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SWOT ANALYSIS OF KAZAKHSTANI STUDENTS' NETWORK INTERACTION IN VIRTUAL SPACE

Abstract

The article presents an analytical review of theoretical material on the study of the problem of network interaction in virtual space and the identification of the attitude of Kazakhstani students of pedagogical specialties of higher educational institutions to virtual communication and interaction in social networks. The trends of the influence of the Internet and digital resources on the development of networking and learning are studied. A SWOT analysis of the features of youth network interactions in the virtual space is presented, recommendations are given on managing existing risks in the development of online student interaction in the digital educational space. The authors have developed two models, one is related to the influence of network interaction on the formation of a network communicative culture of students, the second represents a network communicative culture of interaction between students and university teachers.

Keywords: virtual communication, online communication, network interactions, digital culture, digital ethics, virtual educational space.

Introduction. In modern conditions, there is a significant growth of the Internet and digital technologies in the field of communication and social relations, which have changed the methods and forms of interaction itself. Network interaction and communicative Internet culture determine the methods and rules of user interaction in the digital virtual space. This includes not only the ability to correctly interpret and respond appropriately to online communication, but also the ability to create a supportive and productive environment for all participants in online communities. In these conditions, work related to informing students about compliance with the rules of balanced online and offline interactions on the network, as well as developing online socialization and communication skills, is relevant.

Research into digital interactions can help identify potential threats and challenges associated with the use of the Internet and social media. This may concern not only cybersecurity, but also the threat of disinformation and manipulation through digital platforms. Understanding these threats and developing strategies and technologies to overcome them are becoming increasingly important in today's information society, helping to ensure the effective and safe use of digital technologies, where the online space is already becoming an integral part of our daily lives.

Modern society observes that social networks, originally created as entertainment content, have evolved from basic chats to serious mobile applications (Kacker and Saurav, 2020), providing unlimited opportunities for establishing personal contacts, exchanging opinions, comments, various documents in a wide Internet space without restrictions (Antonetti and Crisafulli, 2021), creating virtual communities, uniting all users (Barlettetal, 2018), thereby demonstrating the global popularity and widespread use of platforms such as Facebook, Twitter, Instagram, Snapchat (Alhabasn and Ma, 2017).

The massive passion of users for social platforms (Facebook, Twitter, Instagram, Snapchat) attracted the attention of foreign scientists (Grieve, 2017; Meshietal, 2020; Macksonetal, 2019; Johnsonetal, 2020; Oladimeji and Kyobe, 2021; InaraRodis, 2021) in studying their features and capabilities , identifying the social activity of users, ranging from the amount of daily time spent on platforms, studying the choice of content of users, to identifying their true motives in establishing interpersonal interaction with other network participants.

Online communities based on personal and professional interests, hobbies, political beliefs, religious ideology, or cultural identities. Virtual communities on the Internet play a significant role in shaping social dynamics and culture. They bring people together with common interests and goals, providing platforms for information exchange, support and socialization. Therefore, we believe that a social network, providing any user with freedom of speech and expression, is a powerful tool in the Internet space that remotely influences the perception, consciousness, attitude and worldview of users. Any of our comments or actions on a social network entail at least certain emotional reactions from both an individual user and a certain community. Content quality, digital culture and user etiquette are integral components in the development of constructive or destructive network interaction and communication. The quality of life in the virtual space depends not only on digital competence, but also on the skills of critical thinking, reflection and self-regulation, which allow users to distinguish truth from misinformation and maintain healthy online interactions.

Social networks, being an integral part of our daily life, affect the development of personal relationships, education, career, arrangement and quality of life. With just one click on the Internet you can solve everything (get to know each other, support, exchange opinions, knowledge, work experience, buy something, etc.) or destroy everything in one mig (support and incite disinformation, expose or be subjected to trolling, cyberbullying, etc.p.).

Materials and methods. Network interaction and online communication in the Internet play an important role in modern society, defining new opportunities and forms of communication through E-mail, chats, forums, video conferencing, learning platforms, social networks and other online platforms that allow users to exchange information and interact online or real time.

Online communication differs from traditional offline communication in its asynchrony, the possibility of anonymity and wide access to information. These features influence the perception of messages, emotional reactions and the formation of a level of trust and security between participants in online interaction. A social network, providing any user with freedom of speech and expression, is a powerful tool in the Internet space that influences the perception, consciousness, attitude and worldview of users.

Online communication also affects the processes of socialization and cooperation, leading to the formation of virtual relationships (short-term, long-term). Virtual relationships can have both positive and negative effects on the mental well-being of participants. They can help improve self-esteem, social support and expand social circles, but can also be a source of stress, cyberbullying and isolation.

Reality shows that the harm caused by the Internet and digital technologies to the emotional and personal states of network users is increasing. All these problems require deeper understanding and study by society.

The purpose of this article is to present a SWOT analysis of the study of the process of development of network interaction in virtual space among students of pedagogical specialties.

With the development of social networks, instant messengers and online platforms, new opportunities for communication have emerged, which has led to the formation of virtual relationships. These relationships can be either short-term (for example, through online games or forums) or long-term (including online friendships and romantic relationships).

It should be noted that with the advent of the pandemic, the possibilities for using various training formats have rapidly expanded, from "on-line", distance learning, mobile, "off-line", "blended learning" to the use of artificial intelligence ("LeanDash"). Social networks have become more active and have become an integral part of communication in various areas from leisure, educational to professional.

With the spread of the Internet, cases of digital violence and bullying are increasingly occurring, which can lead to serious psychological problems for Internet users, including frustration, isolation, depression and suicidal thoughts.

In our opinion, the work of Eraslan and Kukuoglu (2019) is attractive with the hypothesis

that most people are prone to the manifestation of network social addiction, which manifests itself in many users as a certain source of providing social self-realization and interaction with other users through the provision of audio and visual content. Scientists actualize that unlimited access to certain network content, demonstrating the visual component of the user's lifestyle and thoughts, can cause other opponent users, along with minor pleasant moments, to a greater extent - unfavorable emotional reactions, leading to isolation. The reaction of opponents online, and even more so their aggressive comments, can be irresponsible and unsafe.

For Internet users, social interaction in an online community presents different emotional appeals, immersing users in experiencing a palette of reactions from pleasant online communication to the manifestation of unfavorable digital behavior with manifestations of aggression (Whittaker and Kowalski, 2014; Lietal, 2020; Peterson and Densley, 2017; MCCreery and Krach, 2018; Malmasietal, 2019; Coyneetal, 2008; Lietal, 2020).

The content used on social networks has a different impact on the emergence and development of the emotional state of Internet users. Recently, there has been a noticeable increase in research examining the influence of network interaction on the emergence of frustration and aggression (Breuer and Elson, 2017; Alhabash and Ma, 2017; Tia Porterfield, 2022).

Reality shows that the harm caused by the Internet and digital technologies to the emotional and personal states of network users is increasing. All these problems require deeper understanding and study by society. For example, various aspects of the influence of network communication on social and personal processes are reflected in foreign works (Rogers, E. M. 1986; Castells, 2001; Adler & Rodman, 2006; Fontaine, 2007; Boyd, d., & Ellison, N. B., 2007; Littlejohn & Foss, 2008; DeVito, 2019).

An overview of the development of social networks is presented in the work of DanahBoyd and Nicole B Ellison (2008), who explore their influence on the development of users'

personal identity and the formation of social relationships.

The works of Karpenko A.S., Churochkina L.A. studied the influence of social media on adolescents. The development of the worldview of young people was studied by Koryagina S.A., Kravchenko I.O. In addition, N.E. Simonovich examined the consciousness and psyche of young people, the perception of social support and the development of interpersonal relationships are reflected in the works of Kallin K., Milgrom L.M. (2015), virtual interaction was studied by Ioana-Narcisa Crețu, Melissa Harris, features of working in virtual teams and strategies for effective management are presented in the works of Terri R. Kurtzberg, ethical issues associated with online communications and social networks are considered Rafael Capurro – Christoph Pingel.

Kazakhstani scientists studied Internet communications and the characteristics of the Kazakhstani Internet community (Chernykh I., 2014), identified the needs for the use of the Internet and social networks by medical students (Mingisheva N.A., 2018), and considered issues formation of cultural identity (B.Karipbayev, 2019), the influence of social networks on communication processes (Marmontova T., Tazhibaev A.,2023), interaction in online communities (Moglan, D.V., 2014), the potential and prospects are analyzed development of online participation of citizens in Kazakhstan (Zhusuppova A., 2021). The conducted research emphasizes the relevance and importance of digital technologies and Internet communications in expanding the cultural and social ties of Kazakh society, the formation of a new open consciousness of citizens and the interaction between government and education of society.

Results. In this article, we rely not only on an analytical review of theoretical material on studying the problem of network interaction in virtual space, but also study the attitude of Kazakh university students to virtual communication and interaction in social networks. We used content analysis, SWOT analysis and methods of theoretical study, comparison, generalization of the work of foreign and domestic scientists who have studied issues of digitalization, online communication and interaction in the Internet

space. The SWOT analysis based on the results of a student survey we conducted, which made it possible to identify and analyze the data obtained in the context of existing network interactions in the virtual space, summarize them, and present recommendations.

A theoretical review on the topic under study allowed us to create a questionnaire that included 5 sections studying students' opinions about the level and quality of communication, interaction, and establishing relationships in online communities.

We focused on students born in the new millennium and inseparable from the Internet to understand how they perceive virtual relationships and how this reflects on their personality. It was important for us to determine how Kazakh students understand virtual support, love, friendship, enmity and sympathy in the online community.

Our goal was to identify the personal attitude of pedagogical students towards virtual communication and interaction. Based on this, the first section of the questionnaire allowed us to study demographic information about the respondents - age, gender, course of study. The second section contained questions regarding "following" (virtual support). The third section examined students' understanding of virtual love. The fourth section revealed the respondents' attitude towards "friending" (virtual friendship). The fifth section analyzed students' attitudes towards trolling.

The survey was conducted anonymously and covered 430 students from various universities of the Republic of Kazakhstan studying in pedagogical specialties from first to 4th year. The results of the survey collected anonymously via Google Drive; after conducting an online survey, the data were summarized and analyzed. A detailed analysis of the results obtained is presented in the article "Monitoring virtual romantic relationships and behavioral deviations among university students in Kazakhstan in the "on-line community".

Discussions. The analysis of theoretical material allowed us to develop a model of the influence of network interaction on the formation of a network communicative culture of students (Fig. 1.).

Digital etiquette and digital culture, in our understanding, should not be considered in isolation from each other, because only in tandem can they influence the process of forming a network communication culture among users. For this purpose, the university needs specially create an educational environment with a full package of necessary educational resources and high-quality digital content of relevant content. This, in a way, will become the basis for the development of digital competencies and digital etiquette among students, which will assist in establishing constructive network interactions with other users of the virtual space: from simple effective online communication, exchange of comments, subscription to significant accounts (following) to the establishment of strong secure personal connections and friendships (friending, virtual friendship).

The model demonstrates how digital work and communication skills today expand the boundaries of knowledge and interaction, helping, through joint learning and development, to come to one's own deeper study and understanding of the material, analyzing the situation and making thoughtful and correct decisions. The development of digital competence, along with critical thinking and the ability to navigate in the virtual space, will help students from self-learning and self-regulation skills to achieve self-realization and self-affirmation.

In the model, we presented how the quality of the network interaction itself in the virtual space can both influence the development of the individual himself and the formation of his digital communication, and also have a negative impact on his destructive network behavior, manifested as hating, trolling, flames, cyberbullying.

Virtual communication and relationships are a complex and multifaceted problem that requires attention to the psychological, social, ethical and legal aspects of the lives of network users. Understanding this interaction, and developing appropriate strategies and policies, will help ensure the effective and safe use of digital technologies in a world where the online space is becoming an integral part of our daily lives. The refore, in our opinion, the issue of studying the culture and etiquette of online communication

and interaction in the digital educational space is becoming increasingly relevant and important. In addition, the communication culture of the digital generation requires close

study and development of innovative methods for creating a network communication culture and digital etiquette for teachers and students of higher educational institutions.
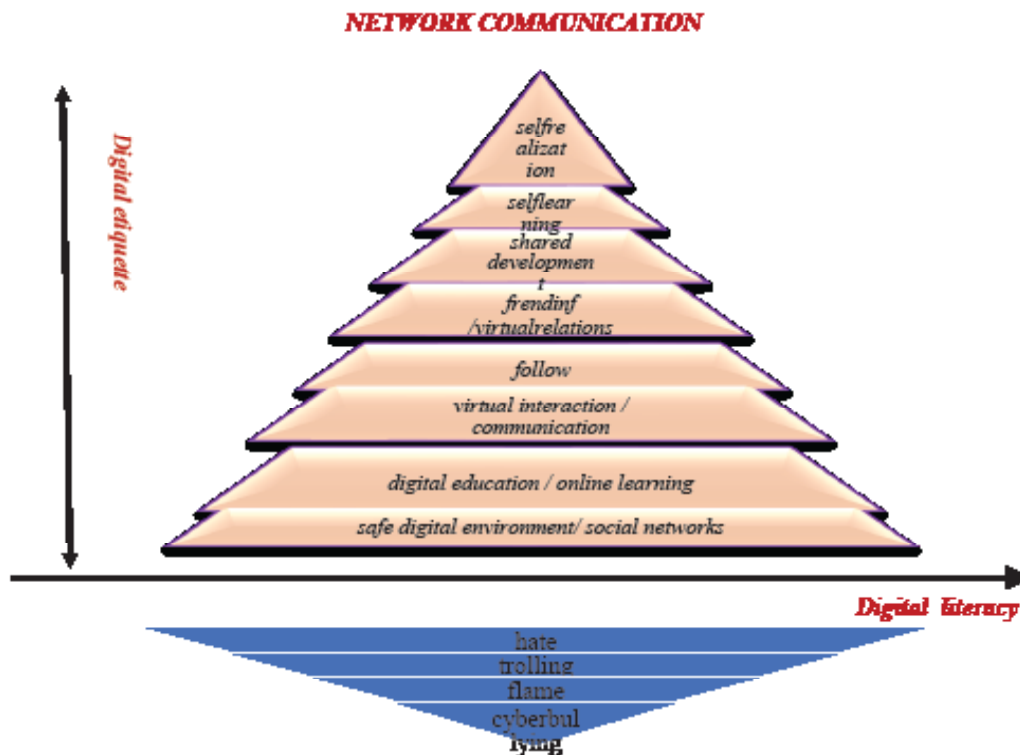
NETWORK COMMUNICATION

Figure 1: Model of the influence of network interaction on the formation of a network communicative culture of students

Before presenting the final SWOT analysis of the identified patterns based on statistical data, the results obtained for each individual section of the survey, starting from the 2nd to the 5th inclusive, should be discussed.

The results of the 2nd section of the survey revealed that students actively use social networks to subscribe to interesting accounts and receive motivation from online communities. Virtual communication is definitely important for many. For example, most students:

- understanding "following" as subscribing to interesting accounts on social networks, they demonstrate their desire to be aware of current events and content;

- appreciate motivating posts and comments, which confirms the importance of psychological support online and motivation in the online environment (community);

- highly appreciate the importance of virtual communication, which indicates its importance

in the modern world, although a significant part of students also recognize that communication in real life is still of greater importance;

- are skeptical about the idea of using following to improve their visibility and interaction in the online environment, especially in relation to teachers.

At the same time, respondents' opinions divided regarding the importance for them of following other students and teachers. Most students prefer to use following in moderation to improve the quality of their online presence. This may be due to the risks associated with virtual space and the existing fear of using following for the purposes of personal fame and popularity. Therefore, students use following to stay relevant, informed and motivated through social media content.

The final data of the 3rd section of the questionnaire, regarding questions of virtual love, indicate that the majority of respondents:

- have a neutral attitude towards virtual love, although there are also significant amounts of wariness and negative perception;

- recognize that virtual love can arise and develop through various virtual forms of establishing interpersonal contact (text messages, video calls, other online forms of communication);

- prefer offline relationships, considering them more meaningful and fulfilling;

- attracts the possibility of international communication and expanding the circle of acquaintances through virtual platforms.

Among the respondents were those who had never encountered virtual love and those who, having experienced it and not receiving the desired effect (satisfaction), left it.

The results obtained allow us to state that students, seeing the potential in virtual relationships for establishing an emotional connection, continue to maintain a wary or neutral attitude towards it. They believe that virtual relationships cannot completely replace offline communication, so they prefer traditional forms of communication for more meaningful and long-term relationships.

Statistical data from the 4th section of the questionnaire determined the respondents' attitude towards "friending" from positive to wary. The results show that students have varied perceptions and attitudes towards virtual friendship. Most people see "friending" as an opportunity for online dating and expanding their social circle, but there is also some skepticism. For example, many remain wary or have a neutral attitude towards virtual friendships. Offline communication is still the preferred option for most students, despite the proliferation of online communication and dating options.

The fifth section of the survey made it possible to identify attitudes towards trolling and determine its manifestations on the social network. The results show that students have a clear understanding of trolling as a form of online aggression or harassment that manifests itself as a negative phenomenon in the online environment. Most of them have not encountered trolling or prefer to avoid controversial discussions online, as well as participation in conflict situations. In response to trolling, the main strategies are to ignore or block the user. Students also tend to deny both their own use of trolling and the possibility of its use in critical situations.

In general, students still show developed awareness and maintain a balance in their use of online social platforms in interaction with other users. They appreciate the opportunities that social networks provide, but prefer to maintain a common sense approach to using them for personal and professional growth, as well as for forming interpersonal connections.

Analysis of the results obtained among the students surveyed demonstrated both positive and negative aspects identified in virtual relationships. The generalized conclusions presented in the SWOT table (Table 1).

Table 1. *SWOT analysis of respondents' attitudes towards network interactions in virtual space*

Strengths	Weakpoints
1. For some students, following is motivating and useful in an online community.	1. Most students prefer real relationships instead of virtual ones.
2. Most respondents understand what following, friending, and bullying are.	2. Some students take friending unreasonably seriously and understand it as providing mutual support and exchanging various data with network participants.
3. For some, virtual love provides an opportunity for emotional expression and communication.	3. For many students, following other users does not improve their own comfort in the online environment.
	4. Some students doubt that friending can replace personal communication in real life.
	5. Some students are ready to continue virtual love offline.
	6. Some students do not understand what following is, and also cannot explain what virtual love and trolling are.

Opportunities	Threats
1. Most students through networking see the prospect of communicating with various people from other foreign countries. 2. Friendlingcan be considered as a completely new way to qualitatively expand your social circle and add new friends. 3. Students can use online interactions to express emotions and motivate other users.	1. Some students show a negative attitude towards various forms of network interaction in the virtual space. 2. Some students take virtual love quite seriously, which can lead them to the illusion of reciprocity and depth of feelings. 3. Some students are attracted to virtual communication and interaction by the freedom of emotional self-expression and maintaining anonymity. 4. Some students themselves were subject to trolling, while others used it.

The data of the presented SWOT analysis indicate the existing contradictory facts regarding the attitude of the surveyed students to virtual relationships. So, for example, along with those who are clearly aware of the real relevance, understand the essence of online relationships, and also know how to interact in the Internet space, there are also those who are either not yet aware or have had negative experiences in online communications and interactions. Therefore, network interaction evokes various emotions in respondents, from potentially approving to extremely wary. This can be an important aspect in teaching students the emotional intelligence that is so necessary in the virtual space. The refore, it is important to take these factors into account and create safe and useful conditions for students to effectively use the networking capabilities of the Internet. In this regard, a SWOT analysis of students' attitudes towards network interaction made it possible to determine what specific measures the education system needs to take to manage existing risks and shortcomings. Recommendations are presented in the table (Table 2).

Based on the proposed recommendations, we could note that educational activities will help students make informed decisions:
- in building constructive virtual relationships;
- using social media for personal and professional development;
- demonstrating safe and ethical behavior in the online environment;
- in building constructive dialogues and discussions with all network users.

Table 2. *Recommendations for managing existing risks in the development of network interaction among students in the virtual space*

Recommendations for developing network communication skills in students,based on the forms of virtual interaction:

following	frending	virtuallove	trolling
Conduct educational activities, covering them in the mass media (digital educational space), organizing training programs (courses, trainings) to improve network literacy, digital competencies, digital etiquette, which influence the development of the following skills in students:			
- maintaining confidentiality and security in the Internet space; - awareness and identification of risks (threats) when reading and publishing comments on the Internet; - critical thinking, from the skills of analyzing and evaluating online publications to the ability to recognize possible threats on the network;	- recognizing and understanding one's own needs and motives of Internet users; - understanding and managing your emotions; - showing empathy towards other users; - listening carefully and understanding the online interlocutor; - expressing your thoughts in a clear and	- understanding the value of privacy and security; - knowledge of the psychological aspects of virtual relationships; - conscious understanding of the existing differences between virtual and offline relationships; - reflection on possible risks (threats, consequences) associated with virtual communication and interaction; - critical thinking, from the skills of analyzing and evaluating	- compliance with the basics of security in the Internet space; - understanding and distinguishing the types and characteristics of destructive communication on the network; - self-control and not allowing reactions to various provocations; - conflict management in the online environment;

- effective use of the social network for personal and professional development.	concise manner; - maintaining safety and building healthy relationships in online friendships.	information on the Internet, to the skills of recognizing fakes, manipulation and deception on the Internet.	- application of digital etiquette and digital culture in online discussions; - using safe methods of responding and protecting against online aggression.

Develop skills in observing the rules of digital culture, digital etiquette and network communication culture in the Internet space

To this end, it is necessary to inform students about maintaining balanced online and offline interactions on the network, as well as to develop their online socialization and communication skills. These skills and competencies will help students effectively manage the quality of their online participation online (correctly interpret and respond appropriately to online communication, create a supportive and productive environment for all participants in online communities), develop emotional intelligence, healthy relationships, and avoid potential risks related to the use of social networks and Internet platforms in communication and interaction.

To summarize, we can actualize that students can use social networks as a tool for searching for information, working, participating in-group educational projects, expanding their social circle, etc. Therefore, social networks play an important role in the development of personal potential, creativity, self-expression and self-realization. Not only by consuming the content of other users, but also by creating and distributing one's own through following, friending and virtual relationships (Fig. 1). Thus, one of the important tasks of the education system is to teach students digital literacy, digital etiquette, and critical thinking in the field of networked social media. To this end, it is necessary to analyze not only the negative aspects of the influence of the social network, but also find ways to use them in the positive development of the personal and professional development of students (Fig. 1). Based on the above, we have developed a model of a network communicative culture of interaction between students and teachers in virtual space (Fig. 2).

The model demonstrates the process of high-quality establishment of interpersonal contacts between students and university teachers in the virtual space. This model, while maintaining the student-centered learning paradigm, reflects the essence and importance of the processes of self-learning and mutual learning of students in the digital educational environment, based on mandatory effective network interaction and online communication. Accordingly, the level and quality of timely provision by teachers and students of constructive feedback (help) to needy students in accordance with their requests and needs, then, accordingly, their level of development of self-regulation, from self-learning skills to self-affirmation and self-realization depends on this.

A generalized analysis of literary sources and interpretation of the results of a student survey allowed us to conduct an integrated comparative SWOT between existing problematic aspects and the potential of network interaction in the virtual space. The analysis is presented in the form of a SWOT table (Table 3).
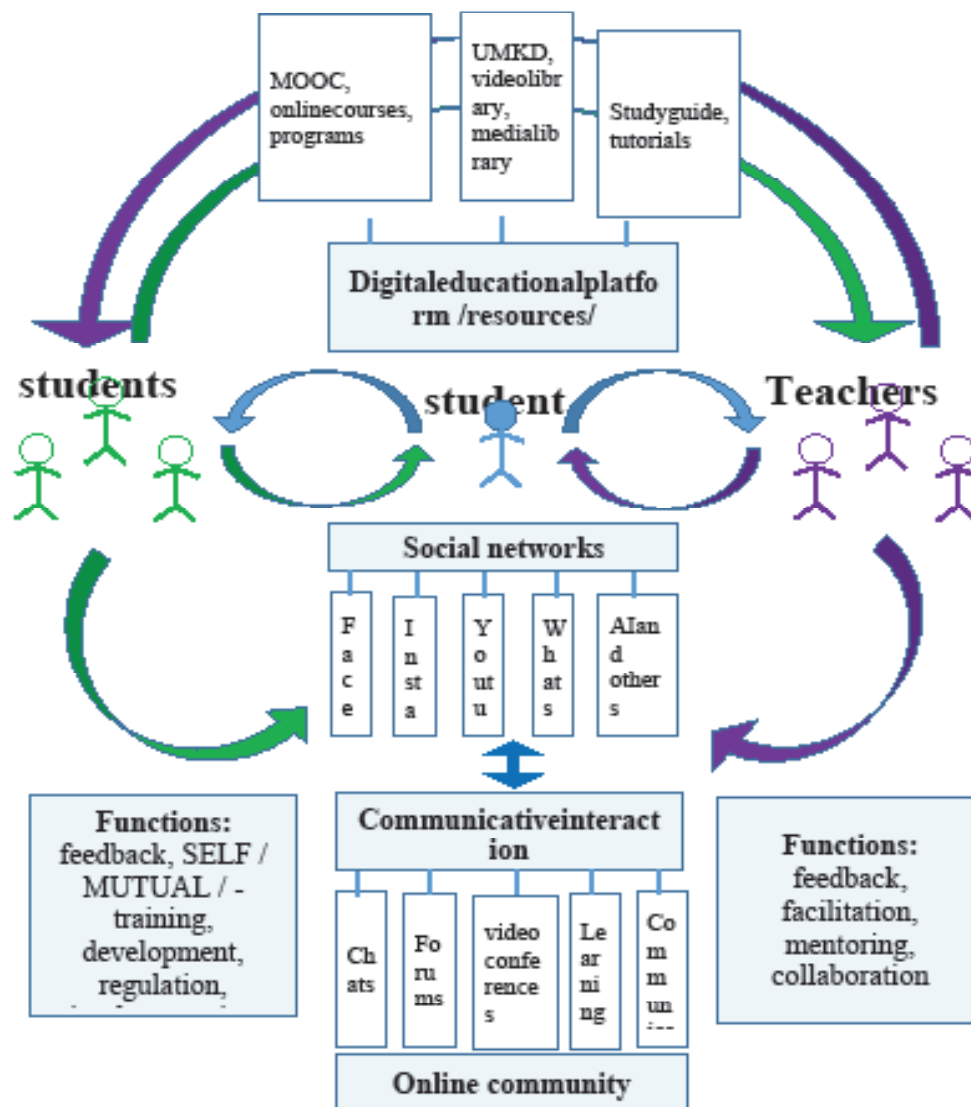
Figure 2: Model of network communication culture of interaction between students and university teachers in virtual space

Table 3. *SWOT analysis of the quality of network interaction in the virtual space*

strengths	weakpoints
- Global availability and scale. Virtual space allows university students and teachers quick and easy access to information and communication regardless of physical, geographic location, promoting intercultural exchange, intercultural understanding and expanding social circles, providing access to educational resources anytime and anywhere. - Expanding learning opportunities. The virtual learning environment provides access to a variety of learning resources, courses and experts from around the world, helping to raise educational standards and learning opportunities while providing additional materials, interactive activities and feedback.	- Technical problems and availability. Uneven access to high-speed Internet and the need for specialized equipment can create barriers to full participation in virtual communication. - Dependence on technology. Internet connection failures or technical problems can lead to interruptions in communication, learning and work. -Lack of personal contact and interpersonal connections. Virtual learning may not provide the full development of interpersonal skills and the formation of personal connections between students and teachers,which are very important for creating an educational environment. - Limited non-verbal elements of communication.

This contributes to the effectiveness of the exchange of knowledge and experience between all participants in the educational process of the university.
- Efficiency of communication. The use of modern technologies enables fast and multi-channel communication through text messages, video calls, forums, chats and online platforms, which develops socialization and promotes improved cooperation and information exchange.
- Effective interaction and feedback. The possibility of instant exchange of information and feedback between students and teachers helps improve the quality of the educational process and a student-centered approach to each teacher, based on his needs and capabilities.

Virtual interaction is devoid of non-verbal signals (gestures, facial expressions) and physical presence, which sometimes makes it difficult to convey emotions and understand implicit signals. It can lead to misunderstandings and a decrease in the emotional tone of communication.
- Limited non-linguistic capabilities. Not all platforms support multilingual interfaces and translation functions, which may limit access and interaction for participants from different countries and cultures.
- Data security and privacy. Possible threats to data security and information confidentiality may arise during the use of virtual educational platforms. Therefore, the risk of data leaks and privacy violations when exchanging information in the virtual space requires careful monitoring and protection.

Opportunities	Threats
- Development of digital skills. Virtual interaction helps develop digital literacy and skills in working with new technologies, which is a key aspect of preparing for the modern job market. - Innovative technologies and teaching methods. Opportunities to use new technologies, such as virtual and augmented reality, adaptive learning and online games, help improve the educational process and attract students to learning activities. - Development of flexible forms of training. The possibility of distance learning and online courses creates new opportunities for the university educational process and professional development. - Improving access to education. The ability to learn and interact remotely contributes to the accessibility of education for the general population and people with disabilities. - Increase in social activity. Networking promotes the development of social skills and creates opportunities to participate in various projects and initiatives.	- Digital divide. Limited access to technology and the internet can create digital inequality and exclude certain groups from education and interaction. - Cybersecurity. The threat of cyber-attacks and data privacy violations in virtual environments is increasing, requiring increased attention to the protection of personal information and data of participants. - Limited social connection. Prolonged virtual interaction can lead to social isolation and decreased quality of interpersonal relationships, especially in the absence of regular face-to-face communication. - Cultural and language barriers. Differences in cultural norms and language barriers can make it difficult for participants from different regions and countries to effectively communicate and understand. - Quality of the educational process. The possibility of loss of quality of the educational process due to the limitations of the virtual format, lack of motivation among students or insufficient qualifications of teachers. -Technology Addiction. Unavailability of technologies or their malfunctions can significantly affect the continuity of the educational process and the quality of learning.

Thus, in our opinion, the impact of the Internet and digital resources on the development of networking and learning is based on the following key aspects:

- *increasing accessibility and globalism*: thanks to the capabilities of the Internet, unlimited access to establishing and expanding online relationships, obtaining educational resources, as well as the opportunity to undergo training anywhere in the world is open;

- *interactivity and feedback*: digital educational platforms and resources create conditions for interactive interaction of students with educational material, teachers and other students. Feedback, online discussions, forums, online diagnostics and testing directly affect the effectiveness of learning and interaction online;

- *personalization and individualization of training*: differentiation of educational materials,

content, taking into account the diversity of knowledge levels and needs of students, allows you to offer individual courses, programs, MOOC, assignments, recommendations, etc. This personalization in building an individual educational route increases the motivation of students and contributes to more effective training that meets the modern needs of employers. This, in turn, contributes to the implementation of a customized approach in education;

- innovations in educational technologies: the rapid development of Internet technologies contributes to the timely creation and implementation of new innovative educational tools (virtual reality, artificial intelligence, adaptive learning, etc.).

This process is dynamic, enriches the educational process, making it accessible, interactive and effective for network learning and interaction in the virtual space.

The presented framework demonstrates how the Internet and digital resources influence networking and education by creating new learning opportunities, expanding access to knowledge, and facilitating greater innovation in educational technologies.

Conclusion. The development of the Internet and social networks has increased the time allocated by users for online communication and interaction. The prerequisites for society's choice in favor of online communication are associated with asynchrony, anonymity and wide access to information and instant contacts. The perception of digital content and Internet messages has different perceptions among network users, and therefore corresponding emotional reactions that influence the formation of the degree of trust between participants. Therefore, these features influence the quality and methods of establishing interpersonal communication online. Understanding these processes and factors can help develop strategies for users to

maintain their skills in establishing high-quality social connections online and improve the level of communication. Consequently, the study of network communication of young people in virtual space remains today a relevant topic in modern science and social research.

The SWOT analysis we conducted revealed both the strengths and opportunities, as well as the weaknesses and threats of virtual interaction, also allowed us to develop recommendations for the development of network interaction among students in the virtual space.

We understand that in the conducted research, there is some limitation in the sample of students (pedagogical specialties), so we propose to further expand the coverage and attract students from all specialties of universities in Kazakhstan. It should be noted that further research could also be aimed at studying the impact of digital technologies on the quality of education and training. Research in this area can lead to the development of innovative approaches to education, improving the quality of education and preparing young workers for life in the age of networked social development and digital economy.

In addition, it is possible to conduct research on the impact of network interaction on the health and well-being of children, adolescents, students and teachers. Research in this area can help develop recommendations for parents, teachers and public organizations on the effective use of digital technologies without harming the health, development and formation of the younger generation.

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