

**Література:**

1. Нормативна база будівництва: навчальний посібник / О.І. Корнійчук, В.І. Алексієвець. Рівне : Волин. обереги, 2019. 136 с.
2. ДБН А. 1.1-1:2009. Система нормування та стандартизації у будівництві Київ: Мінрегіонбуд України, 2011. 13 с.
3. ДСТУ 1.5:2015 Національна стандартизація. Правила побудови, викладання, оформлення національних нормативних документів. Київ: ДП «УкрНДНЦ, 2016. 65 с.
4. ДСТУ Б А.1.1-97:2010. Система стандартизації та нормування в будівництві. Організація робіт з нормування та стандартизації у будівництві. Київ: Мінрегіон України, 2013. 23 с.

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**FORMATION OF STUDENT PROFILE ON THE BASIS  
OF ANALYSIS OF INFORMATION IN THE SOCIAL  
NETWORK OF THE UNIVERSITY**

**Bolubash N. M.**

*Candidate of Pedagogical Sciences, Associate Professor,  
Associate Professor at the Department  
of Intelligent Information Systems,  
Petro Mohyla Black Sea National University  
Mykolayiv, Ukraine*

The informatization of society determines the transformation of the learning process in higher education institutions through the

introduction of innovative educational technologies and methods of computer analytics for the analysis of educational content. The methods of Predictive Learning Analytics based on data provided by educational information environments, learning management systems, social networks are added to the traditional methods of monitoring and diagnosing student performance. Creating a social network for communication between students and teachers of the university with implemented algorithms for analysis content and digital traces of users can significantly increase the effectiveness of monitoring, control and management of learning.

Social networks can be public or private. The most famous among public social networks are Facebook, Twitter, LinkedIn, Instagram, Telegram, VKontakte, Classmates, MySpace. The social network of the university can be attributed to closed social networks. Scenarios for the use of the interface of widespread public social networks do not provide for automatic data collection for analytical purposes, which necessitates the development of a social network of higher education institutions with built-in content analysis tools.

The purpose of the work is to analyze and justify the need to include in the information educational space of institution of higher education social network, which has built-in tools for analyzing digital footprints of users and content to solve a set of tasks decision making in the field of education.

Social networks have become widespread as a tool for communication, exchange of ideas and information. Recently, social networks are increasingly used as sources of big data for obtaining and analyzing data on various events [1]. In Learning Analytics, the analysis of information accumulated in social networks allows in the early stages to identify students who have risks in learning, to form their profiles, to predict their success [2, 3]. The compatible use of structural and content data potentially

allows the use of social networks to solve a wide range of problems related to research and the formation of public opinion among university students.

The purpose of social network analysis is to identify patterns of events: the relationships between users, the patterns by which these events occur and predict these events in the future. Social network monitoring is a specially organized, systematic observation of the state of phenomena and processes occurring in the social network, in order to assess, control and forecast them. Monitoring includes obtaining and structuring primary data. As a result of the analysis it was found that the primary information in the social network of the university includes: texts of messages, links between users, links to external resources, involvement users. Continuous monitoring is a step towards forming student profiles at the expense of:

- assessment of involvement, which can be active or passive, based on the analysis of online behavior;

- identifying keywords in messages about the educational process;

- establishing belonging to the identified communities within the social network.

When creating metrics for data analysis on the university's social network, it is advisable to use information about likes, comments, reposts, reprints, retweets, views, user credentials (gender, age, city of residence and study, address, faculty, group), statistics in the network, connections between users.

In the structural approach, the social network is a graph  $G(N, E)$ , which consists of a set of  $N$  vertices – agents: users and their communities, and a set of edges  $E$  – defined on this set of relationships in the form of connections between agents. The main attention is paid to determining the geometric shape of the network and the intensity of interactions (weight of the edges). In the analysis of large amounts of digital information on social networks

are used methods of multidimensional statistical analysis, Data Mining and Text Mining methods. Important in the analysis of the social network of the university is the definition of communities that are identified by clustering – the behavior of vertices and typical characteristics of social networks is studied.

The social network of the university is a space for informal communication of the subjects of the educational process and an additional source of data for solving the problems of Learning Analytics. Educational social networks bring students together and focus them on interaction in order to communicate about events in the university, provide assistance in learning, implementation of academic projects, conduct research and interaction with teachers. Monitoring students' moods and determining their profiles is an important and convenient tool for managing an educational institution.

Thus, the development of the social network of the university with built-in tools of Learning Analytics provides an opportunity for the rapid formation of student profiles, forecasting their success, dynamic detection of communities. This allows to improve the monitoring and control in the educational institution, has a positive effect on the social aspect of students' lives, makes Internet communication more meaningful and useful.

### **References:**

1. Adedoyin-Olowe M, Gaber M., Stahl F. A Survey Of Data Mining Techniques for Social Network Analysis. School of Computing Science and Digital Media, Robert Gordon University. URL: <https://jdmdh.episciences.org/18/pdf>.

2. Палій С.В. Соціальні мережі як засіб комунікації електронного навчання. *Управління розвитком складних систем*, 2013. Вип. 13. С. 152–156.

3. Сергеев Є.І. Дослідження гетерогенних джерел даних на прикладі соціальних мереж та реалізація їх обробки і прогнозування даних. *Міжнародний науковий журнал «Інтернаука»*. 2018. № 8. URL: <https://www.inter-nauka.com/uploads/public/15247731129737.pdf>.

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## **ДИСТАНЦІЙНЕ НАВЧАННЯ У ЗАКЛАДАХ ВИЩОЇ ОСВІТИ: ВИКЛИК ЧИ НОВІ МОЖЛИВОСТІ?**

**Гальона І. І.**

*кандидат технічних наук, кандидат юридичних наук,  
старший викладач кафедри транспортних технологій,  
Національний транспортний університет  
м. Київ, Україна*

Наше сьогоднішня виявилось періодом серйозного випробування для системи освіти України. Спочатку світова пандемія COVID-19, а з 24 лютого 2022 року повномасштабне вторгнення російської федерації на територію незалежної України. Російське вторгнення спричинило величезну шкоду і для освітньої сфери. Значна частина закладів освіти змушені були тимчасово призупинити освітній процес. Деякі заклади освіти зазнали фізичних руйнувань. Певна кількість студентів та викладачів досі перебуває в містах, де ведуться бойові дії, ще частина вимушено переїхала у безпечні регіони України та за кордон, частина була мобілізована або зарахована до лав сил територіальної оборони.