

Opportunities of Social Networks in Educational Activities

Olha Anisimova¹[0000-0002-8016-9361], Lesia Kovalska¹[0000-0002-1579-7708],
Oksana Peleshchyn²[0000-0002-1641-7340]

¹ Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine

² Lviv Polytechnic National University, Lviv, Ukraine

o.anisimova@donnu.edu.ua, l.kovalska@donnu.edu.ua

Abstract. The article analyzes the possibilities of socio-communication technologies on the Internet, taking into account the needs of modern users, increasing the number of participants in information and communication relationships in the Internet space. It is established that today the number of users of social networks in the world has significantly increased, the area of Internet coverage is increasing, the possibilities of using continuous involvement in the latest information and communication technologies are expanding. The positive and negative consequences of expanding access to the Internet, the involvement and inclusiveness of users of the generation of millennials and buzzers to communicate on social networks. The specifics of the use of distance technologies in various forms of education as a separate area of educational services and important content of educational activities in an emergency situation are revealed. The need to use the latest communication technologies to continue the educational process in a pandemic and quarantine in 2020, which is confirmed by the statistics and growth rates of the number of Internet and social network users. The means and forms of information communication used in the organization of the educational process in the conditions of quarantine and pandemic, revealed the need to integrate information and communication technologies in all learning processes. This trend of creating conditions and implementing distance learning technologies has emerged both in Ukraine and around the world. Promising areas of further research in this area identified the need to improve mechanisms for implementing educational services using remote technologies, development and implementation of new methods of working in the classroom with elements of gamification, virtualization, control and interactivity of participants in the educational process.

Keywords: Social Networks, Information, Communication Technologies, Social Act, Level of Inclusion, Educational Activity.

1 Introduction and Motivation

The latest means of communication have long filled the living space of modern man, replacing many familiar mechanisms of communication and interaction. Sociocommunication technologies and the Internet have significantly influenced the standards and lifestyle of human life, identified changes in ways and forms of communication through web technologies. Such opportunities allow you to quickly get the information you need for work or study, facilitate the rapid transfer of information, lead to data exchange and interaction in the professional sphere, open new prospects for the development of information and communication technologies. In society, depending on the volume of information consumption, determined its own classification by the level of inclusion in the information environment. There are such generations as boomers, generation X, millennials, generation Z. This fact in the development of social networks and the expansion of their capabilities is extremely important and requires its consideration in the process of organizing training, work, leisure planning and more. Based on this classification, it is necessary to choose the approach to presenting information that will be perceived by the audience, will be clear and adequately interpreted, and the result of such cooperation will meet the stated goals and objectives.

Significant today is the so-called clip thinking, which in the fast pace of life transforms people's preferences and affects the classical systems of life. Large volumes of printed text are more difficult to perceive, and the consumer focuses only on headlines or captioned images. The current rhythm of information activity can be described by such phrases - everything is concise and clear, emotional visualization of the life situation, a short signature-thought that guides. Such trends require the study, development of their ability to teach and collaborate with the audience, implementation in educational activities, the formation of appropriate forms of work within a single topic. The information content of social networks works according to a similar scheme, modern learners are accustomed to it and are able to perceive it.

The development of information and communication technologies has led to the reorientation of the user to the formation of their own virtual reality, creating a comfortable environment for communication, choosing mechanisms and forms of learning, obtaining the necessary professional skills, realization of their capabilities. Among such technologies, a special place is given to the services and services of the Internet developed by large IT corporations, which are called social networks.

The latest achievements of science and technology cause changes in society, the younger generation needs interactivity, speed, visualization, practice, inclusion and many other important components of development, life, learning and more. Such needs were especially relevant in the conditions of quarantine 2020, organization of remote work, introduction of new methods and forms of education, changes in the daily rhythm of life and the usual way of life.

2 Related Research

Problems of modern technical possibilities and applied use of modern methods and communication technologies in the educational process were the subjects of domestic and foreign research in them. Identification of applied aspects, theoretical developments and use of other enterprises that used Internet services when studying and studying in life, dedicated their employees to scientists: Yu.M. Bogachkov, O.Yu. Burov, R.V. Huminsky, N.P. Dementievskaya, T.P. Zbritska, R.O. Korzh, A.M. Peleshchyshyn, O.B. Slobodyanik, Yu.O. Serov, A.I. Tabanova, C.C. Fedushko, O.V. Shcherbakov, H.A. Shcherbina and others [1-6, 8-9, 16, 18].

Features of the theoretical and practical component in the use of information and communication technologies in the educational process are presented in the works of the following foreign scientists: E.M. Backlanova, D.A. Gubanov, N. Kurmyshev, D.A. Novikov, A.G. Chhartishvili and other [7, 10, 15, 19].

In their works they consider the problems of using social networks as a tool to influence the behavior, activity of the target audience G.I. Batychko, O.R. Veliyeva [18]. The use of social networks in educational contexts is investigated in order to increase consumer productivity, attract and motivate M. Vitoropoulou and V. Kariotis [19]. On the one hand, scientists identify opportunities to track the distribution of various types of information on social networks; on the other hand, study the characteristics of the use and analysis of social networks. R. Korzh, A. Peleshchyshyn, S. Fedushko, Yu. Serov investigate possible methods of protection of the information image of the university from short-term and long-term aggressive actions in social networks [2, 6, 8, 9].

To date, the issues of the use of social networks and the involvement of participants in the educational process in information and communication technologies on the Internet have become particularly relevant given the emergency situation of the pandemic and quarantine. Identifying the true state and prospects of the educational process in the online format is a debatable issue and needs comprehensive coverage.

The purpose of this study is to determine the possibilities of using social networks in educational activities in the conditions of quarantine and pandemic. The methodology involves the number of general scientific and special methods of cognition. In particular, there are the following: the method of analysis and systematization of scientific literature, logical method, monitoring, observation and method of research results visualization.

3 Basic Points Statement

In an emergency, the world underwent the greatest transformation processes during March-May 2020, which also affected the organization of educational services by higher education institutions. There was a need to continue working so as not to lose touch with applicants and not to interrupt the learning process. A positive phenomenon here was the use of social networks, which have access to almost all participants in the educational process, for information and counseling and further in order to

organize the educational process. Thus, from the means of everyday communication, communication of limited interest groups, social networks and the latest opportunities of information and communication technologies on the Internet have become mechanisms for establishing the educational process, offered modern forms of cooperation, helped to overcome distance and discomfort in atypical conditions.

Distance education is not a new term, but for a long time its possibilities were not resorted to on such a large scale as we see it today. Thus, the website of the Ministry of Education and Science of Ukraine provides the following definition. Distance education is an opportunity to study and receive the necessary knowledge remotely from the educational institution at any convenient time. The Regulations on Distance Education and the Concept of Distance Education Development in Ukraine regulate the rights and responsibilities of **participants** in the educational process [17].

Table 1 presents the distribution of the number of pupils, students and students of educational institutions of Ukraine in accordance with the International Standard Classification of Education ISCED 2011.

Table 1. Distribution of the number of pupils, listeners and students of educational institutions of Ukraine according to the International Standard Classification of Education ISCED 2011, thousand people [22]

Equal education for international standard classification education		Duration of training	2014/15	2015/16	2016/17	2017/18	2018/19
title	code						
Pre-school education	0	4 years	1 294.9	1 291.2	1 300.1	1 303.8	1 278.2
Primary education	1	4 years	1 536.6	1 599.3	1 644.3	1 676.6	1 724.7
The first stage of secondary education	2	5 years	1 714.3	1 708.2	1 743.5	1 796.1	1 845.4
The second stage of secondary education	3	2 (3) years	656.0	617.7	591.4	580.8	599.1
Post-secondary not higher education	4	2 years	122.4	117.9	106.8	92.3	83.4
Short cycle of higher education	5	2 years	452.3	427.5	408.7	398.7	383.7
Bachelor's degree or its equivalent	6	4 years	890.3	855.7	800.5	774.1	746.3
Master's degree or its equivalent	7	2 years	346.7	322.1	377.6	365.8	392.2
Doctoral studies or its equivalent	8	4 years	30.0	30.3	27.8	26.4	24.0
Summary		29(30) years	7043.5	6969.8	7000.7	7014.5	7077.1

The total number of students has not changed in recent years (about 7 million people), Table 1. The total duration of training is 29-30 years.

Preschool education is a pupil of preschool education institutions. Primary education - students of 1 - 4 classes of full-time institutions of general secondary education who receive primary education.

The first stage of secondary education - students of 5th - 9th grades of day and evening institutions of general secondary education, who receive basic secondary education.

The second stage of secondary education - students of 10 - 11 (12) classes of day and 10 - 16 classes of evening institutions of general secondary education, students (listeners) of institutions of vocational (vocational) education, who receive a complete general secondary education. Post-secondary non-higher education - Students (students) of vocational (vocational) education institutions who receive vocational (vocational) education. Short cycle of higher education - students of higher education institutions who obtain a higher education degree "Junior Bachelor" or educational qualification level "Junior Specialist". Bachelor's degree or its equivalent - Students of higher education institutions who obtain a higher education degree "Bachelor". Master's degree or its equivalent - students of higher education institutions who obtain a higher education degree "Master" or educational qualification level "Specialist". Doctoral studies or its equivalent - Applicants for the degree of "Doctor of Philosophy" and "Doctor of Science".

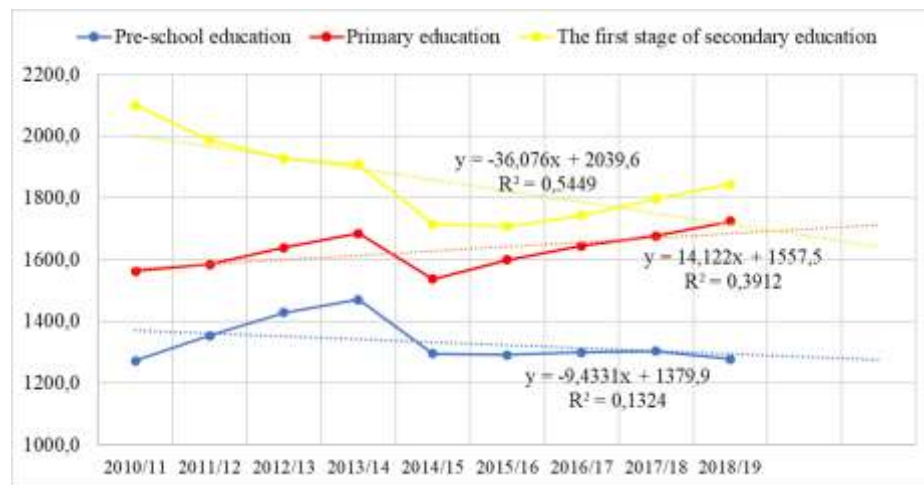


Fig. 1. Dynamics and forecast of the number of people involved in preschool, primary education and students of the first stage of secondary education (2010/11 - 2018/19 academic years)

Figure 1 shows the largest levels of education in Ukraine. Over the last 9 years, we have a downward trend in the number of preschoolers and first-level secondary education. The number of primary school students tends to increase.

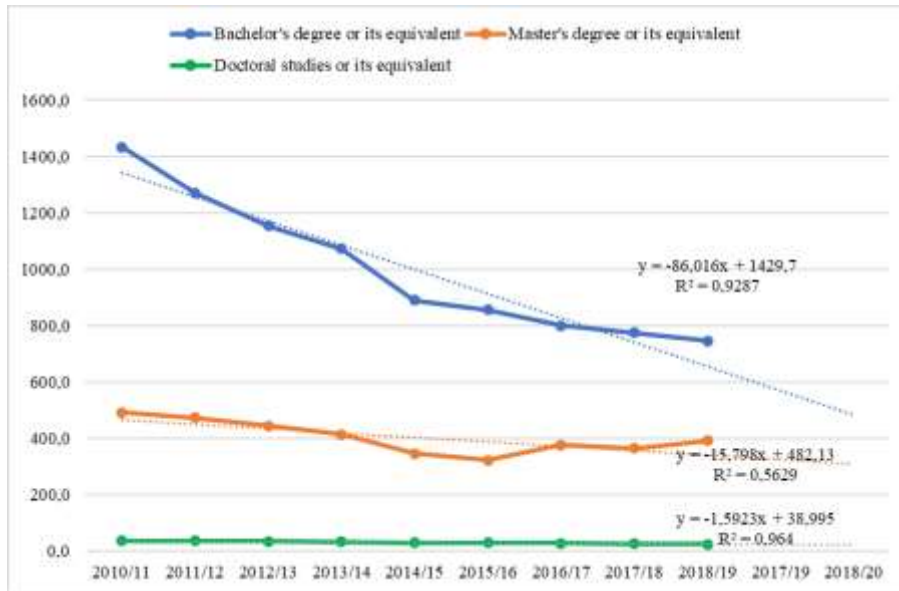


Fig. 2. Dynamics and forecast of the number of applicants for higher education: bachelor, master, doctor of philosophy (2010/11 - 2018/19 academic years)

Figure 2 shows the number of applicants for higher education in Ukraine. Over the last 9 years, there has been a clear trend at all levels to reduce the number of higher education applicants.

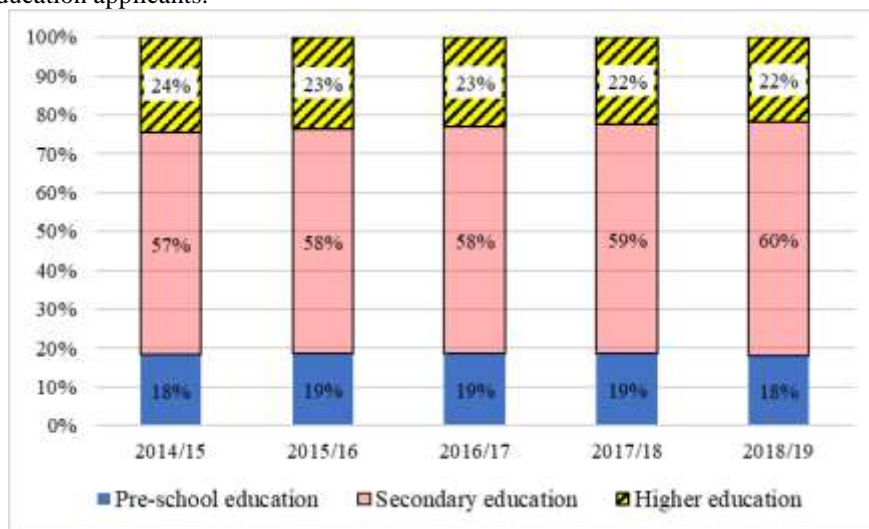


Fig. 3. The structure of students

Figure 3 shows the share of preschool, secondary and higher education in the total number of students.

About 60% is secondary education. Higher education -22%. That is, 82% (about 5.7 million people) are potential distance learners at present.

Citizens who have secondary, vocational, higher education, as well as those who have the opportunity to perform the necessary tasks remotely with the help of educational information and communication technologies can study remotely in Ukraine. The learning process is based on the use of various means of communication. Speaking of distance learning, we need to distinguish between two similar terms - distance education and the use of distance technology in various forms of education (full-time, part-time). In modern conditions, social networks play an important role, which are a public, operational channel of information transmission, a continuous means of communication. Models of distance learning / distance learning technologies are presented in the figure 4.

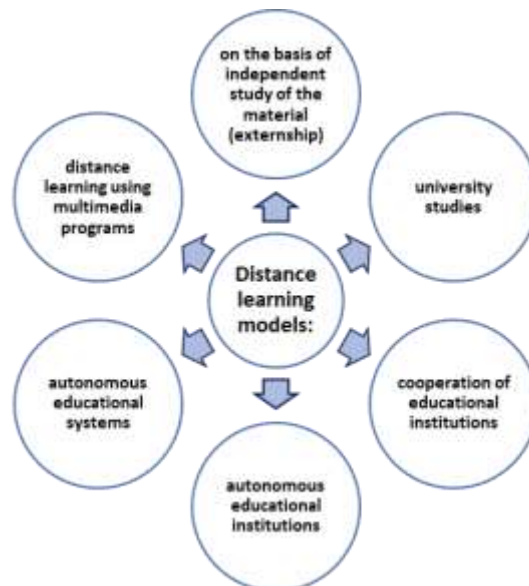


Fig. 4. Models of distance learning / distance learning technologies

The concept of distance learning development in Ukraine has grown and increased the Ministry of Education and Science of Ukraine V.G. Flint December 20, 2000 [14]. Some of its figures have actually expanded at different levels of education, but to the global advanced level was educated on a distance learning platform, which was not. This is small and is justified as an economic, accurate, sanitary, psychological justification. The positive results of this form of education included flexibility, modularity, parallelism, large audience, efficiency, manufacturability, social equality, internationality, a new role of the teacher, a positive impact on the student / listener, quality. All these qualities are undoubtedly present in the educational process on the platform of information and communication. However, the classic scheme of communication between teacher and student, teaching in the classroom is unchanged, especially in natural fields and specialties.

The concept of distance learning is interpreted as a form of learning using computer and telecommunications technologies that provide interactive interaction of teachers and students at different stages of learning and independent work with the materials of the information network. Distance learning technologies in the mechanism of learning and organization of the educational process, especially in critical conditions of quarantine and with the involvement of social networks, involves a set of such measures: the provision of educational material; performance monitoring; consultations by the program-teacher; interactive cooperation between teacher and applicant; quick addition of the course with new information, correction of errors. The advantages of such training involving the latest telecommunications technologies and social networking capabilities include flexibility, relevance, convenience, modularity, cost-effectiveness, the ability to simultaneously use a large amount of educational information by any number of applicants, interactivity, greater control, lack of borders. The subjects of the educational process in the system of social networks include the applicant, tutor, organizer, administrator.

Today, knowledge of the theory does not satisfy the applicant, potential employer, stakeholder. Instead, skills, abilities and experience become especially important. Today, a specialist must have the latest information technology, strive to increase and improve their professional level, have practical skills. In the process of communication there is an exchange of information necessary for further improvement of the professional level and acquisition of new knowledge. An important aspect of remote technologies in the educational process are the noises presented in Figure 5. They must be taken into account at all stages of the educational process. Everyone has a place in the model of the communication process and influences the message and its participants.

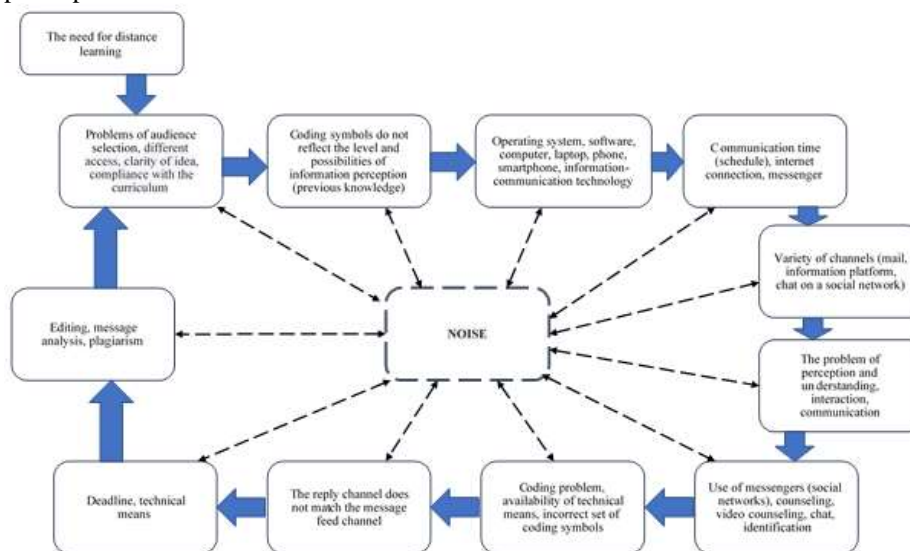


Fig. 5. Noise in the communication educational process using remote technologies

An important component of distance learning technologies on the platform, environment, Internet service is the development of the training course itself, which in the process of work can be changed and supplemented, to show flexibility. It is worth predicting what the course will look like, what multimedia elements it will use, how computer technology can be used for efficiency. For the current generation of applicants, an important element of learning is the use of dynamic objects to create visual models of processes, adaptive modeling of the applicant, inclusion and virtualization of the educational process. This approach allows you to maximize the applicant, work with all types of memory, to promote the development of professional skills and abilities.

The implementation of educational activities involving remote technologies can be carried out in two modes. Synchronous mode assumes that all participants in the educational process are simultaneously in the web environment. Asynchronous allows you to carry out the learning process using remote technologies on a convenient schedule [20]. The main difference here is instant messaging, immediate feedback, monitoring and counseling. Today it is difficult to withstand one of the modes in its pure form.

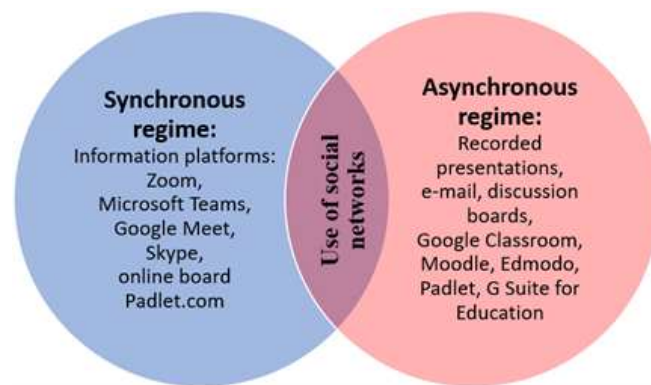


Fig. 6. The place of social networks in distance learning regimes

In the conditions of quarantine and implementation of training with the use of distance technologies, a combined mode is appropriate, which includes elements of synchronicity, asynchrony and the possibility of social networks for quick contact with students [20]. Figure 6 shows graphically such a hybrid, and social networks are an important connecting element, allowing you to go beyond synchronicity / asynchrony. Such models are created in practice and are accessible, comfortable, understandable to all participants. For control, test tests and tasks are prepared and periodically assigned, which allow to attract a large audience of users, use the opportunities of social networks for express polls, perform the proposed task and send for testing in any format. The interaction between the subjects of the training system in the space of information technology is carried out through a system of individual guest books, forums, chats and e-mail, which makes it impossible to write off, shows real knowledge.

Among all these advantages and disadvantages of educational activities in the system of social networks and online learning, especially in a critical situation of quaran-

tine and pandemic, we can highlight such as learning anywhere and anytime, all you need is the desire and access to the Internet. The availability of educational materials is also an important element of learning, moreover, they can be returned to at any time. Established feedback, which allows for control, consultation, guidance. Elements of gamification, interactive classes and control automation allow to maintain the interest of applicants for a long time. In addition, this method and form of learning using the capabilities of the Internet can be called an important element of digitalization. The digital information environment in which students are born and educated is a natural environment for development, and any information can be quickly obtained and exchanged in a digital environment.

The study allowed us to assume that the quality of the communication process is significantly affected by "noise". It is impossible to completely eliminate it. But the use of social networks in the communication process has a positive effect on noise reduction. The capabilities of modern social networks are constantly improving, the list of their services is expanding, providing much more benefits in the organization of a full life, study, work and more. Gradually, due to convenience and speed, social networks replaced live communication. Internet communication is a necessary means of communication in modern life. A social network is a kind of social structure formed by individuals or organizations, it is an Internet service [18]. It reflects the diverse relationships between participants through a variety of social relationships, from casual acquaintances, purposeful development / learning / work, to close family ties. The term was first used in 1954 by J. A. Barnes in Class and Committees in Norwegian Island Parish, Human Relations. Today, social networks have become available, the Internet has connected almost 96 percent of the world's population. By the number of users, about 1.5 billion, in first place among the social networks of Facebook. According to scientists, the minimum time spent in the social network of each person is about 3 hours [11]. The following information communication services and platforms are used directly for conducting educational activities within the Vasyl Stus Donetsk National University: Microsoft Office 365, Microsoft Teams, Moodle, Google Classroom, Zoom Video Communications, Google+ Hangouts, YouTube; social networks - Facebook, Google+, Instagram, LinkedIn, Telegram, Viber, WhatsApp and others [13]. These include those officially recommended by the school to work with the audience as Microsoft Office 365, Microsoft Teams, Moodle, and other social networks and information platforms in which self-organizing applicants, communication, information retrieval, monitoring and consulting on all issues. cooperation.

The life of modern man has moved to the Internet, has become open and accessible, new opportunities and threats have appeared. Such openness is a consequence of information globalization. As we can see today in the conditions of pandemic and quarantine, the only information space remained without significant restrictions, instead it received even more users and mass involvement in its capabilities. Such transformations of established norms of life and full inclusion in the global information network try to use today almost all components of life - shop, doctor's consultations, beautician's advice, communication services, delivery service, cultural events, educational activities, political activity, but at the same time cybercrime develops.

Given the specifics of modern distribution among users and accessibility in different parts of the country or the world, social networks, the latest socio-communication technologies and the Internet should be used in professional activities, study their specifics and opportunities, gain new user skills, protect information and privacy. Like any phenomenon of social life, social networks have many positive and negative components that need to be considered in each case [7].

The special role of social networks in educational activities. For students there is an opportunity to use the texts of lectures, get the necessary information from various sources, clarify complex or controversial issues referring to reference material, self-assess the level of their knowledge through online testing, monitor time efficiency, participate in various thematic groups to study foreign languages and much more [5].

Social networks, especially in the conditions of quarantine and temporary suspension of shops allow to use time and space for the organization of virtual business, online stores, delivery services, etc. Information globalization and the development of social networks have no borders, which opens up space for communication, allows online travel, organize excursions and acquaintances with interesting parts of the world. Virtualization and organization of leisure are also possible through social networks. Team and individual games, pleasant communication and various interest groups allow you to organize recreation, spend time with benefits, distract from the main occupation, gain new skills and knowledge [6].

Partial anonymity, closed profile in social networks allows low-contact people to organize a full life. Low self-esteem and uncertainty in the results of our work are more easily tolerated if we do not display personal information. In some cases, this is the way out and practice of confidence in their actions, the ability to overcome bullying. But in the educational process it carries many problems of identification, assessment of knowledge, determination of royalties and individual work on a particular task [5]. In addition, there is an exchange of experiences and the production of new ideas that appear under the influence of the received information, the implementation of similar tasks by authoritative persons. This is a kind of opportunity to generate new ideas and turn them into a promising project.

Social networks are a great opportunity to start your own business, to establish yourself to the general public, to earn credibility and a good name, to gain support and find like-minded people. It is a kind of opportunity to receive, process and use a large amount of information, develop, self-improvement and make a profit. In addition to the positive aspects of life in the Internet environment and the use of social networking opportunities carries many dangers and negative consequences. As in any other phenomenon or process, social networks and involvement in the Internet space using modern communication technologies has positive and negative results [2].

All these consequences take place in our daily lives. But at the same time, these opportunities and consequences of the introduction of socio-communication technologies are preserved in the implementation of official measures of distance technologies in education. Such consequences require constant monitoring, improvement of mechanisms of cooperation in the educational environment, flexibility in cooperation with different audiences, establishment of information protection and identification system of participants, development of adequate control and feedback systems, etc.

An important aspect of the implementation of the educational process in the system of social networks is the level of Internet coverage, the availability of digital information, the availability of the latest technical means of communication, and so on. Thus, according to statistics at the beginning of 2020, more than 4.5 billion people use the Internet, and the audience of social networks exceeded 3.8 billion. Almost 60 percent of the world's population is already online, and from here we can assume that by the middle of the year, half of all people on the planet will use social networks [11]. There are various barriers to full Internet access that prevent people around the world from gaining fair and equal access to the digital universe that is changing the way we live our lives.

If you look at the results of a survey of students on the possibilities of using social networks and information platforms in the educational process, you can see the following results. The positives include comfortable home learning conditions, convenient task time, pace of study, amount of time required to complete the task, convenience and safety, mobility, accessibility, personal approach, cost savings, time savings, self-organization and self-control. Rapid informatization and digitalization of society actualize the use of such technologies as video conferencing or learning management systems (Learning Management Systems - LMS), etc. According to the Deputy Minister of Education and Science of Ukraine E. Stadny, the use of remote technologies during the quarantine period showed the readiness of about two dozen universities and for them this situation was commonplace.

What does not suit and is a problem field of distance education - decreased level of motivation to learn, lack of live communication with teachers and classmates, unclear criteria for evaluating tasks, perception of information online, technical problems, Internet problems, heavy workload. These problems are classic for the modern student, who is adapting to new conditions of cooperation and learning. But over time, and with the development of the regime, they become less important, the psychological block of problems remains.

A separate issue is access, coverage and quality of the Internet to perform tasks and attend scheduled classes on schedule. In particular, the biggest problems are in rural areas, where applicants are temporarily present. This affects the inclusion, interactivity and visualization of educational mechanisms. Mobile Internet, which is now available in the gadgets of almost every student, allows you to be constantly connected, receive and transmit messages, exchange information, but limits the ability to perform practical work on special information platforms. A separate issue is the procedure of identification of the student in the classroom, his active participation and not only the presence in the chat, the exclusion of plagiarism of work performed or the performance of tasks by outsiders. Such issues require simplification of mechanisms for identification and blocking access to third parties to the work of the audience.

Today it is becoming clear that the previous traditional forms of organization of the educational process are not allowed in a pandemic and quarantine. According to WHO forecasts, such a protracted situation will last for about two years. Therefore, educators have a task to make the most of information and communication technologies, to take into account the demands and needs of modern students. Thus, O. Sharov, Director General of the Directorate of Higher Education and Adult Education of

the Ministry of Education and Science of Ukraine, comments that the 2020/21 academic year will be a year of testing pedagogical skills, creativity and digital awareness of educators. In the future, it will be necessary to weigh the possibilities of remote processing of theoretical material, conducting lectures with a small number of students, taking part of the lecture material to seminars or practical classes, and so on. In addition, it is necessary to move away from the usual overload of independent work of students, which can be overcome by online classes, virtual practical work, individual approach and control of success, and so on. The academic environment is not very comfortable for work and at normal times. This is a constant stress for both students and teachers. Today, during online education, the problem of burnout has intensified, each participant has his own reaction - from the banal eye fatigue to the difficulty of learning new tools [21].

It is established that today 95.5 percent of participants in the educational process carry out distance learning in quarantine. Such work covers from 2 to 6 hours of self-education (teacher) on the use of information and communication technologies for distance learning. The work also uses the usual online information tools, which were tested before the introduction of quarantine, as Viber - 88.2 percent and the school website - 62.7 percent. For self-education today, author's classes on YouTube are in demand - 72.9 percent, materials for educators on EdEra - 42.3 percent and Prometheus - 32.5 percent [20]. Educators identified webinars, online courses and workshops, online conferences, online seminars and projects as effective forms of professional development. Such priorities should be taken into account in the next organization and conduct of advanced training courses. In order to further improve the mechanisms of forms of work with the use of social networks and information services, it is necessary to take into account the following needs of educators to organize a full-fledged educational process. This includes limited access to the Internet and the organization of the teacher's workplace at home; insufficient experience in organizing training in social networks and information services; lack of information and limited access to online tools; fuzzy / late instructions from the administration of educational institutions, communication; insufficient motivation. The main sources of information about the latest updates and news about the educational process, as well as tools for distance learning are social networks.

Today in the world of information technology is a stable indicator - if you are not "digital" then you are not. In today's world, classical education without a distance component in the life of the younger generation may even seem like a foreign body. The next academic year will be held in a hybrid mode, using remote technologies. That is, the distance of distance education will be quite long [21].

4 Conclusions

The paper presents the dynamics of increasing social network users taking into account the total population and Internet users in the world. The necessity of using information resources of social networks in the education system in the modern information and communication space by determining the indicators of systematic risk of

using social networks in relation to the total number of users of Internet resources is proved. It is established that social networks in quarantine have become an important communication tool, a means of organizing distance learning and social adaptation of higher education in non-standard living conditions, based on psychological, social and pedagogical factors. At the same time, it should be borne in mind that social networks cannot replace distance learning systems, but their synergy within information and communication work and practical work opportunities will significantly increase communication opportunities, interest students and promote their inclusion and more active participation in the learning process. The combination is possible by methods of integration of social services and integration into system information networks and platforms. The convenience of using social networks in the preparation of applicants allows students to use information resources and social networks in their usual conditions, promotes advertising of higher education and attract new students, provides the ability to automatically perform some mechanical actions for the user.

The study allowed us to assume that the quality of the communication process is significantly affected by "noise". It is impossible to completely eliminate it. But the use of social networks in the communication process has a positive effect on noise reduction. In general, the experience of organizing educational activities using social networks and the Internet has shown real opportunities to maintain contact with applicants, not to lose the consistency of the learning process. Important aspects of further study of the problem of social networks in the education system are the preservation of information content, organization of information security, identification of working materials, compliance with the code of ethics and academic integrity.

References

1. Mastyash O., Peleshchyshyn A., Fedushko S., Trach O., Syerov Y.: Internet Social Environmental Platforms Data Representation, IEEE 13th International Scientific and Technical Conference on Computer Sciences and Information Technologies (CSIT), pp. 199-202. Lviv, Ukraine (2018). <https://doi.org/10.1109/STC-CSIT.2018.8526586>
2. Syerov Yu., Fedushko S., Loboda Z.: Determination of Development Scenarios of the Educational Web Forum. Proceedings of the XIth International Scientific and Technical Conference (CSIT 2016), pp. 73-76. Lviv (2016). <https://doi.org/10.1109/STC-CSIT.2016.7589872>
3. Slobodyanik, O.V. Implementation of the project method by means of social networks. Information technologies and teaching aids. IITZN NAPS of Ukraine. T. 56. 6. . 30–39. (2016). <http://journal.iitta.gov.ua/index.php/itlt/issue/view/83/showToc>
4. Bogachkov, Yu. M., Burov, O. Yu., Dementievskaya, N.P. Electronic social networks as tools of the modern educational environment: glossary / For general. ed. O.P. Pinchuk. IITZN NAPS of Ukraine. 34 (2015).
5. Shcherbakov, O.V., Shcherbina G.A. Social network to support the educational process in higher education. Information processing systems: coll. Science. wash. 8 (106): Problems and prospects for the development of the IT industry. 159–162. (2012).
6. Syerov Y., Shakhovska N., Fedushko S.: Method of the Data Adequacy Determination of Personal Medical Profiles. Proceedings of the International Conference of Artificial Intelligence, Medical Engineering, Education (AIMEE2018). Advances in Artificial Systems

- for Medicine and Education II series, vol. 902, pp. 333-343 (2020). https://doi.org/10.1007/978-3-030-12082-5_31
7. Kurmyshev, N. Facebook for the university. *Intellegent Enterprise*. 3 (237) (2012). URL: <http://www.iemag.ru/interview/detail.php?ID=25517.4>
 8. Fedushko S., Syerov Yu., Korzh R.: Validation of the user accounts personal data of online academic community. Proceedings of the XIIIth International Conference “Modern Problems of Radio Engineering, Telecommunications and Computer Science” (TCSET'2016), pp. 863-866. Lviv-Slavske, February 23-26 (2016). <https://doi.org/10.1109/TCSET.2016.7452207>
 9. Korzh R., Peleshchyshyn A., Syerov Yu., Fedushko S. University's Information Image as a Result of University Web Communities' Activities. *Advances in Intelligent Systems and Computing*. – Springer International Publishing: Series Volume 512. 115-127. (2017).
 10. Baklanova, E.M. Effective marketing of educational services in social networks. *Questions of modern science and practice*. 3 (34). 111–115 (2011).
 11. All statistics of the Internet for 2020 - figures and trends in the world and in Russia. (2020). <https://www.web-canape.ru/business/internet-2020-globalnaya-statistika-i-trendy/>
 12. The new school year will be a year of testing the digital awareness of educators. (2020). <https://vseosvita.ua/news/novyi-navchalnyi-rik-bude-rokom-vyprobuvan-tsyfrovoi-obiznanosti-osvitian-15997.html>
 13. TOP of the most popular social networks in the world and means / services of communication. (2020). <https://likeme2.ru/ru/TOP-rating>
 14. The concept of distance education development in Ukraine. <http://uiite.kpi.ua/2019/06/03/1598/>
 15. Gubanov, D.A. Social networks of information influence: models of information influence, management and confrontation: a monograph. D.A. Gubanov, DA Novikov, A.G. Chhartishvili; under ed. D.A. Novikova. M . Publishing House of Physical and Mathematical Literature. 228 (2010).
 16. Zbrytska, T.P., Tabanova, A.I. The relevance of using social networking tools in the educational process. *Bulletin of socio-economic research*. 3 (67). 117-130 (2018).
 17. Ministry of Education and Science of Ukraine. <https://mon.gov.ua/ua/osvita/visha-osvita/distancijna-osvita>
 18. Batychko, G. I., Veliyeva, O. R.: Social networks as a forming factor of positive image and positioning space of the university at the educational service market. *Bulletin of the Mariupol State University. Series: Philosophy, Culturology, Sociology* 3, 17–25 (2012).
 19. Vitoropoulou, M., Karyotis, V., Papavassiliou, S. Sensing and monitoring of information diffusion in complex online social networks. *Peer-to-Peer Networking and Applications* 12(3), 604–619 (2018).
 20. Organization of distance learning at school. Guidelines. (2020) <https://mon.gov.ua/storage/app/media/zagalna%20serednya/metodichni%20recomendazii/2020/metodichni%20recomendazii-dustanciynna%20osvita-2020.pdf>
 21. A challenge that cannot be ignored. About distance education in universities under quarantine. *ZN*. (2020). https://dt.ua/EDUCATION/viklik-yakogo-ne-mozhna-ne-priynyati-347904_.html/
 22. Demographic and social statistics / Education. State Statistics Service of Ukraine, 1998-2020. (2020). http://www.ukrstat.gov.ua/operativ/menu/menu_u/osv.htm
 23. Hryshchuk R., Molodetska K., Syerov Y. Method of Improving the Information Security of Virtual Communities in Social Networking Services. *CEUR Workshop Proceedings*. 2019. Vol 2392: Proceedings of the 1st International Workshop on Control, Optimisation and Analytical Processing of Social Networks, COAPSN-2019. p. 23–41.