

# Electronic Social Networks as Supporting Means of Educational Process in Higher Education Institutions

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**Abstract.** Given research describes experience of electronic social networks use in educational practices. It was determined that electronic social networks can be a powerful tool for support of educational process in higher education institutions, namely to support study of different disciplines. There are main advantages of electronic social networks use for education: universal accessibility and free of charge; possibility of instant messaging and multimedia data; user-friendly intuitive interface; ability to search data and information; availability of event scheduling, invitations, reminder settings; support for synchronous and asynchronous communication between network members; access from different devices. It is emphasized that one of the main advantages of electronic social networks is receipt of quick feedback and convenience of their tools and services. Nowadays, it is important to include network educational interaction in existing models of study organization. It is advisable to use electronic social networks to manage educational process in higher education institution. Efficiency of electronic social networks use depends on intensity and need for their use in educational system management for implementation of organizational, educational, psychological and pedagogical functions and ensuring universal communication with subjects of educational process. Expediency of electronic social networks use to carry out research work at university is described. Electronic social networks are convenient tool to conduct surveys and questionnaires, to create thematic groups for specific issue discussion. Also it is possible to interact with researchers from different countries, share experiences and disseminate research findings, invite those who wish to participate in various scientific activities using these networks.

**Keywords:** electronic social networks, higher education institutions, university management, research work.

# **1 Introduction**

## **1.1 The problem statement**

The research [4] emphasizes that nowadays, governments, police and security organizations of foreign countries pay more attention for constant monitoring of social networks because mood of society in social networks usually reflects emergence of social conflicts. Also, social networks are important tool for marketers to track emergence and spread of certain trends in social networks.

Modern period of society is characterized by digitalization of life spheres: from politics and management to education and science. Universal availability and dissemination of information and communication technologies (ICTs) as an integral part of information society facilitates renewal of ways to work them, simplifies processes of knowledge acquisition, exchange of experience and interaction between people. The research [28] emphasizes that present education conception is built under influence of requirements of information society. It is significantly different from previous approaches to learning: from instrument of standardized mass education it is gradually transformed into individualized way to obtain necessary knowledge and information. Changing of educational communication nature from direct to indirect (using ICT and information and communication networks) contributes to this process.

According to Ukrainian researchers, electronic social networks are relatively recent phenomenon that got worldwide popularity in the last few years. Therefore, they are experiencing not only stage of peak popularity, but also stage of rapid development. Main factors of networks attractiveness for children and young people are popularity, free registration, choice of site language, free services, chat, ability to post photos, videos, choose material of interest and more.

Currently network communication is considered as complex process of interactions that are widespread in electronic social networks. Network communities, features and opportunities that need to be explored are appeared during interaction with educational process participants in the global network. Network community (as a collective subject of social information activities in information and communication networks) is defined as “a group of people interacting on the basis of Internet communications, have common ties that are capable to manifest common forms of activity and self-reflection” [24].

Pedagogically grounded implementation and use of ICT is topical. It allows to integrate different forms of information presentation, to combine ways of communication and interaction. Such opportunities are provided by electronic social networks and social services.

## **1.2 Literature review**

The use of ICT for education is analyzed in [13, 15, 14, 21, 27]. After analysis of scientific literature and Internet sources we defined publications on use of electronic social networks for various purposes: for sociology [4, 18]; for management [6]; for research [4, 12, 16, 23]; for introduction of electronic social networks in the

educational process of universities [1, 3, 4, 7, 8, 12, 17, 19, 24, 25, 26, 30, 31] and schools [5, 10, 11, 20, 22, 28, 29].

We believe that it is important to analyze features of electronic social networks use to support educational process in higher education institutions.

### **1.3 The aim of the research**

Publication aim – is to analyze features of electronic social networks use to support educational process in higher education institutions.

## **2 Research results**

### **2.1 Experience of electronic social networks use in educational practices**

A new field of sociological research by social networking data and other social services appeared. Such research was conducted by foreign scientists. They found that person is happier the longer he travels from home. It is the latest discovery of new discipline that explores people's moods and thoughts through social networks. It is an invaluable source of material for such analysis. Comments in social networks are more honest than answers in questionnaires (traditional tool in sociology for researching people's thoughts). Also, social networking is a good tool for sociologists because it is a database with automatic content search. Posts are often accompanied by useful information such as a user profile or an indication of their location when creating a record [4].

New approach to qualification of scientific results emerged. It requires development of a special methodology for their production. Currently, some segments of information space, such as social networks or advertising of scientific products, are not yet explored in Ukrainian science [18].

“Network social services” are distinguished in the Internet. Main feature of these services is “possibility of group interaction of users in the network” with a change in role of user - from passive to active. Any user is able to: view information posted on service regardless of location; its storage both in closed mode (accessible only to the author) and open (accessible to all users); systematization of data and organization of search by keywords; grouping data into thematic groups; discussion of available materials; analysis and evaluation of information quality placed on the service, etc. This feature of online social services determines their benefits over global networking sites, which are essentially just data warehouses. Social networking services include: social search engines and popular classifiers, social networks, blogs, Wiki, social media repositories, personal referral services, geoinformation services [29].

Significant increase in number of electronic social networks and global participation of people in their use is form of self-expression and development of network communication, which is basis of information-oriented society. Use of electronic social networks in education can have a synergistic effect, in particular by

combining use of several mutually agreed pedagogical strategies. Also, electronic social networks use in education is associated with solution of number of psychological, pedagogical, organizational problems [20].

Electronic social networks are popular internet technology that allows users to communicate and interact with each another. Electronic social networks attracted attention of scientists and are used as a teaching tool. However, there is currently insufficient research to find motivation and barriers to use electronic social networks in higher education institutions. This research examined why higher education lecturers use or do not use electronic social networks for educational purposes. Goals of social networks use by lecturers were also analyzed. Data were collected from 658 lecturers from eight different Turkish state universities. Obtained results were analyzed and following conclusions were made: almost half of lecturers who had electronic social networks account reported that they used electronic social networks for educational purposes. The biggest motivating factor for online social networks use is that these networks are means to provide quick and efficient communication with colleagues and students. However, a major factor that hindered electronic social networks use by lecturers was concern that their privacy can be disclosed [1].

Popularity of electronic social networks motivated some university professors to use them for educational activities in Online Social Networking. These technologies have huge potential to improve learning practices. There were several researches evaluating how social technologies can be used effectively and what impacts they have on learning process and students, especially regarding their value in enhancing student-lecturer or student-student interaction. Nine focus groups were attracted to the research, with 46 students studying at Malaysian and Australian universities. The analysis showed that students found number of advantages in electronic social networks use to interact with themselves and with their teachers. Results show that students and lecturers were positive about electronic social networks use to enhance interaction with themselves and with their lecturers for better learning outcomes [8].

Currently, number of researches on potential benefits of Facebook groups implementation in education industry increases. This research identified impact of official Facebook group on learning outcomes. Second-year students in experimental group had access to official Facebook group, while others did not. Obtained results showed that students who used Facebook group during course had greater social connection, better relationships with lecturers and had less stress associated with course compared with students who did not have Facebook group. In addition, having an official Facebook group indirectly increased course satisfaction through social connectivity. These findings reinforced idea that Facebook groups can be useful tool to promote positive learning outcomes for higher education students [31].

The paper presents results of research on electronic social networks use among future bachelors at the University of Western Australia. Main focus of redesign was to create Facebook group to encourage active student engagement. The research looked at students' reactions to need to join group on Facebook and further communicate and complete coursework to further improve their learning organization. Also access of students to information and resources, support and motivation, participation and collaboration, assessment and feedback were examined. Some aspects of the students'

experience of using Facebook services was analyzed. Analysis of the research results showed that students were satisfied with their learning experiences with Facebook. They could write about their questions and get advice and answers from other students and lecturers. So they felt encouraged to learn through their collaboration and participation on Facebook [3].

The research [7] analyzed impact of Internet and Facebook use on students distraction from learning process. Facebook became an important tool for adults to maintain their social presence and enhance social connections. However, requirements for socialization and processing of heterogeneous information on Facebook can have detrimental effect on students' academic performance. The research found that students who used Facebook or Internet very often for daytime entertainment tended to be more distracted and had a lower grade point average. This study informed students and faculty about importance of regulating behavior regarding frequency of Internet and Facebook use.

Twitter is a popular social network for microblogging, facilitating communication by sending short messages up to 140 characters. It allows people to keep in touch but value of Twitter in the context of education is less understood. The paper analyzed empirical research on use of Twitter in learning over a 10-year period from 2006 to 2015 to determine its usefulness to students. About 51 publications were reviewed and analyzed in four main categories: research profile, specific ways to use Twitter in learning, impact on interaction, and impact on student learning outcomes. The results showed that Twitter was most commonly used for communication and evaluation. Currently, the most advantageous use of Twitter is use of push technology, for example, a lecturer sends important information about courses, homework and test dates to students. Also it can be used as a platform for engaging with interaction. Five guidelines were proposed to increase educational value of Twitter [30].

Instagram was established in 2010. It quickly grew into one of the largest social networks in the world with over 700 million users. Instagram can be also used for professional development and training. Use of Instagram for medical education is lagging behind Facebook and Twitter, as many educators do not yet recognize potential of this social network. The publication [25] describes unique features of Instagram which are not available on Facebook or Twitter. The features facilitate use of Instagram to train future physicians in radiology [25].

Social services and social networks became popular in academia, engaging lecturers and interns allowing them to directly discuss problematic professional situations with experts. Social media also expands scope of medical conferences, academic discussion and review of trials of new drugs or new medical research. Professional societies used various social media platforms (Twitter, Facebook) to improve lifelong learning through online discussions in closed groups. However, these tools application to specific training programs can be challenging. Many trainees and lecturers may not be actively involved in social networks, and healthcare professionals may have concerns about sharing case studies while maintaining patient confidentiality. WhatsApp allowed us to quickly share and discuss educational material through group chat, based on the case study method. Participants publish interesting cases, often with images (electrocardiograms, echocardiograms, CT

images, and magnetic resonance imaging) and the group participates in discussions regarding diagnosis and follow-up plans. All participants are required to remove sensitive medical information before posting cases. The purpose of group chat is to share case-specific learning situations and stimulate interesting discussions. WhatsApp was chosen as an interactive platform because it allowed instant messaging, unlimited number of participants, end-to-end encryption and ability to evaluate participation and engagement. Group chat provides administrative rights, so lecturers and students can maintain confidentiality, remove unwanted patient information and support thematic discussions among students for educational purposes [17].

The publication [19] describes a large-scale study of visibility in ResearchGate by US and European institutions of higher education. Institutional visibility at ResearchGate is strongly linked to the number of academic staff. Presence of publications in Web of Science is sufficient to have an institutional profile in ResearchGate. For higher education institutions on the Internet, ResearchGate is more relevant to number of publications than to impact of citation. ResearchGate score should not be used to compare research quality institutions. ResearchGate became the most popular website among academic social networks from point of view of regular users. Not all institutions joined this site, so, ratings to scientists and institutions are controversial. Also, presence assessment of higher education institutions from Europe and the USA in ResearchGate in 2017 reflects impact and quantitative scores of these institutions in ResearchGate. Most of 2258 European and 4,355 U.S. universities included in sample had an institutional profile in ResearchGate. For institutions with doctoral programs, ResearchGate's presence was closely linked to number of Web of Science publications. Some research findings: Institutional findings at ResearchGate reflect more research than visualization; this figure correlates strongly with number of Web of Science publications. Therefore, value of ResearchGate scores for institutional comparisons is rather limited [19].

The publication [6] describes managing features of the educational social system object. It specifies management components of educational social systems. Factors that influence functioning of the educational social system are identified. Use of corporate social network as management object is substantiated. Purpose and peculiarities of corporate social networks use are revealed. Classification is made, their potential for use in the management of the educational social system is determined [6].

The author [28] examines lecturer activity in informational and educational environment of high school students using social network services focused on meeting of educational needs of students. It is established that lecturer activity in such environment involves going beyond traditional didactics and should be directed to implementation of new models of activity, new formats of information and communication processes, organization of various educational interactions. Designing lecturer activity is associated with a change in his role, from “translator” to “curator”. Features of social services of Internet from the point of view of development of information and educational environment as a medium of social interaction of students and emergence of new ways of their educational and cognitive activity are

investigated. Groups of social networking services and organizational forms of training are identified where use of relevant services is pedagogically appropriate.

The publication [10] analyzed scientific publications of Ukrainian and foreign scientists on use of electronic social networks in educational process of schools. Varieties of electronic social networks are described. It should be used in work with students, in particular, which have functional limitations. It is determined that electronic social networks use in educational process of education will partially solve problems of students with functional limitations, in particular, in their learning (homework, engaging in school activities, communication with peers and teachers, etc.).

The article [29] stated that combination of ICT with pedagogical lecturing technologies contributes to formation and development of information and educational environment for students' learning. Emergence and development of network technology services allows expanding scope of traditional educational process. Educational practice of network technology tools use is at formation stage. Features of social services of Internet from the point of view of development of information and educational environment as a medium of social interaction of students and the emergence of new ways of their educational and cognitive activity are investigated. Groups of online social services and organizational forms of learning are identified where use of appropriate services is pedagogically appropriate.

Research "Formation of information and educational environment for teaching high school students through technology electronic social networks" (2015-2017) was conducted at the Institute of Information Technologies and Learning Tools of the NAES of Ukraine. Its performers researched electronic social networks as: means of joint educational activity; developing means of social contacts and extending social interaction of all participants in educational process; means that contribute to accessibility increasing of resources through information and communication networks in educational process. It is determined that electronic social networks influence following: formation of interconnected structured educational content; development of dialogical character of educational process; implementation of problem-situational interactive personality-oriented methods of education and training; formation of different types of social behavior; enhancing students' motivation for cognitive activity; formation of information and communication competence, communicative competence, teamwork skills, cooperation in the network [22].

The publication [11] describes issues on electronic social networks use for development of information culture of children and youth with functional limitations. Basic directions expedient to use electronic social networks in work with children and young people with functional limitations are identified: in order to support educational process; in extracurricular and extracurricular activities, for non-formal education; for information education and self-education of children and young people. Person oriented and creative approach of teachers to teaching of children and young people with functional disabilities through use of didactic potential of electronic social networks will facilitate acquisition of communication and group interaction skills, ability to search, analyze and critically evaluate information, develop

information culture and digital competence. Application of electronic social networks is expedient for development of information culture of children and young people with functional limitations. It can be used in educational, extracurricular and extracurricular activities and during performing practical tasks, such as: search of information in the Internet (both individual and group performance is possible); preparation of speeches using presentation tools, their placement (download) in electronic social networks; use of educational materials posted by the teacher in electronic social networks (synopsis, training control works, other electronic educational resources); preparation of presentations using multimedia (audio, video, animations, etc.), their placement on networks; creation of theme lists and their placement on the network (list of literary works by specific topic; theme audio and video collections, etc.); organization of thematic groups (for example, for joint implementation of a training project); portfolio creation of own works (completed creative tasks, educational projects, multimedia presentations, etc.) by means of electronic social networks; preparation and conducting of surveys on outstanding topics; creation of multimedia greeting cards (for personal, professional and other holidays, as well as wishes for a speedy recovery of students who are ill, etc.) and their mailing; mutual evaluation of the completed works by students, discussing them in the form of comments [11].

## **2.2 Peculiarities of electronic social networks use in higher education institution**

An important component of modern educational paradigm is idea of continuous education, lifelong learning. It goes beyond formal education, involves combination of different forms and types of learning. An indispensable prerequisite is acquisition of ICT skills, development of digital competence, and more [11].

In addition to usual entertainment, electronic social networks have considerable didactic potential, opening great opportunities to increase accessibility and quality of education, interest and motivation of students, ensuring equal access to information and educational services, full and fruitful social integration. Electronic social networks use provides synchronous and asynchronous communication between subjects of educational process. It promotes self-esteem and gain social experience [11].

Social networks, blogs, online communities are environment that offers new information and communication channels, special communication technologies, activities, new ways of interaction. Notice the fact that result of activity in social network or blog is obligatory a “product”: message (post), comment, vote, decision “to join group or not”, “add to friends or not”, etc. It is also important that any activity is exclusively voluntary, motivated, both at the stage of choosing a social network and at the stages of daily actions of user [29].

We support warning about electronic social networks use expressed by Ukrainian scientists [9] that social networks allow formation of general competences only if educational process is carried out by socially-professional lecturers, teachers who have full ownership use and communication skills in electronic social networks.



Main groups of educational functions of network services are: social, psychological, informational. Group of social functions includes: functions of social interaction with communicative (information sharing), interactive (interaction) and perceptual (understanding/evaluation) components. Group of psychological includes: motivational, orientation, instrumental and control and evaluation components. Information functions provide creation, accumulation, transformation of information, exchange, determination of value of information and its selection [29].

In scientific sources, social networks are classified into following categories: type of network (personal and business communication, video, audio, photos, geolocation, purchasing, blogging, news, question-answer, bookmarks, virtual worlds, thematic, dating); openness (open, closed, mixed); geographical coverage (world, country, territorial unit, region, international); level of development (web 1.0, web 3.0, etc.). Corporate specialized networks include Yammer ([www.yammer.com](http://www.yammer.com)) [6].

Depending on the destination electronic social networks can be general-purpose (My World, Facebook, MySpace, YouTube); educational (LiveLib, RusEdu, Wikipedia.org); professionally oriented (Atlaskit, LinkedIn, MoiKrug.ru, Profeo); religious (Faithbook, MyChurch) and more. Therefore, it is advisable to choose network in accordance with tasks set [11].

Analysis of scientific researches [5, 20, 28, 29] and own experience [10, 11] defined advantages of electronic social networks introduction in educational process: universal accessibility and free of charge; user-friendly intuitive interface; students' interest and motivation to use them; possibility of instant messaging and multimedia data; ability to search data and information; availability of event scheduling, invitations, reminder settings; access from different devices (personal computer, tablet, smartphone, etc.) support for synchronous and asynchronous communication between network members.

Electronic social networks use makes possible to: organize group work, for example, in form of research projects which promotes formation of collective collaboration skills; to set educational tasks to students that contribute to formation of ability to analyze and summarize information, to choose ways to achieve it; to develop ability of organizational and managerial activity, ability to make decisions in unusual situations and willingness to be responsible for them; to stimulate accumulation of practical experience of participation in discussions, presentation of materials of their researches by means of Internet services [28].

Electronic social networks provide opportunities for interest grouping, blogging, creating own content, sharing thoughts and comments, and more. Social networks use ensures development of communicative and digital competence of participants, promotes self-esteem and social experience.

Online social networks can be used by lecturers, scholars or parents of students to understand hobbies, preferences, communication, inner world of student by studying data posted on personal page. Electronic social networks are powerful means of disseminating educational material and developing communication skills, allowing them to overcome psychological barriers (such as shyness) that are characteristic of young people with functional disabilities [11].

Formation of network and information ethics, finding a style of communication between participants of educational process, ability to engage in dialogue in network, ethical standards of behavior is important feature. They are educational platforms that promote socialization of young people, and also help to shape their perceptions of single information space. It gradually becomes an integral part of their ability to use the world's sources of information to satisfy their own interests [2].

Therefore, we believe that electronic social networks can be ancillary means of supporting educational process in higher education institutions in the following areas:

1. Supporting of different disciplines study.
2. Management of educational process in institution of higher education.
3. Application of electronic social networks to perform research work at university.
4. Formation of image of higher education institution in Internet environment.

Let's take a closer look at two of outlined areas for electronic social networks use in higher education.

*Educational process management in institution of higher education by use of electronic social networks*

Management of social system can be defined as deliberate purposeful activity of pedagogical community which aims to streamline and develop educational processes. So, management of social system is a process designed to bring one or another educational system or one component of it into conformity with needs, laws of functioning and development. In today's context, an educational institution should be seen as a "social system". It is open organization whose main prerequisites are not in but outside it. It means that success depends on how much it takes into account changes in environment. Main purpose of educational organizations is to provide development, education and training of individuals. Any social system consists of main components: subjects; objects; processes and ideas [6].

Today, role of social networks in management of social systems became an integral part of both human environment and education system. Society brings new demands in order to manage pedagogical social system: to form strategic directions of development, to improve quality, to cooperate effectively, to find common solutions, to resolve conflicts can be effective if it is additionally involved in safe, protected corporate social networks [6].

Scientists in the work [6] point out that cloud services are significant advantage in choice of educational institutions for new approaches to the management of the social system. Main objects of cloud services include: e-mail (Outlook); scheduling system (calendars); e-Notebook (OneNote); structured repository of teaching materials (OneDrive); Office software; Website Designer (SharePoint); video conferencing system (Lync); user management system (students, lecturers, parents); corporate social network (Yammer). Management of educational social system by shared access to corporate social network becomes actual. Yammer is a corporate social network for participants in cloud-oriented environment that enables educational process to work together. It is designed to facilitate knowledge sharing within institution and to enhance teamwork. Subjects with verified accounts can join this network [6].

The main opportunities for managing of social education system through the Yammer network are: discussion, polls, organizing activities, forming groups for

collaboration, using basic external networks, using classic and mobile relationships, managing group content, storing and sharing files, instant messaging, spreading ads on web, searching for keywords, using incentives (motivation, ranking). The network creates conditions: corporate level security, privacy of groups, user management, single sign-on [6].

Advantages of successful use of social networks in management of the social system are: certainty of operation rules (observance of network etiquette rules; use of linguistic norms; prevention of plagiarism; observance of the conduct code; clear organization of management process (publishing plans, conducting surveys, posting announcements, clarifying educational tasks) and ongoing management influence. Another important advantage of Yammer network use is its communicative effect, which is an important component of management [6].

*Application of electronic social networks for implementation research work at the university*

Electronic social networks have different interface and purpose, their audience, mechanisms of work and certain rules. Scholars identify following types of networks: professional, universal, thematic (academic or research). Educational social networks bring students/pupils together and are focused on helping to implement academic research projects or engaging with teachers/lecturers [12].

The research [23] proposed an approach to create and integrate data of user profiles in scientific social networks and open registers. Application of this approach maximizes information presentation on scientific publications and research work of scientific and pedagogical staff for the world scientific community. In this way, researcher has considerable opportunities to expand cooperation with domestic and foreign organizations or scientists.

Modern period of social development is characterized by digitization of all spheres of life from politics and management to education and science. Universal availability and dissemination of ICT as an integral part of the information society contributes to updating ways of working with data, streamlines processes of obtaining information from sharing experiences and interacting with people. In context of education and science reforming in Ukraine it is important to increase efficiency of research and to integrate their main results into educational practice. Global scientific community is raising demands on quality and productivity of research, both individually and collectively. It is evidenced by demand for publications quotations and importance of broad public involvement in discussing of obtained scientific results. Therefore, let's consider electronic social networks as a means of supporting research activities.

During conduction of scientific research in psycho-pedagogical direction it is important to perform observations, interviewing and testing. Nowadays, electronic social networks can be used as means of conducting certain aspects of research. Scientists proved that electronic social networks have significant didactic potential, because they increased level of motivation and interest of students/pupils. Participants can increase their self-esteem and gain social experience [12].

Let's describe some examples [12] of electronic social networks use to perform research work:

1) It is necessary to select certain electronic social network. Then you should create a private page, post information about yourself, and make settings. You can have personal pages on different social networks - it all depends on your goal: communication with other scientists or finding scientific contacts, activities and more. For example, apart from Facebook, there are electronic social networks created specifically for the scientific community, namely Researchgate, Ukrainian Scientists Worldwide, and others.

2) It is important to search for scientific material and to keep track of news about scientific events. Every day in the world there are many scientific mass events: conferences, seminars, round tables, workshops, trainings and more. New books and magazines are also published on topics related to your research. Researchers try to disseminate their scientific findings to colleagues by linking to them or announcing where they can be viewed or downloaded. In social science networks you should subscribe to your favorite person or topic page, and new updates will appear in your news. Try to browse the news daily and you will know and navigate the scientific issues of the problem if you make research.

3) You need to support scientific contacts, presentations of themselves, and organization of thematic groups or pages. Information posted on the page about yourself should be comprehensive. You should mention about awards, diplomas and certificates. Therefore, academic social networking is the best place to make your first professional contacts. You can write a message to the author whose publication you are interested in and ask additional questions. Electronic social networks can be good pedagogical tool allowing you to use different methods: group work, discussion, solving and analyzing situational problems, getting counseling and more. Also, electronic social networks use can have significant informational impact, which will increase awareness of changing worldview of these networks users. You can create thematic group, invite participants to it, and research together specific issue, share experiences, present research findings, and more.

4) Conducting of surveys and reviews. Networking functionality allows you to create closed and open groups that can only include administrator-defined members. So, it is possible to place necessary material information in closed group, namely; texts, videos, images, links, polls, questionnaires, and more. In addition, there is opportunity to conduct surveys, independently evaluate learning outcomes of all group users and to discuss, share experiences and simply communicate with like-minded people. We believe that electronic social networks can be a powerful tool for research. ICT Group thematic group was set up in electronic social network to conduct a variety of surveys for conduction of psychological and pedagogical research by researchers, graduate students, and doctoral students at the Institute of Information Technologies and Learning Tools of the NAES of Ukraine.

5) Evaluation and monitoring of their own scientific work efficiency. Scientific researches should be actively discussed in process of their implementation, not only after publication of obtained results. Young researcher's desire to share their experiences in professional networks is great opportunity to hear feedback on their work. It is also necessary to use statistics tools offered by most social networks.

Received analytical reports will show which your posts are the most relevant and which countries users are interested in your publications.

### **3 Conclusions and prospects for further research**

Following conclusions were made based on the analyzed scientific literature and our own experience of electronic social networks use to support educational process:

1. Electronic social networks can be a powerful tool to support educational process in higher education institutions, namely to support study of different disciplines. There are main advantages: universal accessibility and free of charge; possibility of instant messaging and multimedia data; user-friendly intuitive interface; ability to search data and information; availability of event scheduling, invitations, reminder settings; support for synchronous and asynchronous communication between network members; access from different devices. Electronic social networks can be used to organize group activities, international exchanges, mobile lifelong learning, self-education and more. Nowadays, it is important to include networked educational interaction in current models of learning organization.

2. It is appropriate to use social networks to manage educational process in higher education institutions. Efficiency of electronic social networks use depends on intensity and need for their use in management of educational system for implementation of: organizational, educational, psychological and pedagogical functions and ensuring universal communication with subjects of educational process. You can set up operational management by corporate social networks: discussion, polls, organizing events, forming teams for collaboration, distribution of ads on network, etc.

3. Application of electronic social networks to perform research work at the university. So, one of the main benefits of online social networks is quick feedback and convenience of their tools and services. Electronic social networks are convenient tool for conduction of surveys and questionnaires, creation of thematic groups to discuss particular problem. You can analyze data from user's personal page and determine his social and psychological portrait. Through these networks it is possible to interact with researchers from different countries, share experiences and disseminate research findings, observe participants' reactions to discussions or information, invite interested persons to participate in various scientific events, etc.

**Further researches prospects.** Different aspects of social services use and electronic open access systems in the preparation of masters and future PhDs require further research.

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