

DOI: 10.55643/fcaptp.1.48.2023.3950

#### Natalia Basyuk

Candidate of Pedagogical Sciences, Associate Professor, Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine:

e-mail: natabasyuk@ukr.net ORCID: 0000-0002-5964-6098 (Corresponding author)

#### Olena Hordiienko

Candidate of Pedagogical Sciences, Associate Professor, Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine:

ORCID: 0000-0003-3384-3656

#### Olena Dmytruk

Candidate of Pedagogical Sciences, Associate Professor, Zhytomyr Medical Institute, Zhytomyr, Ukraine; ORCID: <u>0000-0001-5720-3747</u>

#### Oleksandra Marushchak

Candidate of Pedagogical Sciences, Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine; ORCID: 0000-0002-5010-9667

#### Olena Miroshnychenko

Candidate of Pedagogical Sciences, Associate Professor, Educational and Scientific Institute of Pedagogy of the Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine; ORCID: 0000-0002-5712-3752

Received: 23/12/2022 Accepted: 05/02/2023 Published: 28/02/2023

© Copyright 2022 by the author(s)



This is an Open Access article distributed under the terms of the Creative Commons CC-BY 4.0

# SOCIONOMIC FACTORS OF THE CREATION EDUCATIONAL ENVIRONMENT OF THE INSTITUTION HIGHER EDUCATION AS A CONDITION FOR THE FORMATION OF PROFESSIONAL COMPETENCES OF FUTURE SPECIALISTS' SOCIONOMIC PROFESSIONS

#### **ABSTRACT**

The article presents the results of the study of the range of socioeconomic factors for the creation of an educational environment in Ukrainian higher educational institutions (universities) as a condition for the formation of professional competencies of future specialists in socionomic professions. It is established that these factors form the multiplication effect of the influence of the educational environment on the effectiveness of students' acquisition of professional competencies. The basic conditions and obstacles to the effective functioning of the educational environment are established. It is stated that the transience of changes in factors necessitates constant transformations, which requires special attention to ensuring a new characteristic of the stability of universities, which is to ensure adaptability to changes. It is stated that one of the tools for ensuring their adaptability to changes and stability of work is the formation of an educational environment. It is stated that the development of digital technologies forms the preconditions for creating an educational environment in a virtual environment, which leads to an increase in social contacts, creates new incentives for the formation of professional qualities, in particular, through the acquisition of the educational process of the emotional component. This emotional component contributes to the prolongation of social contacts of graduates with universities and with acquired by friends and after the period of study. It is noted that students' practical skills can be compatible with additional funding for both the educational environment and universities. For this purpose, it is recommended to form a research component of the educational process, in particular, the use of a tool for startups and business ecosystems. It is proved that increasing the level of their own professional competence and acquisition of professional qualities should occur in two interrelated areas - acquisition of students' self-education and selfeducation skills. It is noted that the task of universities in these areas is to: instill students' understanding of the importance of self-education; acquire the skills of adequate permanent assessment of yourself and your level of professional competencies; acquiring cooperation skills. It is stated that the educational environment can contribute to the combination of students' acquisition of practical experience and self-financing through the formation of a research component of the educational process, in particular, for the use of a tool of startups and entrepreneurial ecosystems. To formalize the proper formation of professional competencies of future specialists in socionomic professions, an algorithm for creating an educational environment of a higher education institution has been developed.

**Keywords:** socionomic factors, the institution of higher education, educational environment, professional competencies, future specialists, socionomic professions

JEL Classification: A22, I25, O15

# **INTRODUCTION**

Modern higher education should implement the educational process with the significant dynamic influence of external threats and challenges. Significant changes in socionomic



factors for the acquisition of professional competencies by future experts necessitate the departure from the old administrative methods on which higher education has relied on earlier, and the search for new methods and approaches, first of all, motivational ones. This is especially true of students of socionomic professions, since these professions in some literature sources, including GOH et al [1], are defined as correspondence to ensure stabilization of the economy and society for urgent needs Methods of management of individual enterprises, industries, society and country as a whole. One of these methods of complex influence on the process of acquiring education in higher education institutions (universities) is the creation of an educational environment. The effectiveness of the educational environment for the process of acquiring professional competencies is confirmed by the practice of the work of universities of the leading countries of the world. Therefore, the implementation of this mechanism is also aimed at European integration, and integration of the country into the world market, which corresponds to the National Doctrine of Education Development and the Law of Ukraine "On Higher Education". The task of effective assimilation by students of professional competencies helps to maintain the proper level of competitiveness of domestic professionals and, accordingly, the competitiveness of the country's economy. The formation of the educational environment has a multifunctional impact on the work of a HEI and therefore its introduction must be analyzed, provided with resources and personnel and to accomplish this problem a certain set of measures should be carried out to be supported by both the teaching staff. Since the main purpose of the university is to provide educational services for a proper level of quality, then as the main task of realizing the educational environment, the effective formation of professional competencies of future specialists can be considered.

# LITERATURE REVIEW

The problem of creating a university educational environment for the effective implementation of the educational process and the acquisition of professional competencies of future specialists has been investigated by many domestic and foreign scientists. So, Goh et al [1] consider the need to form an ecosystem of the educational institution as one of the paradigms to stimulate higher education 4.0, because, according to Goh et al [1] without the formation of a new paradigm, level of professional competences of future specialists decreases rock from a year. García-Vita et al [2] studied social and educational factors for the effective acquisition of higher education in view of the psychosocial features of students' behaviour in the collective of universities and the importance of the educational environment as an adaptation mechanism. The article Yohannes et al [3] studied various factors of the student's influence on the effectiveness of his learning. It was also weighed on the need to form such an environment of universities in which the difference in the socionomic status of student families would be smoothed. Ternenge et al [4] indicate the correlation of students with socio-cultural and economic factors of influence. This approach is useful, but unfortunately, the factors studied by the authors are not fully relevant to the educational environment in the realities of Ukraine. In the article presented by Shkoliar [5], the educational environment of a HEI is considered a tool that has the following goals: acquisition by students of theoretical and practical competencies in the future profession and increasing the efficiency of the process of acquiring education for proper implementation of the motivational component. He also weighs the need for a university educational environment to increase students' social activity for providing conditions for their interactive interaction and for creative skills. The educational environment should become a multiplier of the integration of components of the content of education. As such components, the authors of the scientific work Shkoliar [5] are called: "Knowledge, skills, experience, the experience of creative activity, attitude to reality, which are embedded in different disciplines that can facilitate the solution of theoretical and practical problems that arise in professional activity". The essential understanding of the educational environment, formulated in the article Shkoliar [5] was used in the presented work. According to the results of Hafiiak et al [6], the development of information technologies (IT) and information and communication technologies (ICTs) is defined as the basis of the reform of the educational environment, which allow to form the latest mechanisms of the educational environment, ensuring the flexibility of the educational process, in particular through the formation of remote access. The importance of the role of IT and ICT as a tool for implementing the latest approaches in the formation of a 6 -lifting environment was used by us in the article presented. Volchik et al [7] have the influence of general economic factors on higher education, in particular, the authors [7] indicate a correlation between GDP per capita and gross population coverage. Based on the specified Volchik et al [7] indicate that "the current higher education system requires deeper reforms", in particular the formation of a new educational environment, the characteristics of which, according to the authors, are "determined by national, regional, historical, cultural, legal and other social factors. that influence the structuring of repetitive social interactions". Tsiuniak [8] indicates that the educational environment "is a system that provides conditions for the development of a student's personality as a specialist, realization of his creative potential, improving professional competencies and expresses the unity and interconnection of his structural components". Tsiuniak [8] believes that the main factor in the formation of the educational environment is the active innovation activity of future specialists in the implementation of various aspects of the influence of the educational environment - information, personality -orientation, etc. The principle



of much aspect influence is used by us in this article. Steyn et al [9] believe that the task of the educational environment is to effectively ensure the differentiated educational needs of students to acquire professional competencies and to properly organize and strengthen the components of this environment to meet educational needs. In our opinion, it is a too-wide look at a problem that requires proper specifics. Chaka [10] considers the stability of ten sets of educational technologies in the implementation of "Education 4.0" on the effective acquisition of competencies. These are effective and inefficient technologies. It is noted that the efficiency of the introduction of technologies "Education 4.0", in particular, educational environment, in some way correlates with the geographical location of universities, first of all - North America. It is indicated that this location is the least used administrative resource to create an educational environment. Bonfield et al [11], using the methodology of scenario planning, studied the formation of the educational environment in Great Britain and indicate the need to harmonize the specified environment with the latest challenges and threats using the example of COVID-19. Taking into account the influence of significant external threats is important for the formation of competencies of future Ukrainian specialists in war conditions, which is considered in the presented work. Chea et al [12], indicate that students of the future and today should have "the ability not only to remember facts but also to analyze information and acquire critical thinking" which proves the need to move away from the university barracks and form conducive learning and adaptive to the challenges of the environment. Unfortunately, this problem is also characteristic of Ukrainian universities, which we took into account in the presented study. Hladchenko [13] considers the need for changes in Ukrainian higher education in view of the dynamism of influencing factors, on the one hand, and the task of ensuring the stability of education during critical transitions. The formation of an educational environment is considered one of the means of ensuring a balance between the indicated trends.

The presented analysis of scientific sources determined the choice of the goal, tasks and direction of the research, the results of which are presented in this article.

*Unsolved aspect of the problem.* The analysis of scientific literature indicated the presence of national peculiarities in the formation of the circle of socionomic factors of creating an educational environment as a condition for the formation of professional competencies. The above determines the need to specify the socionomic factors of creating an educational environment in Ukrainian universities as a condition for the formation of professional competencies of future specialists in socionomic professions. For Ukrainian realities, the basic conditions and obstacles to the effective functioning of the educational environment of higher education institutions also need to be established. The implementation of a systemic complex approach also requires the creation of a formalized method for the proper formation of professional competencies of future specialists in socioeconomic professions.

## **AIMS AND OBJECTIVES**

The purpose of the research is: to establish the range of socioeconomic factors of creating the educational environment of Ukrainian universities as a condition for the formation of professional competencies of future specialists in socionomic professions; establishment of basic conditions and obstacles for the effective functioning of the educational environment of universities; creation of a formalized approach for the proper formation of professional competences of future specialists of socionomic professions, for which it is necessary to develop an outline for the process of creating an educational environment for creating an educational environment of a HEI.

#### **METHODS**

The presented research required the use of both general and special methods of scientific knowledge. The method of content analysis was used for the research of scientific works on the indicated issues and analytical evaluation of their results. The methods of induction and deduction were used to establish which aspects of the problem remained unresolved, further justify the choice of the research topic and establish the research goal.

To specify the socionomic factors of creating an educational environment in Ukrainian higher education institutions as a condition for the formation of professional competencies of future specialists in socionomic professions, the method of systematic analysis was used. In order to establish the basic conditions and obstacles to the effective functioning of the educational environment of higher education institutions, methods of scientific observation and comparison were applied. The method of scientific abstraction was used to introduce a system complex approach and create a scheme of stages of the process of creating an educational environment.

The method of idealization made it possible to establish aspects of the formation of the multiplier effect of the influence of the educational environment on the effectiveness of students' acquisition of professional competencies.



# **RESULTS**

Socionomic factors of the formation of professional competencies of future specialists of socionomic professions under the conditions of rapid changes in external influence factors today determine the need for constant organizational and methodical transformations, which requires special attention to ensure a new characteristic of the stability of organizations, both educational and industrial, business and even, institutional structures. The specified new characteristic of the stability of organizations is the provision of adaptability to changes. In higher educational institutions, one of the tools for ensuring their adaptability to changes and stability of work is the formation of an educational environment.

The socionomic factors of creating an educational university as a condition for the formation of professional competences of future specialists in socionomic professions include: the formation of cash flows sufficient for the work and development of the university; national economic, political and social risks; the demographic situation in the state and individual regions where higher education institutions are located; an increase in the share of the population with a low income level, which limits the ability to pay for a contractual form of education; overproduction of specialists in socionomic professions; low motivation for obtaining an education at a university; low level of quality of training of future students; an increase in the level of competition among universities of the country and with universities of other countries; weakening ties between universities and potential employers of future graduates; decrease in the level of motivation of professors and teaching staff of higher education institutions for quality performance of work duties and improvement of their own competence.

The effectiveness of the educational environment is enhanced by the multiplier effect of its influence. This influence is multifaceted and leads to changes in all aspects of the higher education institution's activities. The multiplier effect of the influence of the educational environment is achieved due to the fact that: the territory of the educational institution becomes unlimited; its influence becomes extended in time - greater, even, during the period of study; it creates a complex impact on the educational process, in particular as a result of the fact that this impact becomes not only informational but also emotional; directly forms the professional skills of future specialists in socionomic professions; begins to ensure that the future specialist receives not only basic professional information, but also information of a general educational nature in the most favourable form.

Let's consider in more detail the above-mentioned factors of the formation of the multiplier effect of the influence of the educational environment of a higher education institution. The characteristic intentions of higher educational institution administrations to form an educational environment in a certain location with reference to the location of the buildings of this or that HEI in the harsh conditions of today's realities is unproductive, which, in particular, in view of the COVID-19 pandemic, was considered in the scientific study of Bonfield et al. [11]. The development of digital technologies according to the article by Hafiiak et al [6] allows for conducting the educational process in remote access, which almost automatically increases the communication of students, teachers, and administrative staff of a HEI in the virtual space. This leads to a new, previously unseen effect in Ukrainian higher education - the creation of an educational environment of a HEI in a virtual environment. The influence of this effect is more noticeable in universities of developed countries, in particular, universities of North America. In our opinion, this influence is a consequence not so much of the territorial location of the higher education institution, but of the spread of skills in the use of digital technologies among the younger generation due to their widespread use by society in the specified territories. This fact was ignored in Chaka's study [10]. This, in our opinion, indicates one of the reasons for the effectiveness of the formation of professional competencies of future specialists when implementing an educational environment in a virtual space. Let's also consider the fact that this factor is especially important for specialists in socionomic professions, as it helps them not only in a natural, unobtrusive way to acquire skills in the use of modern technologies but also opens up new opportunities, in particular, regarding the acquisition of necessary professional information, for example, in sociological studies, which in this way require significantly less labour and financial resources than traditional methods of their implementation. Virtual space makes it possible to engage almost all of a person's senses, so communication in it acquires a significant emotional colouring, which contributes to the formation of complexity in the acquisition of knowledge and makes the indicated process much more effective. Another important factor begins to appear during the introduction of an educational environment for future specialists of socionomic professions. The increase in social contacts facilitated by the educational environment, the very first educational environment in the virtual space, creates new incentives for acquiring professional qualities for the acquisition of an emotional component of the educational process related to relationships in the team. This emotional atmosphere contributes to prolonging the social contacts of university graduates and friends acquired during their studies after the end of the study period.

The formation of the educational environment is aimed at the formation of such forms of cooperation of all participants of the educational process that ensure high efficiency of learning through awareness of the importance of joint achievements. That is, when considering the educational environment as a complex system, the economic, social, and educational result



of its formation is the formation of the effect of the emergence of the activity of all elements of the system, which is more than an additive assessment of the investments in the common cause of individual participants, which are considered as elements of the system. At the same time, it should be taken into account that the multiplier that increases the effectiveness of the educational environment is the achievement of a positive emotional state of the participants of the educational process, i.e. the growth of personal interest of each of the participants due to the increase in their enthusiasm for acquiring knowledge in the process of mutual communication.

The following conditions are necessary for the effective functioning of the educational environment of a HEI in order to ensure the appropriate level of professional competencies of future specialists in socionomic professions: formation of corporate culture; normalization and regulation of the educational environment of universities; organizational and financial support of the educational environment; work on creating a friendly atmosphere of the micro-society of the educational environment and involving university students in its creation to acquire professional competences in this direction; informational support of the educational environment; infrastructural support for the sustainable development of the educational environment of a higher education institution. The biggest obstacles to the effective functioning of the educational environment of higher education institutions may be a lack of support from higher education institutions; insufficient level of organizational support; weak ties of the micro-society of the educational environment and failure to involve students in their formation as creative partners. In order to increase the level of effectiveness of the educational environment of the institution of higher education, it is necessary to form friendly and working relations with the relevant structures in other universities, primarily in Ukraine and other countries.

Formation of the educational environment requires additional funding. According to our analysis, the budget for creating an educational environment is largely individual for each higher education institution and depends on: the tasks faced by the higher education institution team when creating an educational environment of a higher education institution for the effective formation of professional competencies of future specialists; the type and strength of the challenges faced by the ZVO; the number of students; the geographical location of property objects of higher education institutions (educational buildings, dormitories), etc.

Since, according to estimates [2, 9], the budget for creating an educational environment in higher education institutions of developed countries can exceed 400,000 dollars. based on the results of the authors' analysis, we propose a phased introduction to the educational environment. Apart from the dependence on the above factors, the purchase of the necessary high-tech equipment, software, costs for installation and commissioning of the specified equipment is an unconditional component of the budget for the creation of an educational environment. First of all, these are servers, workstations, routers, network storage, KVM equipment (switches, D-links), xDSL equipment, active and passive network equipment. According to our estimate, the minimum amount for the purchase and installation of the specified equipment and software for a small educational institution with a compact location of property objects will be UAH 50,000. In general, regardless of the amount of necessary current assistance from internal stakeholders of higher education institutions (students, teachers), the total amount of budgeting for the creation of an educational environment, even for small Ukrainian institutions of higher education, can exceed UAH 200 000.

The issue of additional financing of the educational environment in the current crisis conditions may be too burdensome for the budget of the institution of higher education, therefore, it is proposed to organize its self-financing through the introduction of startups. Startups, as proven by the study of Duma et al [14] for studying the experience of universities in EU countries, are an effective comprehensive approach to the implementation of the educational process. The introduction of startups is a multifaceted tool for the formation of professional competencies of future specialists in socionomic professions because it should also solve the problems of students gaining experience of interaction with investors, with production and business structures; teaching joint work as a cementing factor of the structure of the educational environment of higher educational institutions; provision of practice-oriented learning conditions, etc. This is shown by the study of Porev [15], in which the concept of entrepreneurial ecosystems is proposed. This concept is a broader approach to the implementation of an educational environment oriented to practice and the combination of learning with entrepreneurial activity. In this way, the proper formation of the research component of the educational process, in addition to the acquisition of appropriate professional competencies by future specialists, creates the prerequisites for solving the problem of additional financing of the higher educational institution and, in particular, the educational environment for the implementation of innovative developments of the student and teaching staff of the university.

The effectiveness of educational activities of higher education institutions in the proper preparation of future specialists can be ensured only if the students themselves are involved in this process, that is, the implementation of a sustainable process of self-improvement of students. Self-improvement of students, in turn, can be effective only if students realize it



as an urgent personal need and acquire it without introducing barracks methods. Increasing the level of one's own professional competence and acquiring professional qualities in accordance with dynamic changes in socionomic factors should take place in two interrelated directions - students' acquisition of self-education and self-education skills. The tasks of universities in the indicated directions are: instilling in students an understanding of the importance of self-education; acquiring the skill of adequate permanent assessment of oneself and one's level of professional competencies; acquisition of cooperation skills.

In order to form an educational environment, university teaching staff need permanent analysis of individual characteristics of students and the ability to coordinate them in the process of collective work; familiarization of future specialists of socionomic professions with effective methods of self-education and self-education; teaching students methods of forming a positive public opinion; involvement of future specialists of socionomic professions in those types of activities that contribute to the intensification of the process of realizing the importance of self-education and self-education; creation of the necessary conditions for self-education and self-education of students.

The result of the formation of the educational environment should be: an increase in the efficiency of future specialists in socionomic professions acquiring a high level of professionalism and the ability to work in conditions of dynamic changes in socionomic factors; gaining experience in understanding others; fostering communication skills and interpersonal and managerial communication skills, etc.

The tasks faced by the management and staff of the HEI in the formation of an educational environment to ensure the proper level of formation of professional competences of future specialists of socionomic professions are: formation of a culture of ensuring the quality of the educational and educational process, mutual relations in the team; formation of an appropriate level of corporate culture; implementation of adaptation mechanisms for changing the functional responsibilities of higher education institutions in view of changes in socionomic factors; provision of an innovative and professional personnel component in the activities of higher education institutions: adaptation of the professional thinking of professors and teaching staff of higher education institutions in accordance with new conditions; improvement of motivational tools to improve the quality of work of professors and teaching staff; creation of an appropriate level of conditions of cooperation between students and teachers of universities; implementation of support for the further improvement of the level of competences of university graduates; promotion of international mobility of university teachers and students; introduction of a new level of interdisciplinary subjects taught to future specialists of socionomic professions; involvement of teachers and students in international research programs; promoting the formation of institutional infrastructure (research centers, centers for the provision of consulting services, joint enterprises, public organizations, etc.) for the practical training of future specialists in socionomic professions; provision of conditions for non-formal education.

One of the factors of the effective functioning of the educational environment of a HEI is, as mentioned above, the use of modern digital technologies for this purpose. The areas of application of IT and ICT are, for example: updating the infrastructure of the telecommunications network of universities; intensification of SMART technologies, in particular, MUniversity, Virtual University, Green University, Cloud University; implementation of the virtual campus project; free use of the Internet on the territory of the university; free use of digital resources of universities; transfer of university library to digital format; provision of consultations and familiarization with lectures from remote points; the wide use of video conferences and webinars in the educational process. That is, it is the development of IT and ICT that opens up new opportunities in education and creates new learning tools. Examples of this are MUniversity technology, or mobile university, which is based on the wide use of gadgets, mobile phones, and IT services in the educational process; Virtual University - transfer of the entire educational process to the virtual space; Green University - the technology of introducing energy-intensive, energy-saving and ecologically clean technologies at universities; Cloud University (a cloud university in which cloud technologies and services are preferred for building information infrastructure).

As can be seen from the above examples of the use of IT and ICT in the formation of the educational environment of higher education institutions, they generally lead to the provision of student mobility.

In order to formalize the proper formation of professional competencies of future specialists in socioeconomic professions, a diagram of the stages of the creation process of an educational environment for creating an educational environment of a HEI has been developed (Figure 1).



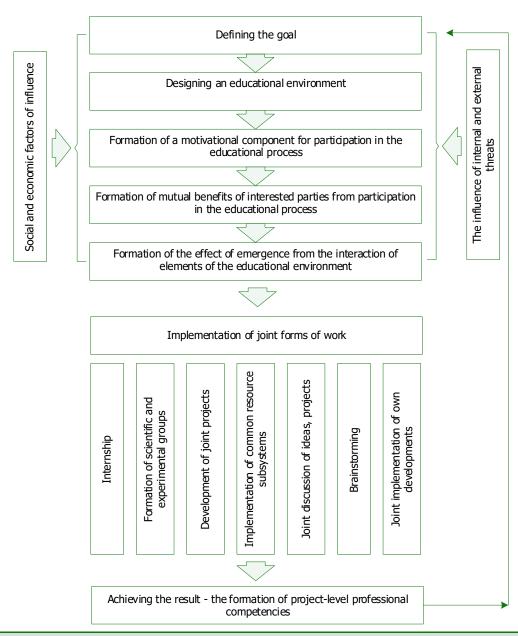


Figure 1. Diagram of the stages of the process of creating an educational environment of a HEI for effective formation of professional competencies of future specialists in socioeconomic professions.

Achieving the result - the formation of professional competencies, as indicated in the presented scheme, should take place not only in the implementation of the positive influence of the educational environment on the educational process but also in the formation of counteraction to external threats or the formation of adaptation mechanisms to the specified threats. an example of an adaptation mechanism for the implementation of the educational process in the conditions of war and pandemic can be the introduction of remote access for students. Also, when developing a process phasing of creating an educational environment of a HEI, it was taken into account that the educational environment for each university and due to the peculiarities of the influence of external factors has certain differences. In addition, differences in the educational environment are formed due to different goals that higher educational institutions can set for themselves. These goals may, in particular, differ due to differences in the set of professional competencies for various specialities that future specialists acquire during training. Therefore, the stage presented in Figure 1 of the stages of the process of creating an educational environment "Designing an educational environment" should be preceded by the "Definition of the goal" stage. Since the implementation of the stage of the stages of the process of creating an educational environment "Formation of a motivational component for participation in the educational process" involves the use, first of all, of informational, informative, professional motivational factors, the diagram of the stages provides for the stage "Formation of mutual benefits of interested parties from participation in the educational process". The implementation of the stage "Formation



of mutual benefits of interested parties from participation in the educational process" should hide the realization of economic motives for the acquisition of professional competencies by students to strengthen economic incentives. This is, for example, the implementation of the concept of entrepreneurial ecosystems and the receipt of part of the income from the implementation of student innovation projects; introduction of startups; stimulating the interaction of stakeholders, in particular, stakeholders - students and their families with the administration and teaching staff of the university; economic and non-economic stimulation of successful students, etc. Therefore, the implementation of the next stage - "Implementation of joint forms of work" is logical and rational both from the point of view of obtaining professional skills, and tools for the formation of an educational environment, and for the formation of mutual benefits of interested parties from participation in the educational process.

The special role of stakeholders, which in modern realities they have begun to play in the formation of student collectives of relations with higher education institutions, is defined by Kopylov et al. [16], and the increasing role of stakeholders in the introduction of an educational environment, as pointed out by Zhehus et al. [17], also becomes significant socially an economic factor in the activity of a higher education institution, and, accordingly, a condition for the formation of professional competences of future specialists in socionomic professions. This, in particular, fundamentally changes the role of the university administration and the tasks facing it, primarily with the aim of introducing innovative management methods. The role of professors and teaching staff in the activities of higher education institutions is also changing, as teachers also, to a certain extent, become stakeholders of universities as providers of educational services. The new role of the teaching staff becomes one of the main factors on which the quality of education and the effective implementation of the educational environment depend. Since the role of students and their families as stakeholders of universities is growing, this also leads to significant changes in the acquisition of appropriate competencies by future specialists. For example, an important factor is the role of graduates of higher education institutions, who can ensure the connection of universities with the industrial and business environment. This emphasizes the importance of prolonging the effect of the educational environment of higher education institutions for the period after the students have acquired their education. The implementation of the stage of the developed stages of the process of creating an educational environment (see Figure 1) "Formation of mutual benefits of interested parties from participation in the educational process" indicates these factors.

# **DISCUSSION**

With a significant level of dynamism in the change of factors of external influence, a significant increase in risks and threats, socionomic factors of the formation of professional competencies of future specialists in socionomic professions should be subject to permanent monitoring by researchers. These changes determine the need for constant transformations of methods and tools used in the educational process, which to some extent contradicts the opinion established in the scientific literature [2, 3, 5] about the sufficiency of the implementation of only one or another set of measures. At the same time, the work of Bonfield et al. [11] indicated the need to modify the tools of the educational environment in accordance with threats, but, unfortunately, did not mention the permanent nature of threat assessment, namely, the permanent nature of threat assessment requires, in our opinion, the implementation of constant monitoring and threat assessment by both scientists and HEI administrations. Since the phenomenon of the educational environment is relatively new, its research and clarification of its mechanisms should also be at the centre of the attention of researchers. Unfortunately, most scientists [4, 7, 17] focus on establishing the need for the formation of an educational environment and not on a detailed study of all the features of its influence on the formation of professional competencies of future specialists. An example of rapid changes in this regard is the formation of a virtual educational environment, the creation of which was, to some extent, a forced step in view of the emergence of new threats of a significant level. The introduction of the educational environment put an end to the old approaches to the administration of the educational process and stopped the atomization of student groups. The forced nature of the use of IT for the formation of the educational environment and its effectiveness in counteracting the process of atomization of student groups is not mentioned even in a sufficiently thorough work [6, 18]. At the same time, the authors of the presented article agree with the main thesis of the paper [6] about the importance of the role of IT and ICT as a tool for implementing the latest approaches in shaping the educational environment. The set of related consequences is multifaceted and will require further research, which, in particular, is indicated in the work of Tsiuniak [8]. The multiplier effect of the influence of the educational environment on the effectiveness of students' acquisition of professional competencies will also require further research. The multiplicative nature of this effect will remain outside the attention of scientists, even Yohannes et al [3], in whose article the effect of socioeconomic status and environmental factors on the academic performance of students is covered in detail. The essential understanding of the educational environment formulated in the article by Shkoliar [5] is used by us in the presented work as a direction of research, but improved and detailed. The introduction of an educational environment can have not only positive effects, which the authors of the presented study focused on but also negative ones. Negative effects of the



introduction of the educational environment, in particular, are briefly mentioned in works [1, 3]. Assessment of the possible negative effects of the educational environment on the educational process should contribute to the formation of methods of counteracting them. Therefore, the study of possible negative effects of the educational environment will require the attention of the scientific community. The proposed phasing of the creation of the educational environment of the institution of higher education will also require clarification. Unfortunately, even in the article devoted to the role of IT and ICT as a tool for the implementation of the latest approaches in the formation of the educational environment [6], there are no proposals for the algorithmization of formalized approaches to the formation and functioning of the educational environment. Some aspects of this issue, in particular regarding the scheme of stages of creating an educational environment, are proposed in the presented article. But the creation of formalized approaches to the formation and functioning of the educational environment will require, in our opinion, further research. The specified algorithmization of formalized approaches should form the basis for the automated design of the educational environment, analysis of its genesis, prediction of the consequences of the introduction of new directions of its implementation, etc.

# **CONCLUSIONS**

The rapidity of changes in factors of external influence determines the need for constant transformations, which requires special attention to ensure the stability of the HEI's work. This leads to the need to implement change adaptability tools. For HEIs, one of the tools for ensuring their adaptability to changes and stability of work is the formation of an educational environment. The range of socionomic factors for the creation of the HEI educational environment as a condition for the formation of professional competencies of future specialists in socionomic professions directly depends on the set and strength of external challenges and tasks that the HEI team wants to solve with the help of the formation of the educational environment.

The specified factors form a multiplier effect of the influence of the educational environment on the effectiveness of students' acquisition of professional competencies. This multiplier effect is achieved due to the fact that in the educational environment: the territory of the educational institution becomes unlimited; its influence becomes prolonged and greater during the period of study; it creates a complex influence on the educational process, due to the fact that this influence becomes not only informational but also emotional; directly forms the professional skills of future specialists in socionomic professions; begins to provide the student with the most favourable form of not only basic professional information, but also information of a general educational nature.

The development of digital technologies forms the prerequisites for a new, previously unseen effect in Ukrainian HEIs the creation of an educational environment in a virtual environment. The creation of a virtual educational environment leads to an increase in social contacts, which creates new incentives for the formation of professional qualities by students of socioeconomic professions, in particular, through the acquisition of an emotional component in the educational process. This emotional component contributes to prolonging the social contacts of graduates with the HEI and with friends acquired during the studies and after the end of the study period.

The formation of the educational environment is aimed at the formation of such forms of cooperation of all participants of the educational process that ensure high efficiency of learning through awareness of the importance of joint achievements. That is, both during research and during implementation in practice, the educational environment should be considered a complex system, the result of which is the formation of the effect of the emergence of the activity of all elements of the system.

The following conditions are necessary for the effective functioning of the HEI educational environment: formation of corporate culture; normalization and regulation of activities of HEI educational environment; organizational and financial support of the educational environment; work on creating a friendly atmosphere of the micro-society of the educational environment and involving students in its creation; informational support of the educational environment; infrastructural support for the sustainable development of the HEI educational environment. The biggest obstacles to the effective functioning of the educational environment are lack of management support; insufficient level of organizational support; weak ties of the micro-society of the educational environment and failure to involve students in their formation as creative partners.

The acquisition of practical skills by students can be compatible with the provision of additional funding for both the educational environment and the HEI. For this, it is recommended to form a research component of the educational process, in particular, the use of the tool of startups and entrepreneurial ecosystems.



The educational environment increases the effectiveness of the acquisition of professional competencies only when the students themselves are involved in the process of forming the educational environment, due to which the implementation of self-improvement of students is achieved, which, in turn, can be effective only under the condition of awareness of self-improvement as an urgent personal need in education. Increasing the level of one's own professional competence and acquiring professional qualities should be acquired in two related directions - students' acquisition of self-education and self-education skills.

The result of the formation of the educational environment should be: an increase in the efficiency of future specialists in socionomic professions acquiring a high level of professionalism and the ability to work in conditions of dynamic changes in socionomic factors; gaining experience in understanding others; fostering communication skills and interpersonal and managerial communication skills, etc.

The educational environment can facilitate the combination of students' acquisition of practical experience and self-financing by forming a research component of the educational process, in particular, using the tool of startups and entrepreneurial ecosystems.

In order to formalize the proper formation of professional competencies of future specialists of socionomic professions, a phased scheme of the process of creating an educational environment of a higher education institution has been developed.

### **REFERENCES**

- Goh, P. S. C., & Abdul-Wahab, N. (2020). Paradigms to drive higher education 4.0. *International Journal of Learning, Teaching and Educational Research*, 19(1), 159-171. https://doi.org/10.26803/ijlter.19.1.9.
- García-Vita, M.d.M., Medina-García, M., Polo Amashta, G.P., & Higueras-Rodríguez, L. (2021). Socio-Educational Factors to Promote Educational Inclusion in Higher Education. A Question of Student Achievement. *Education Sciences*, 11, 123. https://doi.org/10.3390/educsci11030123.
- Yohannes, S., Yemane, T., & Okbay, M. (2021). The effect of socionomic status and environmental factors on the academic performance of students at Asmara College of Education. *Hungarian statistical review*, 4(1), 51–72.
  - https://doi.org/10.35618/hsr2021.01.en051.
- Ternenge, T.S., & Torkuma, T. T. (2021). Sociocultural and economic factors as correlate of academic performance of undergraduates in the department of library and information science Benue State University, Makurdi. *Library Philosophy and Practice*, 5758.
  - https://digitalcommons.unl.edu/libphilprac/5758.
- Shkoliar, N. (2021). Learning environment of higher educational institutions as the factor of forming students' readiness to professionally oriented communication in a foreign language. *Pedagogy of* creative personality formation in higher and secondary schools, 3(76), 65-70. https://doi.org/10.32840/1992-5786.2021.76-3.12.
- Hafiiak, A., Shefer, O., Borodina, E., & Alyoshin, S. (2019). Formation of professional competence of future IT specialists in institutions of higher

- education. *Control, navigation and communication systems,* 4(56), 40-42. https://doi.org/10.26906/SUNZ.2019.4.040.
- Volchik, V., Oganesyan, A., & Olejarz, T. (2018).
   Higher education as a factor of socionomic performance and development. *Journal of International Studies*, 11(4), 326-340.

   https://doi.org/10.14254/2071-8330.2018/11-4/23.
- Tsiuniak, O. (2019). Innovative education environment as a factor of professional development future masters of initial education. *Innovative Pedagogy*, 14(1), 175–179. https://doi.org/10.32843/2663-6085-2019-14-1-36.
- Steyn, H., Vos, D., & de Beer, L. (2018). Education in Modern Society, Education in Modern Society. *In book: BCES Conference Books*, 16. 10-17. https://www.researchgate.net/publication/342448251\_ Education\_in\_Modern\_Society.
- Chaka, C. (2022). Is Education 4.0 a Sufficient Innovative, and Disruptive Educational Trend to Promote Sustainable Open Education for Higher Education Institutions? A Review of Literature Trends. Frontiers in Education, 7, 824976. https://doi.org/10.3389/feduc.2022.824976.
- Bonfield, A., Salter, M., Longmuir, A., Benson, M., & Adachi, C. (2020). Transformation or evolution? education 4.0, teaching and learning in the digital age. *Higher Education Pedagogies*, 5(1), 223–246. https://doi.org/10.1080/23752696.2020.1816847.
- 12. Chea, C. C., & Huan, J. T. J. (2019). Higher Education 4.0: The Possibilities and Challenges. Journal of Social Sciences and Humanities, 5. 2. 81–85.



- http://www.aiscience.org/journal/paperInfo/jssh?paperId=4421.
- Hladchenko, M., Dobbins, M., & Jungblut, J. (2020). Exploring Change and Stability in Ukrainian Higher Education and Research: A Historical Analysis through Multiple Critical Junctures. *Higher Education Policy*, 33, 111–133. https://doi.org/10.1057/s41307-018-0105-9.
- Duma, O.I., & Zavtura, K.O. (2021). Startup ecosystem in Europe: best practices and lessons for Ukraine. Bulletin of Lviv Polytechnic National University. Series of management and entrepreneurship in Ukraine: stages of formation and problems of development, 3(1), 119-130. https://science.lpnu.ua/sites/default/files/journal-paper/2021/jun/23780/menedzhment121-121-132.pdf.
- Porev, S. M. (2018). Concept of entrepreneurial ecosystems and realities of Ukrainian universities. Proceedings of Scientific Works of Cherkasy State Technological University Series Economic Sciences, 48, 45-52. https://doi.org/10.24025/2306-4420.0.48.2018.127010.

- Kopylov, S., & Opaliuk, T. (2021). Model of the interactive format of relationships between the university and stakeholders. *Ukrainian Pedagogical Journal*, 2, 20-27. <a href="https://doi.org/10.32405/2411-1317-2021-2-20-27">https://doi.org/10.32405/2411-1317-2021-2-20-27</a>.
- Zhehus, O.V. (2018). Key stakeholders of higher education institution in the industrial market. *Eastern Europe: economy, business and management,* 4(15), 170–177. http://www.easterneuropeebm.in.ua/journal/15\_2018/29.pdf.
- Shayery, A. J., Zayed, N. M., Islam, K. M. A., Hossain, M. F., Nitsenko, V. S., & Imran, M. A. (2022). The impact of internationalization to improve and ensure quality education: a case study of Daffodil International University (Bangladesh). *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 6, 160-169. https://doi.org/10.33271/nvngu/2022-5/136.
- Mia, M.M., Zayed, N.M., Islam, K.M.A., Nitsenko, V., Matusevych, T., & Mordous, I. (2022). The Strategy of Factors Influencing Learning Satisfaction Explored by First and Second-Order Structural Equation Modeling (SEM). *Inventions*, 7(3), 59. https://doi.org/10.3390/inventions7030059.

Басюк Н., Гордієнко О., Дмитрук О., Марущак О., Мірошниченко О.

# СОЦІАЛЬНО-ЕКОНОМІЧНІ ЧИННИКИ СТВОРЕННЯ ОСВІТНЬОГО СЕРЕДОВИЩА ЗАКЛАДУ ВИЩОЇ ОСВІТИ ЯК УМОВА ФОРМУВАННЯ ПРОФЕСІЙНИХ КОМПЕТЕНТНОСТЕЙ МАЙБУТНІХ ФАХІВЦІВ СОЦІОНОМІЧНИХ ПРОФЕСІЙ

У статті представлені результати дослідження кола соціально-економічних чинників створення освітнього середовища в українських закладах вищої освіти (ЗВО) як умови формування професійних компетентностей майбутніх фахівців соціономічних професій. Указано на значущість та особливості впливу освітнього середовища саме на формування компетентностей фахівців соціономічних професій. Новизною представленого дослідження є встановлення того, що соціально-економічні чинники формують мультиплікаційний ефект упливу освітнього середовища на ефективність набування студентами професійних компетентностей та встановлення основних умов і ефективного функціонування освітнього середовища та перешкод йому в українських ЗВО. Також новизною представленого дослідження є формалізація належного формування професійних компетентностей майбутніх фахівців соціономічних професій у вигляді схеми етапів створення освітнього середовища. Представлене дослідження вимагало застосування загальних і спеціальних методів наукового пізнання. Установлені основні умови ефективного функціонування освітнього середовища та перешкоди йому. Указано, що швидкоплинність зміни факторів обумовлює необхідність постійних трансформацій, що вимагає особливої уваги до забезпечення нової характеристики стабільності 3ВО, якою  $\epsilon$  забезпечення адаптивності до змін. Указано, що для ЗВО одним з інструментів забезпечення адаптивності до змін та стабільності роботи є формування освітнього середовища. Указано, що розвиток цифрових технологій формує передумови створення освітнього середовища у віртуальному середовищі, що призводить до збільшення соціальних контактів, створює нові стимули формування професійних рис, зокрема через набування освітнім процесом емоційної складової. Ця емоційна складова сприяє подовженню соціальних контактів випускників із ЗВО та з друзями по навчанню й після закінчення періоду навчання. Зазначено, що набування студентами практичних навичок може бути сумісним із забезпеченням додаткового фінансування й освітнього середовища, і ЗВО. Для цього рекомендується формування дослідницької складової навчального процесу, зокрема використання інструменту стартапів та підприємницьких екосистем. Доведено, що підвищення рівня власної професійної компетенції та набування професійних рис має відбуватися в двох взаємопов'язаних напрямах – набування студентами навичок само-



освіти й самовиховання. Відзначено, що завданням ЗВО за вказаними напрямами є: прищеплення студентам розуміння важливості самовиховання, формування навички адекватної перманентної оцінки себе та свого рівня професійних компетентностей та навичок співпраці. Констатовано, що освітнє середовище може сприяти суміщенню набування студентами практичного досвіду та самофінансуванню шляхом формування дослідницької складової навчального процесу, зокрема за використання інструменту стартапів та підприємницьких екосистем.

**Ключові слова:** соціально-економічні чинники, заклад вищої освіти, освітнє середовище, професійні компетентності, майбутні фахівці, соціономічні професії

**JEL Класифікація:** A22, I25, O15