaction of independent work with the course of study. To increase the perceived motivation of education seekers, independent work of students in the conditions of distance learning should be included in the process of assimilation of professional material consistently and promptly.

2. With different degrees of preparedness of students, the individual abilities of a person are taken into account, and in the conditions of the formation of such different level educational groups, the principle of differentiation becomes extremely relevant. Differentiation provides an opportunity to acquire knowledge for each student in a meaningful and effective way according to the level of complexity of tasks and exercises, the speed and means of completing tasks, according to the degree and level of support provided, according to the nature of the cognitive activity. As noted by V. Zhukovsky and K. Simak, "the principle of differentiation and personal approach allows taking into account the motivational sphere of students and their psychological features when working with educational materials" (Zhukovsky & Simak, 2016).

3. Choosing optimal methods to achieve the goal, which do not contribute to machine learning of the material, but stimulate the conscious perception of the material. In the framework of distance education, the role of stimulating cognitive processes is assigned to the independent work of the students of education, in the application of which a necessary approach is an inductive approach to mastering the material, which ensures a sequence from partial to general. Induction, which is based on analysis, increases the quality of the cognitive process, like analogy and deduction. Such an approach provides the efficiency of independent work of education seekers who, upon mastering the fundamental disciplines in the higher education system, aim for independent research activities in the future.

4. Carrying out of the classroom work reproductive exercises for successful learning of the material, tests, written exercises, exercises for the development of receptive types of activities, etc.

5. Provision for all students of education to study the course material as successfully as possible. The distance course provides students with a system of self-control. Tasks are formed according to a scheme that provides an opportunity to receive a hint for activation, analogy, and independent analysis. Attempts in training exercises and tasks are unlimited for the possibility of choosing an individual amount of training by the learner.

Let's list the factors that, in conditions of distance learning, ensure the organization of independent work of education seekers:

–   modernization of the content of educational courses;
–   application of modern educational

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technologies;
– creation of conditions for the formation of self-education abilities and skills (Kuzminskyi et al., 2018).

Individualization of the independent work of education seekers makes scientific and research activities successful and creates conditions for self-realization, and self-determination.

With the help of distance educational technologies, pedagogical support for the independent work of education seekers is created, electronic educational resources of a game nature are developed, Internet testing is implemented, and independent work with Internet resources is offered.

Therefore, in the conditions of distance learning, the effective organization of independent work of students of education is designed to stimulate the cognitive processes of students of education, to motivate them to study the material (Tsvyd-Grom et al., 2021).

Conclusions

The peculiarities of independent work in the conditions of distance learning are considered. The definition of independent work is given, and the purpose of independent work is written out.

One of the priority areas of modernization of higher education is distance learning. Distance learning is defined as a form of organization of the educational process. Distance education forms have been written out. The possibilities of the Moodle platform in organizing the independent work of education seekers in the conditions of distance learning are shown. According to the method of distribution of educational content, educational modes are proposed. The positive features of distance education that reveal its essence are indicated. Distance learning modes have been analyzed. The types of distance learning of education seekers are presented, which differ in the degree of remoteness, individualization, and productivity. The principles of organizing students' independent work in the conditions of distance learning in institutions of higher education are formulated.

The issue of consideration of electronic educational resources, and the need to create and provide resources for the information and educational space of higher education institutions require further research.

Bibliographic references

Biletska, O., Kuchai, T., Kravtsova, T., Bidyuk, N., Tretko, V., & Kuchai, O. (2021). The Use of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. The Romanian Journal for Multidimensional Education, 13(2), 243-267. DOI: https://doi.org/10.18662/rrem/13.2/420

Bogachkov, Yu. M., Bykov, V. Yu., Pinchuk, O. P., Volnevich, O. I., Tsarenko, V. O., Uhan, P. S., ... y Manako, A. F. (2012). Organization of the distance learning environment in secondary general educational institutions: manual. K.: Pedagogical thought. (In Ukranian)

Dotsenko, S. O. (2021). Organization of independent work of education seekers in conditions of distance learning. Psychological and pedagogical problems of higher and secondary education in the conditions of modern challenges: theory and practice: materials V International. science and practice conference, Kharkiv, March 31. - April 2 2021 / Kharkiv. national ped. University named after H. S. Skovorody; Kharkiv: Mitra, 1, 101–104. (In Ukranian)

Dyka, N., & Glazova, O. (2021). Distance learning of the Ukrainian language: features, advantages and prospects. Educational Discourse, 2(33), 205-220.

Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., & Kuchai, O. (2022). Possibilities of Using Multimedia Technologies in Education. International Journal of Computer Science and Network Security, 22(6), 727-732. https://doi.org/10.22937/IJCSNS.2022.22.6.91

Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. International Journal of Computer Science and Network Security, 22(4), 797-803. DOI: https://doi.org/10.22937/IJCSNS.2022.22.4.95

Kuchai, O., Yakovenko, S., Zorochkina, T., Okolnycha, T., Demchenko, I., & Kuchai, T. (2021). Problems of Distance Learning in Specialists Training in Modern Terms of the Informative Society During COVID-19. International Journal of Computer Science and Network Security, 21(12), 143-148. DOI: https://doi.org/10.22937/IJCSNS.2021.21.12.21

Kuzminskyi, A. I., Kuchai O. V., & Bida, O. A. (2018). Use of polish experience in training computer science specialists in the pedagogical education system of Ukraine. Information Technologies and Learning Tools, 68(6), 206–217. DOI: https://doi.org/10.33407/itlt.v68i6.2636

Order No. 1115. Regulations on the distance form of obtaining a complete general secondary education. Ministry of Education and Science of Ukraine on September 8, 2020. Retrieved from: https://zakon.rada.gov.ua/laws/show/z0941-20#n2

Osaulchyk, O. (2020). Transformations in the organization of independent work of students in the conditions of rapid development of distance learning. Socio-political, economic and humanitarian dimensions of the European integration of Ukraine: a collection of scientific works of the VIII International Scientific and Practical Conference (June 3, 2020). Vinnytsia, IV, 233-239. (In Ukranian)

Pavlovska, L. (2022). The role of independent work during distance learning in secondary school. InterConf, 99, 239-245. DOI: https://doi.org/10.51582/interconf.19-20.02.2022.028

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. International Journal of Computer Science and Network Security, 22(6), 739-746. DOI: https://doi.org/10.22937/IJCSNS.2022.22.6.93

Skabelko, R. (2021). Distance education: a modern and affordable approach to the learning process. Vseosvita. Ministry of Education and Culture of Ukraine. Retrived from: https://vseosvita.ua/library/distancijna-osvita-sucasnij-ta-dostupnij-pidhid-do-procesu-navcanna-428648.html

Tamarkina, O. (2020). Independent work of students of higher education institutions in the conditions of distance learning. Current issues of humanitarian sciences, 34(5), 228-231. (In Ukranian)

Tsis, O. O. (2018). Organization of independent educational activities of students of technological and pedagogical specialties using information and communication technologies: study guide. Ternopil: Osadtsa Yu.V.

Tsvyd-Grom, O.P., Nosenko, M.M., Reznik, V.G., & Bonkovskyi, O.A. (2021). Organization of independent work of students in conditions of distance learning of foreign languages in institutions of higher education. Teaching languages in higher educational institutions, 38, 236-250. (In Ukranian)

Yakubov, S. (2015). Distance Learning. Process organization. School Director, 1(97), 11-17. https://elibrary.kubg.edu.ua/id/eprint/6902/1/S_Yakubov_DSHSHS_1_IPPO.pdf

Yasulaitis, V. A. (2005). Distance learning: methodical recommendations: Kyiv: MAUP. (In Ukranian)

Zastelo, A.O. (2012). Psychological foundations of the organization of the information-educational environment of distance education. Bulletin of Kharkiv National Pedagogical University named after H. S. Skovoroda. Psychology, 42(2), 19-29. Retrieved from: http://nbuv.gov.ua/UJRN/VKhnpu_psykhol_2012_42%282%29__5

Zhukovsky, V.M., & Simak, K.V. (2016). The role of independent work of first-year students in the process of formation of professional speech competence during the preparation of bachelors of language majors. Proceedings. "Philological" series. Ostrog: Type of national of the University "Ostroh Academy", 60, 141–144. (In Ukranian)

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