Network Culture and its Influence on Social Adaptation of Students

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Abstract – The article is devoted to the study of the influence of network culture on the social adaptation of students. In the research, the authors come to the conclusion that network culture is a special kind of culture inherent in society, and it has network logic of its basic structure. This allows the author using the network approach as a methodological basis for the study. The article concludes that network societies are a modern form of self-organization and require consideration of the socio-cultural characteristics of the network informational society and its educational sphere. The formation of a “network society” imposed on the modern student a new identity - the “Virtual Resident”, which requires him to form new competencies corresponding to social changes and the modern labor market.

Keywords – network culture, network society, education, adaptation, virtual resident, identity

I. INTRODUCTION

Widescale changes in the social structure of the country, political, economic and socio-cultural processes, and modernization of education put forward new requirements for the level of professional knowledge, skills, pedagogical culture, personal characteristics of future specialists. Such qualities as business initiative, innovative thinking, and communicative competence can evoke sympathy, make a favorable impression and positively influence others, as well as create an environment of psychological comfort and trust. Accordingly, it is considered that they are the main signs of professionalism. Social challenges for the development of a modern education system are reflected in the Law “About the Education in the Russian Federation”. Realization of the tasks set leads to the training of qualified staff capable of creative work, professional development and the desire for self-education. The problem of social adaptation of students as a future specialist now is a real-time relevant as never before. Personal-professional adaptation becomes a necessary attribute of social relations.

The present stage of development of the world community is characterized by numerous shifts and changes. For humanity, the onset of the 21st century is marked by two universal mankind factors. The first of these is globalization as “the process of universalization, the formation of structures, connections and relations that are unified for the entire planet Earth in various areas of society’s life” [1]. The second factor is informatization as “the process of mastering of information as a management and development resource by using informatics to increase the intellectual potential of society, of its members, which ensures the further progress of civilization” [2], or as M. Castells called this process "Informationalism" as a new way of development. Its specificity lies in the formation of a new source of creativity in modern civilization and exists in "technology of knowledge generation, information processing and symbolic communication" [3].

In the context of continuous globalization and informatization of society and education in particular, the problem of the student’s adaptation as a future specialist to these civilizational changes becomes urgent. The principal positions of personal development are: the ideological training of the future specialist, the formation of his civil position, patriotism; humanistically oriented education, which should ensure maximum realization of personal potential and contribute to the formation of a competent, qualified, competitive specialist; innovative personality, aimed at the perception and production of new ideas; predictive and open education.

The peculiarities of the modern stage of development are the existence of a “networked person” and a “networked society”. For a “networked person”, not vertical subordination is inherent, but horizontal coordination, which contributes to the mobility and efficiency of the development stage and real professional activity.

Today, the concept of “network”, “network society” is increasingly used, but they are still insufficiently studied, and many scientists place their hopes on the formation of a new global network society, which in the future may solve the problems of all mankind.
II. METHODS AND MATERIALS

Today, a new social structure in the form of a network society is characteristic of most of the planet and is based on a new economy. M. Castells defines a network as “a complex of interconnected nodes”.

The network is a translucent system, and, consequently, it is democratic and provides people with equal opportunities. As A. Bard and J. Zoderkvist note, the principle of transparency is manifested in the fact that all members of the Network have access to all necessary information and can make their own contribution at any time [4]. A. Marin and B. Wellman, which define a social network as “a series of socially relevant nodes connected by one or more types of relationships” [5], draw attention to another aspect of the definition of the network. The specificity of modernity leads to a wide distribution of social networks and the organization on their basis of most types of activities, and, therefore, raises the question about network culture, its features, the study of which is drawn by K.A. Berdnik [6]. A number of contemporary researchers address issues related to the substantiation and understanding of the essence of the network society and the possibilities of using the network approach in studying the education system. [7–9]. The essence of adaptation processes in the education system is considered both by the students and by the teachers [10], which allow the authors revealing the essence and possibilities of the influence of the network culture on the social adaptation of students.

III. RESULTS

Networks are very different. This may be a trading network, an intelligence, religious network of influence agents or informational, as well as the Internet, which is the embodiment of the universal network. Therefore, it is called World Wide Web, which is the network widespread throughout the world.

The network is considered as a system and can be of two types - communicational and social. As in any network, the main attribute of a communicational network is its multi-channel, high density of logistic ways to transfer information. A modern student is a person, an individual, which can exist in an unstable communicative environment, constantly creating adequate forms of self-realization.

Social networks are never only communication networks, the transferring of available information. A communication node here is a certain node, an actor, a social subject capable, like an electronic computer in computer networks, to process and accumulate, create new information, moreover, be the subject of free will and action. This may be the network structure of individuals (for example, students, teachers, and researchers), a network of branches, a network of organizations, or universities, etc.

The prospect of expanding of social networks is primarily related to the satisfaction of different human needs. To implement them, a person enters into various communities, which exist today mainly in the form of social networks. This is connected, among other things, with the learning of a person to fulfill his needs using virtual multimedia space, the Internet and its tools. The actual network community is formed on this basis. It happens, that today in society there are two main dialectically related development trends - one of them is in the unity, integrity of humanity, and the other in the creating of new opportunities for the all-round development of individuality, the individualization of a person.

A modern student is a mobile person, able to adapt to changes in society. The formation of a “network society” imposed on the modern student a new role - a “virtual resident”, since social changes and the competitiveness of the labor market require mobility, erudition and diversified development. Moreover, 50% of the time free from the classroom, with centralized and unhindered access to the Internet, the student is online. In the virtual world, many opportunities await him for development, self-realization, education, recreation, provided that the ever-growing network potential is used rationally. However besides the big advantages, the network society has its drawbacks - financial scammers, hackers, all sorts of disinformers, networks of temptations (the porn industry, computer games, etc.). Building a networked society is global in nature and connected with the increasing role of international instruments, as well as the development of global telecommunications, which provide tremendous opportunities for horizontal communication between individuals and groups, and it makes significant part of the world - the potential network structure.

It should be noted, that the problem of the realization of the student’s personal abilities focuses his attention on more fully realizing his potential in the given real life conditions. This problem directly leads to the problem of building a life strategy, educational trajectory, and professional development of an individual. The ongoing socio-economic, political, and cultural transformations in the country cause changes, both in the life of social groups and in the life of an individual. The need to form a new style of social behavior, meets the challenges of the modern stage of development of society, it leads to the actualization of the problems connected with the phenomenon of adaptation [11]. In the conditions of competitiveness of modern society, the question of training a future specialist, highly qualified person, capable of professional self-improvement, self-education and self-development becomes extremely relevant.

The concept of “educational environment” also reflects the interrelation of conditions, which ensure the formation of a personality. In this case, the student is supposed to be present in the educational environment, interaction of the environment with the subject (in our case, with students). When it comes to the educational environment, we mean the influence of the conditions of education on the student (just like the influence of the student on the conditions in which the educational process is carried out). This reverse influence, in essence, sets the direction for a certain type of educational environment by incorporating knowledge, which is significant to a person and by using comfortable learning technologies that are accepted by students. In the educational space, to a greater extent, there are not so much educational tasks, which are important for a listener, which are set by a listener himself, but rather seeing them from the side of the organizers of the pedagogical process — by teachers [12].
The educational environment and the educational influence on the personality of a student, as a future specialist in the relevant industry, is the key in the formation of both personal and professional identity and the possibility of his adaptation in the context of informational uncertainty.

The components of personal-professional adaptation are: motivation and values, indicators of which are: motivation for professional development and self-development, value attitude to professional self-realization, socially active life position; competence (productive cooperation with various social groups, the availability and replenishment of professional knowledge, creativity and initiative); activity (the desire for goal-setting in the activity, the ability to self-organization and self-control, the ability to reflect); communicative (culture of speech, communicative behavior, emotional stability).

The educational impact on a student in an educational environment should contribute to the development of his personal identity. J. Marcia speaks of four identity statuses: 1) the Identity diffusion (when a person does not understand the purpose and meaning of his life and can not build constructive relationships with other people), 2) the Foreclosure (when a personality is self-determined through introjects and stereotypes imposed from outside without appropriate psychological assimilation), 3) the Moratorium (when the person is keenly aware of who he is, what his true values are and how he should live) and 4) the Identity achievement (when a person is truly self-identified and acquires onto-psychological integrity, having clear ideas about the meanings and values of life) [13].

Personal identity is characterized by the following hierarchy of identity status: the Identity diffusion → the Foreclosure → the Moratorium → the Identity achievement. This hierarchy also reflects the ontogenetic development of identity within of being of a single person. First, a child has not got strong beliefs, values and goals, is in the status of a diffuse identity. Then, introjecting, without appropriate assimilation, certain attitudes and norms of behavior dictated by parents and other authorities, it proceeds to the status of the Foreclosure identity. After that, being already at a minimum in adolescence, a person begins to think about his own choice of life position, on what is his true being, and what is imposed from the side and does not correspond to his true desires, as well as on the discrepancy of his own ideas about one self and ideas about him around people. Thus, a person goes through a stage of identity crisis and falls into the status of the Moratorium. And finally, coping with the identity crisis and not retreating at the same time back to the Foreclosure identity, based on unconscious introjects, a person moves to the status of the Identity achievement, acquiring meaningful and assimilated beliefs, values and goals, as well as a holistic view of himself and his place in the world [14].

Social identity is characterized by a slightly different hierarchy of identity status: the Identity diffusion → the Moratorium → the Foreclosure → the Identity achievement. Here a crisis arises under the pressure of a diffuse state, when a person realizes his non-conformity with social life, the absence of his own definite and reliable social position. At the social level, an identity crisis is resolved not by assimilating attitudes and values and realizing one’s true needs, as happens in the case of the formation of personal identity, but by introjecting generally accepted patterns of behavior and culturally determined meanings of life. Only after that, when a person harmoniously fits himself into society, is determined in social being and finds his own image in relationships with people around him, he integrates social image with his true beliefs, values and goals into a single whole, which leads at a social level formation of the status of the Identity achievement. Thus, the processes of formation of personal and social identity proceed in parallel, diverging next to the status of the Identity diffusion and again merging into a single whole in the status of the Identity achievement.

One of the main tasks for researchers is the development of methods of achievement the highest status of identity, in which a person embraces a constructive way of forming personal integrity, acquires the purpose and meaning of life and harmonizes relations with other people. In accordance with the above model, a person in terms of developing personal and social identity, taking into account the fact, that the first starts to form in the ontogenetic a bit later than the second (the person initially realizes his individuality through belonging to certain social groups), it moves along the following spiral: the Identity diffusion → the Moratorium → the Foreclosure → the Moratorium → the Identity achievement. Since psychosocial development involves the passage of a person through certain age-related crises, such a spiral with a successful passage of a critical period is repeated as many times as a person experiences crisis in his life.

The identifications lead to the formation of the structures of self-consciousness of the individual, contributing to its further social adaptation. The analysis of the structure of a student’s personal and professional development indicates that the level of its formation largely determines the possibility of self-realization of the subsequent personality, and, consequently, its professional suitability. This allows concluding that personal development as an adaptation process is important, determining the professional success of the activity of a future specialist in mastering a profession. The formation of a modern specialist of a new generation is possible only if the educational process is organized on the basis of competence principles and the creation of conditions for self-actualization and self-determination of the student’s professional development trajectory.

Wider are the general competencies developed in the TUNING System as an educational tool in the context of the supranational concept of a Higher Education [15]:

1. The ability of an abstract thinking, analysis and synthesis.
2. The ability to apply knowledge and skills in practice.
3. Knowledge and understanding of the subject area of the professional development.
4. The ability to communicate in their native language both verbally and in writing.
5. The ability to communicate in a second language.
6. Skills of using information and communication technologies.
7. The ability to conduct research at an appropriate level.
8. The ability to learn and be modernly taught.
9. The ability to search, to process and analyze information from different sources.
10. The ability to be critical and self-critical.
11. The ability to adapt and to act in a new situation.
12. The ability to generate new ideas (creativity).
13. The ability to detect, formulate and solve problems.
14. The ability to make justified decisions.

Considering the personal and professional development of a student in accordance with the selected competencies, it is possible to state that in the current conditions, the formation of these competencies of a future competitive specialist is impossible without using of network practices, information and communication technologies and also without the Internet.

The Internet has long ceased to be only a technical tool to meet the various information and communication needs of an individual, but has acquired the shape of a large-scale social phenomenon. Today, the Internet as a fundamentally new area of social interaction, in which not only individual spheres of human activity are transferred, but also new ones, entails changes in the socio-cultural field, which in turn affects the dynamics of social processes. The global computer network, gradually integrating into the public life, is becoming one of the main structures of society. As a result, sociocultural processes begin to obey the network logic of development and functioning. The complex hierarchy of group relations is changing, and, consequently, also the ratio of the collective and the individual.

The problem of finding common conceptual principles in the study of the network structures of society, the need to analyze the Internet on the basis of the sociocultural approach actualizes the need to study the phenomenon of network culture. The term “network culture” today is considered to be unstable and belongs to the category of concepts, the appearance of which is due to the rapid development of the Internet technologies and fast ingoing of network logic into social processes.

In general, a network culture can be defined as an information and communication system that binds together all network elements, through shared intangible (symbolic) forms of culture (values, norms, rules, attitudes, ideas, language, etc.) and thus provides network integrity and self-reproducibility. The distinctive features of this type of culture are the predominance of electronic-mediated practices of communicative exchange, and, as a result, the absence of space-time restrictions, independence from the material forms of the embodiment of thought, image, ideas, that can freely spread in electronic space.

Famous scientist K.A. Berdnik identifies the following theoretical foundations in the study of the phenomenon of network culture:

1. a) Consideration of network culture only in the context of the new Internet communication environment. However, it should be noted that the global network environment is very dynamic, and there prevail individualistic tendencies. This space of loners and their union in any community occurs on the basis of their internal motives and needs. Therefore, speaking of the network culture of the Internet, it is necessary to take into account its fragmentation and mosaic. It would be more correct to talk about the culture of various network communities united by common interests. They have their own language, internal hierarchy, a set of well-established ideas that constitute the ideological position of members of the subculture, etc. allow researchers talking about the existence of a network culture of Internet communities.

b) Network culture is considered as a special kind of culture inherent to society, which has network logic of its basic structure. The culture of the network society is fragmented, has the form of an interactive network, where the main means of communication is hypertext, which leads to the individualization of cultural meanings, the problem of the production of values and the formation of a new way to define identity. Whereas, in a society with a traditional hierarchical structure, culture (according to the concept of nuclear [16]) includes the following elements: the cultural core, which has minimal variability, therefore concentrates the system of values, norms, standards, etc.; protective belt of the cultural core, which performs the function of a filtering mechanism, that passes directive information, both from the core of the culture and to it.

2. a) Network culture is determined and reflected of the general culture of society. It is a computer simulation of the real life of society, which is a manifestation of the principle of “self-similarity” of the network structures discussed above.

b) Network culture is presented as a new type of socio-cultural life in the information and communication space of the Internet, which changes the usual cultural tradition and causes changes in the whole social life.

3. a) The determination of a network culture as a high level of development of user skills, as well as the ability to effectively use modern information and communication technologies in information processing, both from the Internet and posting on the Web.

b) Network culture is determined through adherence of certain behavioral norms and rules when using various information resources, as well as moral requirements in the process of network communications. The above mentioned approaches are the result of a different understanding of the essence of cultural phenomena and reflect certain aspects and manifestations of network culture. To overcome the weakness of the methodological base and conceptual disunity in the analysis of network phenomena, we consider it necessary to consider the phenomenon of network culture through the prism of a sociological approach.

Considering the network culture as a special kind of culture inherent to the society, which has the network logic of its basic structure, it can be stated, that in the process of social adaptation it is able to form the competencies, which are necessary for the
student in professional activities, and also highlights a special kind of it - network competence, which requires further research.

The problem of social networks in the educational environment is becoming increasingly important among the scientists of the current era. This is due to the constant changes and innovations in all spheres of society. Computerization and informatization are increasingly replacing the usual production process. And that is why social networks are the answer to all the demands, which society puts in front of modern man, and it allows constantly updating of personal knowledge.

Many researchers are more focused on individual social networks and its general options for network participants, without highlighting the possibilities of using them among educators, academics, students, and individuals aimed at self-development. The authors consider this problem in detail.

The concept of “social networks” was introduced into scientific use by the English sociologist J. Barnes in 1954. By the essence of this concept, the author understood the complex interweaving of relationships. In 1959, this concept fell under the consideration of Hungarian mathematicians, who developed the theory of social networks, and first proposed the concept of clustering coefficient, that is, the degree of closeness between heterogeneous groups (when a person expands the network of his connections at the expense of individuals whom he personally does not know, but his friends know). In the scientific revolution, the term “social networks” means any social structure and diversity of social interrelations, but in modern discourse they are meant, first of all, on-line networks that are created in the virtual space and provide for remote communication and establishment relationships between the participants of the so-called network structure [17]. More purposefully, is to understand by the concept of a social network a social structure, which is formed by individuals or organizations. It reflects the various connections between them through social relationships, the purpose of which is to transfer information in demand using modern information technologies in the virtual space, which is becoming increasingly important in the information society.

Extrapolating the possibilities of social networks to the educational sphere, it should be noted that previously developed scientific sources indicate the presence of a number of advantages of using the latter for all aspects of the social structure. By making a conditional division of the network participants into two groups: the subjects who teach and those who study, we have identified several identities, basic incarnations, which participate in social networks. The representatives of the first group are teachers, educators and scientists; another group consists of students, learners and trainees. This should also include those who are engaged in self-education, self-development. In this regard, it is necessary to clarify the essential role of the virtual space, in particular, social networks in the life and work of teachers, scholars, pupils, students, trainees, and those striving for continuous development.

Going into the limitless spaces of virtual world contributed to the identification of those social networks, which are relevant among students and are inherent to a higher degree of higher education.

In the open spaces of the Network, there are countless communities that provide the opportunity for self-learning. In a general interpretation, networks, which have the goal of satisfying self-educators, are divided into general, specialized and business networks.

1. There is a very important advantage of social networks: the opportunity for a modern student to learn a foreign language by registering on specialized sites (www.livemocha.com www.soziety.com). A user learns a foreign language by interacting with a native speaker, in response teaching him his native language.

2. In addition to networks of general subjects and specialized, there are so-called business networks, which are more appropriate to the level of organization, contributing to the professional development and career development of an individual. The main purpose of such networks is the search for labor by employers and, accordingly, the search for work by people. In general, due to the mentioned properties, social networks can be considered as a tool, that ensures the effectiveness of the educational process. To sum up, the authors specify what opportunities social networks offer to various participants in the educational or scientific process.

For educators:

1. In order to personal development: the process of communication with colleagues; learning foreign languages; sharing ideas in the creation of scientific and educational projects;

2. For the purposes of the educational process: communication with students in remote mode (send assignments, make comments, etc.); the possibility of participation within the social network of a group of scientific or educational interests; sharing views, the opportunity to share with students the necessary materials (lectures, workshops, presentations, etc.).

3. The ability to get an expert advice on legislation, health, culture, economics, etc.; possibility of communication with friends, according to personal interests.

As it can be seen the possibilities of social networks can be used to solve a variety of tasks: in social networks, it is possible to effectively organize the collective work of a divided study group, long-term project activities, international exchanges, including scientific and educational ones; receive the possibility of continuous education and self-education, network work of people located in different countries, on different continents of the earth. This all speaks of great opportunities, since the teacher can reasonably plan his affairs, competently organize his work and achieve an effective result. Social networks allow optimizing the costs of one’s time and achieve the effect not only for one self, but also for students, to achieve the common goal to which the learning process is directed. Exactly the social networks, which are currently actively used, can be considered as a special mechanism, where students and teachers can find common ground of interests of the educational process and achieve the maximum effect for both parties. For a teacher, this
is the tool for the optimization of time, and for students it is achieving high qualitative and quantitative indicators.

Social network is a social structure consisting of a group of nodes, which are social objects (people), and connections between them (communication in social networks). Social networks are never limited only to communication networks, to the movement of available information. The communication node is a social subject capable of processing and accumulating, creating new information; moreover, being the subject of free will and action.

The social networks include sites, which provide the opportunity to find business contacts, friends, classmates, colleagues and etc. Now there is a pronounced segmentation of user groups belonging to one or another social network. In fact, every major product in this market has its own specifics and attracts a different contingent. There a lot of new social associations, formed due to network connections.

The method of using network technologies is the current direction of the theory of learning, which is based on the following provisions:

- learning is determined by the tools and objects, that the student uses. Actions on objects require communication. This communication about actions and objects is paramount for learning;
- learning is determined by the environment in which new knowledge is learned. It is vital for a person not only to perceive and consume information, but to act actively, getting a result as a reward for his actions;
- training takes place in the knowledge-sharing community, where beginners gradually become experts, their practical participation in solving problems within a specific area of knowledge;
- collectivism is based on theories of the network, self-organizing systems. New knowledge is constantly being acquired and it is vital to understand the difference between important and unimportant knowledge.

IV. CONCLUSION

Network communities are a form of self-organization of civil society, it is the phenomenon of network culture, and facilitate social adaptation, communication and integration between representatives of various social groups. As a result of the cooperation of users of social services, a huge amount of educational materials are available in the virtual pedagogical network, available for all users. The integration of education materials in social networks can significantly increase students’ interest in learning activities, increasing their competence and competitiveness as future specialists, which will contribute to their adaptation, mobility and efficiency in future professional activities.

Network culture is considered not as a set of norms of behavior in global networks, but as a phenomenon of the modern network society, which is becoming increasingly relevant in the context of globalization and informatization in the education system. Network culture is also positioned as a special kind of culture inherent to society, which has network logic of its basic structure. The culture of the network society is fragmented, has the form of an interactive network, where the main means of communication is hypertext, which leads to the individualization of cultural meanings, the problem of the production of values and the formation of a new way to define identity. Whereas in a society with a traditional hierarchical structure, a culture includes the following elements: the cultural core with minimal variability and therefore concentrates the system of values, norms, standards, etc; the protective belt of the cultural core, which acts as a filtering mechanism, passes directive information both from the core of the culture and into it; and a new kind of sociocultural life in the information and communication space of the Internet, which changes the usual cultural tradition and causes changes in all social life.

The analysis of the structure of a student’s personal and professional development indicates that the level of its formation largely determines the possibility of self-realization of a person, and, consequently, his professional suitability, the ability to adapt to new socio-cultural conditions. This allows concluding that personal development is an important process, which determines the professional success of a future specialist. A modern student is a person, an individual, who can exist in an unstable communicative environment, constantly creating adequate forms of self-realization; it is a mobile person, able to adapt to changes in society. The formation of a “network society” imposed on the modern student a new role - the “Virtual Resident”, since social changes and the competitiveness of the labor market require him to be mobile, smart and all-round man. The formation of a modern specialist of a new generation is possible only if the educational process is organized on the basis of competence principles and the creation of conditions for self-actualization and self-determination of the student’s professional development trajectory. In our opinion, the further development of network culture is possible by creating various network educational communities of universities in order to improve the quality of education and to train students to become competitive and highly qualified specialists, adapted to new socio-cultural conditions.

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