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## TO THE ISSUE OF THE IMPLEMENTATION OF NON-FORMAL EDUCATION OF STUDENTS AT TECHNICAL UNIVERSITY

*The renewal of the educational sector takes on a continuous nature, which ensures the development of modern higher education, which is aimed at creating conditions for the formation of a highly educated, creative, responsible, socially active, competitive modern specialist in the market of educational services of Ukraine. In the conditions of globalization, the role of a specialist of a new formation, capable of effective work and lifelong learning, who strives to improve his professional development through formal, non-formal and informal education, is constantly growing. The processes of globalization, entry into the international space are typical of Ukrainian society today and require fundamental changes and the construction of a new educational concept. The use of the concept of “informal education” became one of the principles of state policy in the field of education and expanded age boundaries in ensuring the right to education. Radical transformations in the education system, the adoption of a number of legislative and regulatory acts on non-formal education open up additional opportunities for learning that are less formalized and more innovative. The article defines the prospects for the development of non-formal education of technical university students. The role of informal education in the system of professional formation and self-improvement of the individual is substantiated. The European experience of forming the concept of “lifelong education” and the legislative regulation of non-formal education in Ukraine is studied. The objective reasons for the acquisition of the non-formal education are defined: the rapid pace of development of IT technologies contributes to the emergence of new professions; changing the strategy of success in society; inconsistency of the requirements of the labor market with the professional level of specialists. The features of the organization of the educational process with the use of distance education, modern ICT and the wide use of social networks are also considered.*

**Key words:** *non-formal education, “lifelong education”, educational process, ICT, “soft skills”, social networks.*

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## **ДО ПИТАННЯ ВПРОВАДЖЕННЯ НЕФОРМАЛЬНОЇ ОСВІТИ СТУДЕНТІВ У ТЕХНІЧНОМУ УНІВЕРСИТЕТІ**

*Оновлення освітньої галузі набуває неперервного характеру, що забезпечує розвиток сучасної вищої освіти, яка спрямована на створення умов для формування високоосвіченого, творчого, відповідального, соціально активного, конкурентоспроможного сучасного фахівця на ринку освітніх послуг України. В умовах глобалізації постійно зростає роль фахівця нової формації, здатного ефективно працювати та навчатися впродовж життя, який прагне до покращення свого професійного розвитку шляхом формальної, неформальної та інформальної освіти. Процеси глобалізації, входження у міжнародний простір на сьогодні є типовими для українського суспільства та вимагають докорінних змін та побудови нової освітньої концепції. Використання поняття “неформальна освіта” стало одним із принципів державної політики у сфері освіти та розширило вікові кордони в забезпеченні права на освіту. Радикальні перетворення в системі освіти, прийняття низки законодавчих та нормативно-правових актів про неформальну освіту відкривають додаткові можливості для навчання, які є менш формалізованими та більш інноваційними. У статті визначено перспективи розвитку неформальної освіти студентів технічного університету. Обґрунтовано роль неформальної освіти у системі професійного становлення та самовдосконалення особистості. Досліджено європейський досвід формування концепції “освіта протягом усього життя” та законодавче врегулювання неформальної освіти в Україні. Досліджено об’єктивні причини здобуття неформальної освіти: швидкі темпи розвитку ІТ-технологій сприяють появі нових професій; зміна стратегії успіху у суспільстві; невідповідність вимог ринку праці до професійного рівня фахівців. А також розглянуто особливості організації освітнього процесу із застосуванням дистанційної форми навчання, сучасних ІКТ та широке використання соціальних мереж.*

**Ключові слова:** *неформальна освіта, “освіта впродовж життя”, навчальний процес, ІКТ, “гнучкі навички”, соціальні мережі.*

**Formulation of the problem in general.** Traditional education keeps up with the pace of social development, in particular, the excessive flow of information through the global network, the Internet. It acts as an alternative, and in some cases, a competitor of formal education, and opens up additional opportunities for innovative learning, their rapid adaptation and application. Usually, young people aged 17–25 get formal education in order to acquire basic (fundamental) knowledge in one or another field, but it is not enough for career growth, as the educational need is not fully satisfied, taking into account the specifics of the employer’s activity. Therefore, the specialist needs to acquire new competencies, self-improvement, self-development through informal education (Honcharuk, 2012: 31).

**Analysis of recent research.** The theoretical justification of the idea of non-formal education is presented in the works of domestic and foreign scientists (Pavlyk N.P. Borovyk T.M., Ustychenko S.V., Rogers A., Lazarenko O.O.). An analysis of the experience of organizing informal education of students of pedagogical universities of foreign countries and the possibility of adapting such experience to Ukrainian realities (Honcharuk A., Horuk N., Rogova N. V., Rybakova S.S.). The problem

of using social networks in the educational process is gaining relevance and is the subject of study by many scientists (Brian Lee, Harkusha I.V.).

**The purpose of the article is** to summarize domestic and foreign experience of organizing non-formal education; determine the place and role of the state in the formation of the information field and mission of entities providing educational services in the field of non-formal education; to analyze the state of introduction of non-formal education of students at technical university, to determine the prospects for its further development; to investigate the objective reasons for the acquisition of the informal world; to investigate the peculiarities of the organization of the educational process with the use of distance education, modern ICT and the use of social networks.

**Presenting main material.** Non-formal education is a new definition of modern pedagogical science. Researchers from all over the world have been actively developing this concept in recent decades. The main feature that distinguishes non-formal education from formal one is voluntariness and interest in a subject that is studied or improved throughout a person’s life (Lazarenko, 2016: 255).

World experience shows that the acquisition of non-formal education is conducted using active sup-

port from the state, which provides access to education for citizens of different age groups within different periods of their lives. People who have a long break in their profession, middle-aged people who have turned out to be “redundant” in their fields or a category of citizens who do not have formal education update their professional skills through non-formal education (Horuk, 2004:156).

Non-formal education as a permanent learning process according to the Action Plan “Education for All” of the European Union, which corresponds to the national concept of “lifelong education”, provides:

- leveling of qualifications through modernization of education;
- provision of additional opportunities to persons who did not receive the appropriate educational level/qualification;
- reduction of the number of unqualified persons;
- social integration of migrants;
- increasing the age for career advancement (Rogers, 2002: 278).

There has been a surge of non-formal education in Ukraine now, taking on new forms and content, producing innovative techniques and methods, covering new socio-age and professional groups. The main advantages of such measures of non-formal education are independent choice of place, time, duration of study; absence of age, professional or intellectual restrictions on the participants, which helps increase motivation for learning and self-improvement. The most important thing is the ability to respond to the needs of the labor and service market increasing the age for career advancement, the involvement of leading scientists and the most experienced practitioners in teaching, the most active use of innovative approaches and testing of innovative teaching methods and technologies. It determines the fact that non-formal education begins to fulfill the function of a new provider of higher education services in the context of life-long education or “education without borders” in society (Borovyk, Ustychenko, 2019: 6).

At the same time, the researchers note the contradiction between the interest of students in free access to innovative, alternative forms and methods of learning that meet their individual educational and professional needs, and the limited access to them, the lack of their recognition due to the lack of development of a criterion evaluation system in the country.

We agree with the statement that the most important types of non-formal education are professional courses/trainings are trainings and/or seminars for improving qualifications and/or acquiring new skills. As a rule, professional courses are held in short periods and in “safe space” conditions. Public educa-

tion prepares the country’s population, especially the youth, to fulfill their role as citizens. At the same time, public education includes non-formal social institutions (families, communities, libraries, churches, public organizations, trade unions, sports teams, election campaigns, mass media, etc.). An online course is an Internet course with largescale interactive participation and open access via the Internet. In addition to traditional course materials such as videos, reading tasks and homework. Such education provides the opportunity to use an interactive user forum that helps creating a community of students, teachers and teaching assistants. It is one of the latest forms of distance learning, which is actively developing in world education (Rogova, Rybakova, 2019: 55).

The case-study method is also actively practiced in non-formal education. Its cultural basis is the “precedent” or “case” method. A case is a description of a specific situation that has the right to exist in one or another practice. This situation contains a certain problem that needs to be solved. This is a kind of tool which helps to transfer to the classroom a part of real life or a real situation, which needs to be worked on, and a reasoned solution should be offered (Shalova, Stavvytska, Korbut, 2024: 299).

An extensive network of providers operates on the Ukrainian service market, the purpose of which is to promote public awareness of educational programs implemented in Ukraine. In particular, the online platform of non-formal education in Ukraine “Learn Lifelong”, implemented with the support of the DVV International Representative Office in Ukraine, the International Center for Non-Formal Education and the Ukrainian Association of Adult Education, functions for Ukrainians who wish to acquire new knowledge and skills. Non-formal education services can be obtained through free online learning services: Prometheus, EdEra, Coursera, Duolingo, TED (Technology, Entertainment, Design), etc.

**Objective reasons for obtaining non-formal education:**

- the rapid rate of development of IT technologies contributes to the emergence of new professions that require the disclosure of the creative potential of an individual;
- a change in strategy of success in society (the knowledge of graduates of educational institutions needs updating before they finish their studies, which reduces the motivation to obtain formal education);
- formal education is not perceived as a tool for building a career, but is a means of realizing the creative potential of an individual;
- formation of an active life position of a specialist is carried out through non-formal

education; acquisition, improvement of professional competences; awareness of motives for lifelong learning; solving professional, social, life problems, etc. (Borovyk, Ustychenko, 2019: 8).

It should be noted that with the adoption of the Law of Ukraine “On Education”, Articles 8 and 18 of which regulate the right to lifelong education through formal, non-formal and informal education, a new vector of the development of the educational environment has been set, which must meet the challenges of today. This law defines the following types of education:

- formal education – is obtained according to educational programs in accordance with the levels of education, fields of knowledge, specialties (professions) determined by the law and provides for the achievement by the students of education of the learning results of the corresponding level of education and the acquisition of qualifications recognized by the state;

- non-formal education – is obtained, as a rule, through educational programs and does not involve the awarding of state-recognized educational qualifications by education level, but may end with the awarding of professional and/or the awarding of partial educational qualifications;

- informal education is self-organized acquisition of certain competencies by a person, in particular during everyday activities related to professional, social or other activities, family or leisure.

Such a shift from academic to informal learning cannot be ignored, because the information age requires a person to learn throughout his life. In this context, the role of higher education institutions, whose non-formal education services can be systematic and effective, is increasing. Many years of experience in formal higher education (educational activities and formation of competences, proven teaching methods, qualified teachers) strengthens the position of institutions in non-formal education as well. This format allows students to focus on acquiring professional skills and competencies and on the formation of soft skills in the field of communication and decision-making as well. In addition, in terms of competition in the market of educational services, those institutions of higher education that can be reformatted quickly and develop their own unique offers, will be successful.

We agree with N. Pavlyk’s definition of the main difference between formal and non-formal education in the processes of organizing educational activities (as opposed to the approach to learning as a process of knowledge transfer), which understands integration into the cycle of alternating formal and non-formal

types of education due to the innovative nature of non-formal education, which being recognized as effective, is moved from the plane of non-institutional education to the system of institutional education (Pavlyk, 2016: 264).

Based on generalization of theoretical works of scientists and our analysis of the state of introduction of non-formal education of students in NTUU “Igor Sikorsky Kyiv Polytechnical Institute”, it is possible to determine the prospects for the further development of non-formal education:

- popularization of the concept of lifelong education and non-formal education among students of different age groups and courses;

- development of mechanisms for integration of formal and non-formal education at the university;

- determination of criteria and quality indicators of non-formal education;

- development of a model for recognizing the results of non-formal education in formal university education;

- designing the content of non-formal education of students of technical specialties – as an additional system of formation of professional competence, focused on mastering socio-pedagogical functions and personality development of future specialists;

- determining the place of non-formal education in the educational program to ensure the possibility of additional influence on all its components: the content of education through the provision of specializations or additional educational services; expansion and dialogization of forms and methods of education; tools for assessing the level of professional competence of graduates taking into account independently acquired experience; attraction of additional resources at the expense of non-formal education providers and available material and technical support; requirements for the activity of professors and teaching staff due to a change in the level of demands of students to establish constructive interaction; the management system of the department’s activities, taking into account special courses of non-formal education, educational projects and their management;

- study, development and introduction of the best practices of implementation of non-formal education;

- consulting and psychological-pedagogical support of students in non-formal education.

**The use of social networks during the implementation of non-formal education.** The organization of the educational process with the use of distance learning in the professional training of a higher education student encourages us to implement non-formal education. One of the main types of which is online education, which is carried out through

distance learning technologies, modern information and communication technologies and social networks as an innovative element in the education system. This alternative form of organization of the individual educational trajectory of a university student has been used in the educational process of Ukraine not so long ago, and has already acquired educational significance. Accordingly, in today's conditions, in order to solve the tasks of higher education institutions, there is a need to apply online learning through the Internet, where various academies, online courses, educational and information environments, etc. have been created. It, in turn, gives the participants of the educational process the opportunity to acquire knowledge, generalize, store it and successfully use it in their future professional activity (Brian Lee, 2013: 837).

Distance learning makes it possible to implement interactive technologies for teaching material, to obtain a full-range higher education or improve qualifications. It has such advantages as asynchrony, effective information access, flexibility, relevance, convenience, modularity, economic efficiency, interactivity, technology, updating the role of the teacher, increasing motivation and self-organization of students, reduction of social distance, as well as the absence of geographical boundaries for obtaining education, etc. (Rogova, Rybakova, 2017: 56).

The active function of social networks is groups of professional direction, which are united according to common interests. Social networks in education are an additional opportunity to organize independent work of students outside the classroom and acquire the ability to solve complex specialized tasks in future professional activity (Harkusha, 2019: 41).

**Conclusion.** On the basis of the conducted research, it has been proven that non-formal education cannot be considered as an alternative to formal education, it is its addition, a continuation of existing formal educational systems and is aimed at satisfy-

ing human needs for self-development, self-improvement, and self-realization of personal and professional potential. The form of meeting needs of non-formal education through providers of educational services, which simplify the search and expand the directions of self-improvement and professional growth of the individual, is gaining more and more popularity.

In addition, after carrying out a theoretical analysis of literary sources on the studied issue, we proved that among such non-traditional forms of distance learning as social networks, higher education students have the opportunity to find relevant information to expand professional competences in the field of occupational health and safety. Summarizing the above, we should note that it is advisable for the participants of the educational process to use social networks as a tool of informal education for personal needs, to find motivation and inspiration in order to expand the possibility of self-development, self-realization and gain new knowledge and practical experience.

Thus, the conducted research confirmed the relevance of non-formal education for students of a technical university, because it allows to increase the level of professional competence due to greater specification of the professional training process in accordance with the needs and interests of large companies.

Further consideration of the topic of the article may be related to the study of the state and prospects of the introduction of non-formal education in the professional development of higher education lecturers, and the comparison of the obtained results. Despite a wide range of research, the analysis shows that the issues of applying the theory and practice of the organization of non-formal education in the process of professional training of Ukrainian higher school students is not fully developed. A clear outline of the content, forms and methods of non-formal education, the system of validation and recognition of it results outside the attention of scientists that are leading among modern European trends.

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