ОСВІТНІ ІННОВАЦІЇ

VIRTUAL UNIVERSITY: EDUCATION AS A LIFESTYLE

ВІРТУАЛЬНИЙ УНІВЕРСИТЕТ: ОСВІТА ЯК СТИЛЬ ЖИТТЯ

D. Svyrydenko
V. Kyvliuk

Urgency of the research. *The introduction of lifelong learning is an urgent need for human survival in the context of a modern civilization that seeks sustainable development or coevolution with nature. It is substantiated that objective processes of social development influence for reform and innovative updating of educational technologies. The virtual university is such resource that allows us to solve the maximum of the tasks of educational development with minimal investment.*

Target setting. *Implementation of the virtual university idea is an important issue of contemporary education discourse. This process contains a complex of problems of legal, psychological, economic, pedagogical and social nature. Realization of any idea, even under unequivocal justification of its importance and expediency, requires a harmonization of huge amount of detail. Searching for the optimal model of the virtual university together with the necessity to fit it into the general context of the social and political structure of a particular region, state, educational space as such is also a complex and ambiguous issue.*

Actual scientific researches and issues analysis. *K. Edwards analyzes the advantages and disadvantages of a virtual university, which is a natural link in the evolution. L. Vlaceanu and J. L. Davies discover the transformation of classical university into virtual. S. Guri-Rosenblit*

Актуальність дослідження. *Впровадження навчання впродовж життя – це нагальна потреба виживання людини в контексті сучасної цивілізації, яка прагне до сталого розвитку чи коеволюції із природою. Логічно стверджувати, що об'єктивні процеси соціального розвитку впливають на реформування та інноваційне оновлення освітніх технологій. Віртуальний університет – це такий ресурс, який дозволяє вирішити максимум завдань розвитку освіти з мінімальними вкладеннями.*

Постановка проблеми. *Реалізація ідеї віртуального університету є важливим питанням для сучасного освітнього дискурсу. Цей процес містить комплекс проблем правового, психологічного, економічного, педагогічного та соціального характеру. Реалізація будь-якої ідеї, навіть при однозначному обґрунтуванні її важливості та доцільності, вимагає гармонізації величезної кількості деталей. Пошук оптимальної моделі віртуального університету, разом із необхідністю вписати її у загальний контекст соціальної та політичної структури певного регіону, держави, освітнього простору також є складним і неоднозначним питанням.*

Аналіз останніх досліджень і публікацій. *К. Едвард. аналізує переваги та недоліки віртуального університету, який він вважає природною ланкою еволюції. Л. Влачану та Дж. Л. Девіс дослід-жують перетворення класичного універси-тету у віртуальний. С. Гурі-Розенбліт піддає аналізу моделі*

distinguishes models of distance education at a virtual university. F. Terrazas-Arellanes, L. Strycker, E. Walden, and A. Gallard discover the problem of the 21st century skills formation at the virtual university. The features of organization of the cloud-based educational and research environment were researched by Ukrainian researchers (V. Bykov, A. Hurzhii, O. Spirin, M. Shyshkina and others).

The research objective. The authors aimed to discover the problem of rethinking the role and content of educational processes through the prism of forming a virtual university concept as a lifelong-learning strategy implementation.

The statement of basic material. The concept of the virtual university is relatively new and it is necessary to distinguish a number of contradictory points in its verification. Firstly, it is the quality of the education received. The problem of educational process content at the virtual university, organization of control and level of accomplished tasks, issues of intellectual abilities and critical thinking development, reflexivity of consciousness are the subject of heated discussions of both the supporters and opponents of the virtual university idea. Secondly, there is the question of the way of thinking. The virtual space involves a network mode of organization characterized by openness of the structure, poly-variability of determination and expediency of modal logic. The phenomenon of virtual university is the result of responding to the needs of social transformation. In such model, the content of the social roles of the teacher and the student changes significantly. The competence of the modern teacher is not limited to knowledge. After all, the most experienced academician is not able to absorb all the information in a certain science, and obviously loses in the volume of assimilated information to any search engine.

дистанційної освіти у віртуальному університеті. Ф. Терразас-Арельянес, Л. Стрикер, Е. Уолден та А. Галлард розкривають проблему формування навичок 21 століття у віртуальному університеті. Особливості організації хмарного освітнього та дослідницького середовища досліджували українські автори (В. Биков, А. Гуржій, О. Спірін, М. Шишкіна та інші).

Постановка завдання. Автори ставлять за мету дослідження проблеми переосмислення ролі та змісту освітніх процесів крізь призму формування концепції віртуального університету як реалізації стратегії навчання впродовж життя.

Виклад основного матеріалу. Поняття віртуального університету є відносно новим, у якому наявний ряд суперечливих моментів, цікавих для дослідження. По-перше, це якість отриманої освіти. Проблема змісту навчального процесу у віртуальному університеті, організація контролю та рівень виконуваних завдань, питання інтелектуальних здібностей та розвитку критичного мислення, рефлексивності свідомості є предметом бурхливих дискусій як прихильників, так і противників ідеї віртуального університету. По-друге, питання про спосіб мислення. Віртуальний простір передбачає мережевий режим організації, що характеризується відкритістю структури, полі-мінливістю детермінації та доцільністю модальної логіки. Феномен віртуального університету є результатом реагування на потреби соціальної трансформації. У такій моделі зміст соціальних ролей викладача та учня суттєво змінюється. Компетенція сучасного вчителя не обмежується знаннями. Адже найдосвідченіший академік не здатний засвоїти всю інформацію певної науки і, очевидно, програє в обсязі асимільованої інформації будь-якій пошуковій системі.

Conclusions. *The main problem of modern education lies in the fundamental inability of a specialist perfect preparation to the changing social and cultural context and impossibility to predict the state of technologies, even in the near future. In addition, contradiction between understanding of learning as a business proposal in response to available demand, or a profitable investment in future social and economic well-being and traditional ideas of education as formation of a personality in accordance with a cultural model and ideal leads to a general trend of dehumanization of education. Solution of this contradiction by a volitional choice is impossible. The fact is that virtualization of learning is already taking place. Therefore, we consider that learning should be understood as a way of life of a modern person. The virtual university is an adequate and effective model of formation of the 21st century skills requested by our dynamic society.*

Keywords: *virtual university, lifelong learning, visualization of culture, virtualization of everyday practices, 21st century skills.*

Висновки. *Основна проблема сучасної освіти полягає у принциповій нездатності фахівця досконало підготуватися до мінливого соціального та культурного контексту та неможливості передбачити стан технологій навіть у найближчому майбутньому. Крім того, суперечність між розумінням навчання як ділової пропозиції у відповідь на наявний попит чи вигідним вкладенням у майбутнє соціальне та економічне благополуччя та традиційними ідеями освіти як формування особистості відповідно до культурної моделі та ідеалу призводить до загальна тенденція дегуманізації освіти. Розв'язання цього протиріччя вольовим вибором неможливе. Справа в тому, що віртуалізація навчання вже відбувається. Тому ми вважаємо, що навчання слід розуміти як спосіб життя сучасної людини. Віртуальний університет є адекватною та ефективною моделлю формування навичок 21 століття, попит на які формує сучасне динамічне суспільство.*

Ключові слова: *віртуальний університет, навчання впродовж життя, візуалізація культури, віртуалізація повсякденних практик, навички 21 століття.*

Urgency of the research. Scientific and technological progress is fundamentally changing the world, the human and the strategies of their interaction. The social space of culture is not only a result of human creativity explication, but also a significant factor of determinant influence on consciousness, motivation and activity, methods of communication and self-identification of the person.

The fundamental method of connecting the human with the world is knowledge. It is logical that with the change of context, the corresponding transformations take place in the nature and in the means of this connection. The modern world feels the forced influence of the so-called information technologies, which embody the idea of time and space plasticity, linearity of determination and means of identification. Therefore, knowledge is becoming more and more important in the strategy of interaction with the rapidly changing world. Such knowledge a priori cannot be fragmentary and chaotic. Hence there is the need for understanding cognition as training, systematic and consistent process that is education. Consequently, organization of effective education system, which would include lifelong learning, is a prerequisite for a successful adaptation of a person to the monumental and massive construction

of contemporary culture.

Obviously, the pace of civilization development is accelerated in a super-fast mode. On the other hand, the traditional and bureaucratized system of education around the world does not have enough time to react either to predict the content of knowledge and skills demanded by technology and society. This causes at least two problems.

Firstly, the process of education should be understood as open and fundamentally not complete. And this means different way of educational process organization, new content of the courses and ways of communication between the teacher (tutor) and the student. Secondly, the problem of optimizing communication and interaction of the defined actors is urged by the necessity of some technical devices. Technical possibilities of such connection exist and are widely used. This, of course, is a web 2.0 based on computer network.

Target setting. Organization of the educational process with the help of the latest technologies is a more disputable issue. A virtual university should be considered as an optimal interaction way of the participants of educational process. Appropriateness of its operation is explained by a relative autonomy of the actors involved. This autonomy is represented by:

- variation of time-spatial localization (geography of location, time-table and time spent do not have a significant influence on the education process and results);

- plasticity of the contents of the educational process, a separate discipline, types of works, etc.;

- heuristicity of the educational process, based on a greater autonomy of those who study;

- a successful combination of academic excellence of a traditional university as a competent source of knowledge and access to training for a wide range of concerned parties.

So, we have some reasons to consider the phenomenon of the virtual university as the most successful way of lifelong learning organization. But the concept of the virtual university is relatively new in pedagogy and it is necessary to distinguish a number of contradictory points in its verification. Firstly, it is the quality of the education received. Access to information does not mean mastering it, transforming its content into the quality of personal knowledge and competences. Therefore, the problem of educational process content at the virtual university, organization of control and level of accomplished tasks, issues of intellectual abilities and critical thinking development, reflexivity of consciousness are the subject of heated discussions of both the supporters and opponents of the virtual university idea.

Secondly, there is the question of the way of thinking. Classical rationalism produces a corresponding systemically structured and logically deterministic methodology of cognition and education. The virtual space involves a network mode of organization characterized by openness of the structure, poly-variability of determination and expediency of modal logic. In view of this, the problem of scientific knowledge demarcation is attached to an extremely broad social context. A kind of a "crusade" of professional psychologists against the diversity of coach trainers, esoteric scientists, apostles and prophets of spiritual enlightenment and so on can be an illustration of this problem relevance. In addition, the issue of the type and way of thinking leads

to an important philosophical question about the essence of mind and consciousness: either the center of thinking is, respectively, its creator and dominant intellectual life, or the mind and consciousness are an instrument, a function of thinking, an operating system of intelligence activities.

Implementation of the virtual university idea is also important. And this process contains a complex of problems of legal, psychological, economic, pedagogical and social nature. Realization of any idea, even under unequivocal justification of its importance and expediency, requires a huge amount of detail and agreement. Searching for the optimal model of the virtual university together with the necessity to fit it into the general context of the social and political structure of a particular region, state, educational space as such is also a complex and ambiguous issue. We stand at the standpoint, that virtual ontologies could be the methodology for understanding of the general processes take place as well as in the sphere of higher education at the 21st century [20].

Taking into account all of these factors, the problem of rethinking the role and content of educational processes through the prism of forming a virtual university concept as a lifelong-learning strategy implementation is an extremely urgent issue demanded by contemporary social culture.

Actual scientific researches and issues analysis. This research problem is of considerable interest and a lively polemic of a number of thinkers around the world. Guzmán-Valenzuela C. (2018) provides a typology of modern universities by the following criteria: tasks, methods of obtaining knowledge, pedagogical activity. According to these parameters, the author distinguishes four types of universities: expert, non-elite, entrepreneurial and revolutionary. The main thing in the expert university is the discipline and consistency of mastering knowledge: In the expert university, the predominant teaching approach focuses on disciplinary knowledge. The role of the university is to produce this knowledge, and the teaching task is focused on transferring disciplinary frameworks and bodies of knowledge to students. Teachers take on the role of educating students to become professionals in a specific disciplinary field [6]. According to the author, non-elite universities perform the function of social elevator, that is, allow poor citizens through their own efforts and abilities to positively change their social status: "In non-selective private universities, with the majority of the students enrolling from the lower socio-economic classes, the pedagogical situation has become challenging for teachers since they have had to respond to students' different learning needs. In such universities, teachers have to take on palliative roles" [6, p. 5].

Entrepreneurial universities are product-oriented: "The entrepreneurial university provides students with skills that enable them to be autonomous, strategic, innovative competitive and, indeed, entrepreneurial. Students in this kind of university, who are paying high tuition fees, have rising expectations about their education. In pedagogical terms, there is a technical-instrumental vision in which the acquisition of self-sufficient practical skills that enable students to gain employability in a competitive market is key" [6, p. 6]. The author considers such diversity inappropriate. Therefore, it justifies the need for their complex combination, because such solution requires by existing social transformations.

L. Vlaceanu and J. L. Davies (2001) call such regularities of transformation of classical university into virtual: "When examined closely, conventional and newly emerging virtual universities provide contrasts. Two

alternatives appear. First, they are considered separate products of different historical contexts, thus technologically, culturally, and educationally as different as the time and space these epochs might imply. Subsidiary to this thesis is the reality that traditional universities are faced with both the end of their monopoly in delivering knowledge and the need to transform themselves institutionally in order to face new demands and developments. The emerging virtual universities are, from this perspective, simply an alternative type of higher education that relies heavily on the new ICTs. The second contrast has two variants. On the one hand, emphasis is placed on the fact that conventional universities are being permanently challenged by new developments, including technological developments, and that they have emerged from these challenges in better and stronger shape. The single implication of this thesis is that whatever the new higher education institutional developments resulting from technological change may be, conventional universities are here and will remain with us for the foreseeable future. They will assimilate those newly emerging technological developments within their structures and functioning, according to their well-established inner logic" [18, p. 279]. The authors believe, that the interaction between virtual and classical universities is in accordance with the following problems: accelerating changes in society and education, the ability to complement the classical university with virtual, institutional changes in education, the quality of education.

Edwards K. (2001) analyzes the advantages and disadvantages of a virtual university, which is a natural link in the evolution: "The attainment of an appropriate market size will depend either on a large scope for distance learning or on the collaboration of several universities in sharing the courses. Even then, the initiative will probably require start-up funding, which generally only governments are likely to provide. Such funding has been provided in the United Kingdom where specific government funds have been made available for consortia of universities to work together to prepare such material. The funding had one important qualification attached, which was that any material produced must be freely available to all universities supported by public funds. But while the project produced some excellent results, the uptake across the system has been disappointing. There has been a clear demonstration of the "NIH" syndrome – the "not invented here" attitude among many faculty members!" [4, p. 606]. The most serious concern is the virtual format of education in the field of the humanities. But such fears are unfounded. If the classical system of teaching the humanities is focused on the content of learning, then the virtual seeks to form the skills of students effective independent learning.

Guri-Rosenblit S. (2001) distinguishes five models of distance education at a virtual university. Namely, single-mode distance platforms, dual and mixed universities, advanced training centers and new technology centers: "Distance teaching at university level is currently provided through at least five major organizational models: *(1)* single-mode distance teaching universities; *(2)* dual- and mixedmode universities; *(3)* extension systems; *(4)* consortia-type ventures; and *(5)* new technology-based universities" [5, p. 489]. The author proves the inevitable nature of changes in the content of the potential audience of consumers of educational services, changes in the infrastructure of universities, qualitatively new functions of the manager and teacher of the virtual university, the globalization of education: "The discussion on future trends in the academic world will relate to five domains: *(1)* potential student

constituencies; *(2)* new roles for the academic faculty; *(3)* new forms of knowledge generation and delivery; *(4)* the restructuring of the organizational infrastructures of universities; and *(5)* the impact of globalization on higher education markets" [5, p. 494].

L. Ling and P. Ling (1998) substantiate the significant socio-cultural mission of the virtual university: "The new discourse of universities and education which is based upon the corporate and the technological virtual world, constitutes a new form of political struggle and is reflected in the new discourse of education and of universities where privilege is given to meanings which focus upon productivity, technological cleverness and rationalization of resources" [9, p. 38]. This approach resonates with the ideas, formulated by W. Mozgin [10].

The problem of virtual university is closely connected with the problem of online education and one's methodological support. The features of organization of cloud-based educational and research environment were researched by the serious of famous Ukrainian researchers (V. Bykov, S. Vernygora, A. Hurzhii, L. Novohatko, O. Spirin and M. Shyshkina) [3]. N. Myronchuk discovered the peculiarities of self-organization processes at the educational environment, based on the modern ICT tools [11]. From the side of international researchers, mentioned problems were discussed by F. Terrazas-Arellanes, L. Strycker, E. Walden, and A. Gallard through the problem of the 21st century skills formation [15]. From the other side, some researchers postulate the position, that critical thinking is the corner-stone of the 21st century education and skills, tryin to substantiate this approach [19]. Other famous researches (F. Siddiq, P. Gochyyev and M. Wilson) try to underline, that ICT in higher education produces the challenges of the changes of the everyday practices which should be predicted and adopted in the regulations of online politics globally [14].

But most of the phenomena studied, related to the notion of the virtual university, are in the stage of formation and justification. Therefore, the sense of virtual university as a solution of life-long learning strategy is required.

The research objective. The authors aimed to discover the problem of rethinking the role and content of educational processes through the prism of forming a virtual university concept as a lifelong-learning strategy implementation.

Tasks:

1. To analyze social and cultural preconditions for virtual university origination.

2. To study basic conceptual features of the virtual university and the principles of its creation.

3. To determine the content and efficiency of degree standing on the innovative principles and methods of training suitable for application at the virtual university.

4. To analyze the potential of the virtual universities to be the effective tools of formation of the 21st century skills for students.

The statement of basic material. Virtualization of modern social and culture space should be regarded as accomplished, but not a complete fact. In order to describe the scale of the occurring processes more fully, we would like to give a series of statistical data:

1. Over the past 16 years, the growth of the virtual distance learning

services market has increased significantly (approximately 9 times).

2. About 77% of organizations of different property types in the United States offer web training as an approach to solving the problem of advanced training.

3. Application of virtual distance learning technology has led to an increase in the profit of 42% of organizations.

4. More than 67% of associations offer portable e-learning in one form or another.

5. 99% of distance courses users are convinced that virtual learning has helped them to improve their education and competencies.

6. The market for e-learning services is expected to reach $ 37.6 billion by 2020.

7. The ratio of profitability between the traditional system of education and virtual learning is 75:1.

8. By 2019 video (as a means of transmitting information) will have accounted for 80% of the total web activity [7].

In our view, a more embossed view of the scale of transformation of the global higher education area may be a reference to the concept of a mega-university. These big virtual universities (or university consortia) are educational institutions, that have more than 100,000 students, whose training is, of course, difficult to implement without switching to a virtual university model. According to the analysis of the largest university (students number as of 2019), there are more than 70 mega-universities in the world, among which the following five universities are leaders in the number of students: Indira Gandhi National Open University, India (4.9 million students); California Community College System, USA (2.1 million students); National University, Bangladesh (2.0 million students); Anadolu University, Turkey (1.9 million students); Islamic Azad University, Iran (1.5 million students) [16].

Virtual mega-universities, while minimizing the need for students to be physically present at the university in the learning process, also address important issues of academic migration and brain drain from less developed countries to more developed ones [13]. In general, in today's educational discourse, there are the debates about the role of higher education not only in meeting the needs of the promising labor market. The problem is in meeting the requirements of the new balance of power in the current century: higher education is increasingly perceived as a tool for solving intercultural contradictions, preparing of active citizens, ensuring sustainable development, conflict-free coexistence, etc. [2].

Consequently, we have some reason to assert that the share of virtual learning is very significant. From the point of view of economic factors, virtual learning is extremely cost efficient, effective in solving urgent problems and it demonstrates a galloping growth rate. In addition, the general social, cultural and civilizational tendency to accelerate the dynamics of various processes (training, technology development, production intensity and a variety of challenges and problems that need to be addressed: from existential to environmental, etc.) leads to a spectacular cultural shift.

As you know, the culture of Antiquity is a culture of voice, and the words that sound (the poems by Homer and Hesiod, democracy and rhetoric, the ancient tragedy and the stoic lecton). The culture of the Middle Ages is the cult and authority of the written word, text and author. The tradition of sense-

making through an artistic image, initiated by Modernism, leads to visualization of modern culture. It is therefore clear, that the technical capability of producing and translating content through visualization is widely used in communication in general and in teaching in particular. So, O. Kyvliuk writes about this situation: "With informatization deepening of all the spheres of society's activity, virtual education is expanding. It is a kind of education, the technological basis of which is information and communication and digital technologies" [8, p. 26].

We need some social intelligence in "faceless" virtual reality. That is why modern authors pay more attention to the development of this concept, that is an ability to understand people`s behavior correctly. This ability is necessary for effective interpersonal interaction and successful social adaptation, and was introduced into the psychology by E. Thorndike in 1920 to refer to "foresight in interpersonal relationships" [12, p.12]. "Foresight" in public relations is a manifestation of systemic strategic thinking and a high level of reflection. It is important that the skills of social interaction in such aspect should be worked out to the level of perfection and skillfulness. However, the following question arises: How and under what conditions should "social intelligence" be formed in the modern information society, and even more, is the virtual university capable of solving such problems? On the one hand, formation of "button culture", Internet lifestyle community and virtual reality leads to solitude and anomy of personality. On the other hand, modern technologies give such communication opportunities for which geometry of space and distance is not a problem, but a task that is being successfully solved. Therefore, we consider it necessary to analyze the concept of the virtual university regarding the ability to form competencies that are demanded by the modern labor market.

In contemporary educational research, authors often appeal to the concept of lifelong learning, which is a meta-concept as of today. It can be adequately interpreted only in its partial projections for specific tasks of specific research. In our view, the analysis of the capabilities of virtual universities on the background of the dynamic development of national educational systems, can be evaluated through the prism of their ability to provide the formation of 21st century skills in students. As a result of this analysis, the virtual university has to prove itself or as an effective model of development of these skills (providing its own social role in socio-cultural dynamics), or, to get features that may indicate its somewhat marginal status in the implementation of students' preparation tasks for future active inclusion in a new type of society.

The detailed list of the mentioned skills is a matter of discussion, but UNESCO succeed to identify the stable 'core' of the 21th century skills: "Different organizations, including also partnerships and consortia, have defined and endorsed core competences/skills frameworks using different foci, emphases, groupings and terminologies. Most frameworks seem to converge on a common set of 21st century skills or competences, namely: collaboration; communication; Information and Communication Technology (ICT) literacy; and social and/or cultural competencies (including citizenship)" [17]. The question on connection between online education and 21th century skills was central for the series of researches. The empirically-based studies (using experimental and control groups of students), demonstrated than online learning help student to develop their skills needed by the contemporary and future social situation. We would like to note that the virtual university

produces a new model of learning. In this context learning consists of the following components: instruction, self-education, interaction.

Following the instructions is necessary for access and operational activity in the virtual space of the learning resource. And it also forms a kind of algorithmic thinking, which is absolutely necessary for technological processes implementation.

Self-education is, first of all, is a self-study. For the success of this process, there must be certain prerequisites: stable motivation, critical and analytical thinking skills, self-discipline, sufficient level of elementary education and the skills of performing educational tasks. It is clear that application of virtual learning is appropriate at a certain stage of education, but not at the initial stage. And the virtual university itself mainly justifies the use of a mixed, hybrid type of training. Such a restrained position is grounded. Indeed, even in the context of the information society, personality formation and inclusion in the culture take place according to the ancient principle of paideia, the topicality and significance of which have been considered in a number of scientific articles and monographs [1, p. 15]. However, the significance and value of self-education should also not be diminished. The well-known scholar Tom Aquinas wrote about importance of self-education and it is difficult to overestimate the importance of self-education under the modern conditions of rapid informational growth. Therefore, virtual learning is, perhaps, the best way to organize self-education at an elder age.

And, finally, there is the third component – interaction. This interaction is, in essence, communication, but extremely rationalized and de-personalized. It is difficult to call this type of communication interaction, because it is not about the emotional, empathic or personal level of interaction. The participants of virtual learning interaction are united by a single purpose, an idea of the result. These futurological intentions and aspirations, when setting the priority of the activity purpose, respectively diminish attention to the means or concomitant factors of its achievement. Therefore, such interaction is, in essence, pragmatic. And "social intelligence" in this context should be understood in three ways: first, as the ability to assess and respond adequately to the manifestations of the emotional components of communication, and secondly, as the ability to build purposeful activity in communications of different nature; thirdly, as a creative and individualized ability to establish communication with different partners.

The phenomenon of virtual university is the result of responding to the needs of social transformation. In such model, the content of the social roles of the teacher and the student changes significantly. The competence of the modern teacher is not limited to knowledge. After all, the most experienced academician is not able to absorb all the information in a certain science, and obviously loses in the volume of assimilated information to any search engine. In such situation, not the volume of information, but the systematic comprehension, that is, the quality of ownership is crucial. In other words, the modern teacher is not an oracle of in-depth knowledge, but a coordinator and guide in a huge information space.

The role of the student is also changing. His task is not so much to master the baggage of knowledge, but to master the technique of interpretation of certain semiotic spheres, some branches of science and technology.

Such rules of engagement are driven by the needs of the global economy,

where the condition for survival is to be able to change. Therefore, a virtual university is a complex of educational services that can prepare for a dynamic environment as many subjects as possible. Its main advantage is the availability of educational services, which is achieved by a new type of educational institution infrastructure.

Conclusions. The main problem of modern education lies in the fundamental inability of a specialist perfect preparation to the changing social and cultural context and impossibility to predict the state of technologies, even in the near future. This implies a certain devaluation of the social value of higher education. The theory of connectivity and network learning contains the potential sufficient to form the required minimum of awareness. But inclusion in these communication processes of an educational nature does not guarantee the mastery of critical thinking skills. In addition, contradiction between understanding of learning as a business proposal in response to available demand, or a profitable investment in future social and economic well-being and traditional ideas of education as formation of a personality in accordance with a cultural model and ideal leads to a general trend of dehumanization of education. Solution of this contradiction by a volitional choice is impossible. It should be regarded as a dialectical contradiction. After all, on the one hand, education is the only non-automated kind of human activity and it proves expediency of the traditional system of education. On the other hand, it is impossible "not to notice" changes caused by the development of technologies. It is impossible not to react to these changes because the interaction of the man with the world of nature and social culture is inevitable. The fact is that virtualization of learning is already taking place. The way of "demonizing" virtual technologies is at least not productive. A modern university can arrogantly stand on the sidelines of such social culture movement. Then the question of the need for its existence will become increasingly acute and ambiguous. But the university can become the flagship of the process of informatization and virtualization of learning, preserve traditions and values of academic education, significantly expand the educational space and be a successful business project.

Thus, under the conditions of the information society, it is, at least, not rational to deprive an adult person of the opportunity to study. Therefore, we consider it sound to understand learning as a way of life of a modern person. In addition, as statistics eloquently state, there is a direct link between the level of education and the level and duration of life. And the virtual university is the most optimal form of the educational process organization in this context. The virtual university is an adequate and effective model of formation of the 21st century skills requested by our dynamic society.

References:

1. Bazaluk, O 2017. 'The Strategies of Systematization of the Theories of Education. The Main Meaning and Features of the Theories of Education of Plato's and Isocrates' Lines', *Future Human Image*, Vol. 7, p. 11-27.
2. Binhas, A 2019. 'Shared Living in Israel – Higher Education as an Agent of Change in a Conflicted Society', *Ukrainian Policymaker*, Vol. 5, p. 17-23. Available from: <https://doi.org/10.29202/up/5/2>. [11 December 2020].
3. Bykov, V, Vernygora, S, Hurzhii, A, Novohatko, L, Spirin, O & Shyshkina, M 2019. 'The design and use of the open cloud based learning and research

environment of a university', Vol. 74, № 6, p. 1-19. Available from: <https://doi.org/10.33407/itlt.v74i6.3499>. [15 December 2020].

4. Edwards, K 2001. 'Virtual Versus Classical Universities: Liberal Arts and Humanities', *Higher Education in Europe*, Vol. 26, № 4, p. 603-607. Available from: <https://doi.org/10.1080/03797720220141942>. [15 December 2020].

5. Guri-Rosenblit, S 2001. 'Virtual Universities: Current Models and Future Trends', *Higher Education in Europe*, Vol. 26, № 4, p. 487-499. Available from: <https://doi.org/10.1080/03797720220141807>. [18 December 2020].

6. Guzmán-Valenzuela, C 2018. 'Universities, knowledge and pedagogical configurations: Glimpsing the complex university', *Educational Philosophy and Theory*, Vol. 50, № 1, p. 5-17. Available from: <https://doi.org/10.1080/00131857.2017.1313717>. [15 December 2020].

7. Jasmini, V 2017. *Online learning statistics and trends. eLearning industry.* Available from: <https://elearningindustry.com/online-learning-statistics-and-trends>. [20 December 2020].

8. Kyvliuk, OP 2012. 'Virtualization of the educational space as a pragmatic component of the development of information pedagogy', *Vyshcha osvita Ukrayiny. Teoretychnyy ta naukovo-metodychnyy chasopys*, № 1, p. 25–30.

9. Ling, L & Ling, P 1998. 'The virtual university: To be and not to be', *Melbourne Studies in Education*, vol. 39, № 1, p. 27-42. Available from: <https://doi.org/10.1080/17508489809556308>. [18 December 2020].

10. Możgin, W 2019. 'The Condition of a Modern University – Is There a Problem?', *Future Human Image*, Vol. 11, p. 56-65. Available from: <https://doi.org/10.29202/fhi/11/6>. [20 December 2020].

11. Myronchuk, N 2020. 'Information and communication technologies as a means for the educational process actors' self-organization', *Information Technologies and Learning Tools*, Vol. 75, № 1, p. 202-211. Available from: <https://doi.org/10.33407/itlt.v75i1.2537>. [20 December 2020].

12. Oliynyk, VV 2010. Theoretical and methodical principles of development of system of increase of professional and technical education on the base of distant technologies: study manual, Kyiv: *NAES of Ukraine, UEM.*

13. Savenkova, L & Svyrydenko, D 2018. 'Academic Mobility and Academic Migration Issues: The Case of Ukrainian Higher Education', *Interdisciplinary Studies of Complex Systems*, № 13, p. 57–65. Available from: <https://doi.org/10.31392/iscs.2018.13.057>. [11 December 2020].

14. Siddiq, F, Gochyyev, P & Wilson, M 2017. 'Learning in Digital Networks – ICT literacy: A novel assessment of students' 21st century skills', *Computers & Education*, Vol. 109, p. 11-37. Available from: <https://doi.org/10.1016/j.compedu.2017.01.014>. [15 December 2020].

15. Terrazas-Arellanes, F, Strycker, L, Walden, E & Gallard, A 2017. 'Teaching with Technology: Applications of Collaborative Online Learning Units to Improve 21st Century Skills for All', *Journal of Computers in Mathematics and Science Teaching*, Vol. 36, Issue 4, p. 375-386.

16. *The Largest Universities in The World by Enrollment.* Available from: https://www.worldatlas.com/articles/universities-with-the-largest-enrollments-in-the-world.html>. [11 December 2020].

17. *Twenty-first century skills (UNESCO).* Available from: <http://www.ibe.unesco.org/en/glossary-curriculum-terminology/t/twenty-first-century-skills>. [16 December 2020].

18. Vlasceanu, L & Davies, JL 2001. 'Virtual and Classical Universities between Complementarity and Contrast', *Higher Education in Europe*, Vol. 26, Issues 4,

p. 475-485. Available from: <https://doi.org/10.1080/03797720220141799>. [15 December 2020].

19. Wardani, D, Martono, T, Pratomo, L, Rusydi, D & Kusuma, D 2019. 'Online Learning in Higher Education to Encourage Critical Thinking Skills in the 21st Century', *International Journal of Educational Research Review*, Vol. 4, Issue 2, p. 146-153. Available from: <https://doi.org/10.24331/ijere.517973>. [15 December 2020].

20. Zou, C & Gao, W 2019. 'Virtual Ontology: To the Question of New World Order', *Philosophy and Cosmology*, Vol. 23, p. 53-61. Available from: <https://doi.org/10.29202/phil-cosm/23/5>. [15 December 2020].

ТРАНСФОРМАЦІЯ ОСВІТИ ЯК СИСТЕМИ ПІДГОТОВКИ ЛЮДИНИ ДО ЖИТТЯ ПІД ВПЛИВОМ СОЦІОКУЛЬТУРНОЇ ДИНАМІКИ XXI СТОЛІТТЯ

TRANSFORMATION OF EDUCATION AS A SYSTEM OF PREPARING A PERSON FOR LIFE UNDER THE INFLUENCE OF SOCIO-CULTURAL DYNAMICS OF THE XXI CENTURY

М. І. Кіт

Актуальність теми дослід-ження. *Соціокультурна динаміка, характерна для сучасної глобально-інформаційної цивілізації, ставить перед людиною нові виклики. На багато з них неможливо відповісти без потужного особистісно-освітнього базису. Освіта постає як ключовий елемент підготовки людини в новій соціокультурній та цивілізаційно-інформаційній реальності.*

Постановка проблеми. *Перша третина XXI століття характе-ризується низкою економічних, політичних та соціокультурних змін, сукупність яких формує новий, ще не до кінця розгаданий виклик системі підготовки людини до життя засобами освіти. Завершення освіти індустріального суспільства й начало освіти суспільства інформаційного формують нові виклики до освіти України.*

Аналіз останніх досліджень і публікацій. *Сучасні тенденції трансформації будь-якого соціального явища змінюються з надзвичайно динамічною та*

Urgency of the research. *The socio-cultural dynamics that characterize the modern global information civilization pose new challenges for human being. Many of them cannot be answered without a strong personal and educational base. Education is emerging as a key element of human preparation in the new socio-cultural and civilizational-informational reality.*

Target setting. *The first third of the XXI century is characterized by a number of economic, political and socio-cultural changes, the combination of which forms a new, not yet fully solved challenge to the system of preparing people for life through education. The completion of the education of the industrial society and the beginning of the education of the information society form new challenges to the education of Ukraine.*

Actual scientific research and issues analysis. *Current trends in the transformation of any social phenomenon are changing with extremely dynamic and unpredictable*