

DISTANCE LEARNING AND FACE-TO-FACE LEARNING: STUDENT PERCEPTION OF QUALITY ASSURANCE AND PROSPECTS FOR IMPROVEMENT IN EDUCATION MANAGEMENT TECHNOLOGIES

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ABSTRACT

Global challenges are an objective factor influencing the development of socio-economic and socio-political subsystems of society. The influence of this factor is not uniform, causing a different impact on every social activity sphere. The actualization of challenge to people's health risk, determined by the widespread of the COVID-19 infection in 2020, has become the cause of changes in modes of operation for most of social institutes, including that of education. To implement the national governments' decisions concerning prevention of population's infecting with COVID-19, the administrations of most European universities have refrained from teaching educational programs in the face-to-face mode and adopted the decision of applying the distance form of training. This forced step by the universities has determined the raise in stakeholders' interest in the problematics of the quality of education obtained through the distance mode of higher education. In their attempt to provide the answer concerning the potential of the distance form of training in ensuring education quality, the authors of this article have conducted a poll of 544 students from higher education establishments of Eastern Ukraine. The answers obtained were analyzed by the following aspects: comparing education quality depending on the mode of obtaining it; perspectives of applying the distance form of education at each stage of higher education; efficiency of applying the distance training instruments in the training process. On the results of analyzing the respondents' answers, recommendations and conclusions as to the state of distance education and the perspectives of its development were formulated. Besides, the article offers a classification of distance education instruments and proposes recommendations concerning their application in the training process. The article's content will be of interest not only for specialists working at agencies that ensure quality of higher education, but also for stakeholders and administrations of the universities that are planning to raise the level of their presence at the education services market on account of implementing the distance training's potentials.

Keywords: Distance education, questionnaire of students, higher education quality, education management, distance education instruments.

INTRODUCTION

The acutement of certain global challenges, and consequently the actualization of risks connected with them, change our ideas of the place and role of common things. Each of the presently identified global challenges makes a certain impact on the dynamics and the vector of higher education system development. Besides, the global challenges actualization, as well as national governments' reacting to them, determine the changes in the contents and forms of training. For instance, such global challenge as "sustainable development and climate change" has fostered popularity of such education programs as "Ecology and environment preservation", "Ecology and the balanced use of nature", "Environment protection technologies" and so on among applicants to higher education institutions. In its turn, the acutement of the challenge of coordination of the global ethics with the norms of national cultures has become a reason for introduction of the education programs and separate training subjects with corresponding content, namely "Historic regional studies", "Regional studies" (American studies, European studies, Orientalism), "International political regional studies", etc. The global challenge connected with the growth of terrorism threat has become the cause of the raise in demand for specialists in national security and defense. Such correlation between global challenges and the higher education response is not exhaustive and can be treated both in terms of its content and context.

Each of the global challenges, depending on its urgency for society at a particular period of time, influences both the society with its main subsystems and immediately an individual person to a different extent. In other words, it is impossible to speak of a rigid hierarchy in global challenges because the threat levels of their risk development are constantly changing. For example, just recently the world scientific community's attention was drawn to solving the problems of counteracting the global warming and the climate change (The UN conference on the issues of the climate change Madrid, December 2 – 13, 2019) – discussing the issues of climate protection and the need in decreasing harmful exhausts. Likewise, at the World economic forum at Davos (January 24, 2020) climatic problems were discussed, while presently the most urgent challenge for mankind is becoming the risks connected with health deterioration, namely dangerous viruses' mutations and the spread of dangerous pathogens. According to experts' estimations, the most urgent risk facing society is currently that of virtually non-controlled proliferation of the COVID-19 infection in the world.

By the power of its impact on the civilizational development, this challenge is the most significant and such that influences all the spheres of social life with no exceptions. As the practices of taking measures to counteract the spread of COVID-19 attest, the most affected areas appeared to be the material sphere and the socio-cultural structure of the public life sphere.

Prior, the authors of this publication have drawn attention to the fact that being influenced by most of the global challenges, the higher education changed its content, but in the past such changes were rather optional than necessary. The decisions to introduce the new education programs, as well as new academic subjects, used to be taken by higher education institutions arbitrarily and on their own accord. Non-adoption of such decisions could only influence the competitiveness of a higher education institution in the education services market. In other words, the impact of the global challenge on the higher education sphere was, on the one hand, not ruinous, and, on the other hand, facilitated the development of higher education content. The global challenge of the COVID-19 spread is of an utterly different nature of its influence both on the education system in general and the higher education subsystem in particular. The reflexing of the higher education subsystem on counteracting this challenge is not limited by either the universities' competency or by altering the content of higher education alone. Besides, the reflexing on the part of a higher education institution is not viewed any more through the prism of goodwill and desirability of certain actions of the university administration. Solving the issue of counteracting the challenge is administered exclusively on the government level and with non-alternative course of action for higher education institutions' administrations. It should also be noted that among the results of countering the spread of the COVID-19 infection on the part of the higher education system is, among other things, the change in the mode of obtaining it. Here, the authors mean the changes to the conditions of education programs realization that were provided for by the norms of the Order of the Ministry of Education and Science of Ukraine No. 406 of 16.03.2020 "On organizational measures to prevent the spread of the COVID-19 virus". This document requires that the realization of education programs for the period of the quarantine should be maintained exclusively "through organizing the training process with the adoption of the distance learning technologies that do not suppose

attendance of education facilities by students” (the Ministry of Education and Science of Ukraine, 2020). The fulfilment of this order supposes the use of the distance form of learning as the main form of interaction between the subjects and the objects of the training process. Prior to the introduction of this order’s norms, the distance learning was considered the main form of obtaining a profession quite conventionally. In other words, the distance form of training, despite its all advantages comparing with traditional forms (full-time training and extramural training), was not popular enough with students and obligatory for application by higher education institutions. Therefore, there arises a situation wherein the problematics of the use of distance form of education by higher education establishments is gradually shifting from the education sphere to that of national security due to the risk of the COVID-19 coronavirus infection spread, this risk being identified at the global challenge level, namely that of deterioration of population’s health. It is quite obvious that such a change in the place and the role of the distance form of training in the higher education system cannot currently be viewed exclusively within the context of scientific interest of individual researchers, moreover, within the problematics of the pedagogic scientific thought. This is connected with the fact that the distance form of training is ever more often considered not only as one of the instruments of training communication, but also as a peculiar mechanism of the guaranteed ensuring the sustainable development of the productive force of society, and, consequently, of national security.

Emphasizing on the connection of the education problematics with the national security issues is not something utterly new to scientific thought. Earlier, attention was paid to the cause-and-effect connection between the mentioned phenomena in the report for the American government “Reform of American Education and National Security” (Klein, Rice & Levy, 2012). On the results of the monitoring undertaken for compiling the report, it was determined that the education system of the USA does not ensure competitive advantages for higher education graduates. This means that in the long perspective the country may lose its ability to dominate the global economy and play the decisive role within the system of international relations. Considering the chosen topic, it is expedient, at least in this publication, to leave the problematics of determining the correlation between the education system and the national security without further consideration, and concentrate on the issues of the distance learning, namely those connected with the estimation of its further development perspectives.

LITERATURE REVIEW

The problematics of the distance learning, considering its significance for development of teaching technologies, is constantly within the circle of scientific attention of researchers and practicing specialists. Among the latest scientific researches, deserve for attention the works by such scientists as I.E. Allen and J. Seaman – undertook the analysis of the state of the distance form of training application in the USA (Elaine & Jeff, 2016).

A. Bozkurt, E. Akgun-Ozbek and S. Yilmazel (Bozkurt, Akgun-Ozbek & Yilmazel, 2015) performed the analysis of the thematic directions in scientific research on the distance learning problematics, as well as determined the vectors of further scientific research.

E. Erichsen, D. Bolliger and C. Halupa researched the peculiarities of students’ perceiving of doctorate programs in the training subjects taught by means of the distance and traditional forms of teaching (Erichsen, Bolliger & Halupa, 2014).

S. Kruk undertook the analysis of the online education practices and determined the peculiarities of planning it (He Xu & Kruck, 2014).

R.L. Moore considered the peculiarities in organizing and support of the interaction between subjects and objects of the training communication within the distance training system (Moore, 2014).

G. Rumble considered a method of distance learning systems formation depending on their varieties, as well as determined the peculiarities in managing the distance learning system’s development (Rumble, 1986).

M. Simonson and S. Zvacek established the conditions for efficient application of the distance learning, as well as considered theoretical aspects of building up a distance course (Simonson, Zvacek & Smaldino, 2014). O. Simpson considered the directions in students’ training in the course of their assimilating the contents of the training subjects in the distance mode (Simpson, 2002).

K. Stoessel, M. Barbarino, Bjorn Fisseler, S. Sturmer determined the efficiency dependency for the distance form of training application on teaching subject material to students from different socio-economic groups (Stoessel, Ihme, Barbarino, Fisseler & Sturmer, 2015) and so on.

On analyzing the content of the mentioned scientists' works as well as researches by scientists not mentioned in the literary review, the following basic problems in the distance education were identified:

- uneven rates in changes of popularity levels of distance learning instruments at private not-for-profit institutions and private for-profit institutions attest to the existence of problems in monetizing those education services that were provided by higher education institutions through the distance form of training. To the decrease in economic attractiveness of universities' realization of distance education programs also attests the fact that prevailing majority of such programs is implemented by state-owned universities (Elaine & Jeff, 2016);
- the diversity of content and practices in distance education determines the absence of a possibility to solve them within the contextual direction of one individual science. The complexity in perceiving, and correspondently, in solving the distance education problems rests in their simultaneous positioning within several branches of scientific cognizance, namely: pedagogic science; legal science; economic science; sociology science; public administration, etc. (A. Bozkurt, E. Akgun-Ozbek and S. Yilmazel, 2015);
- the spatial and time gap between the training communication participants is the reason for a decrease in distance training efficiency (the absence of a sense of community in the distance training environment) (Moore, 2014);
- imperfection of theoretic-and-methodological foundation of distance education development along with the problems in managing it (Rumble, 1986);
- complexity of ensuring observation of the training activity by the training communication participants and as a result inability of its timely correction depending on peculiarities in these or other students' perceiving the learning material (Simpson, 2002);
- complexity in ensuring quality of the training process organized by means of distance training instruments (estimating the quality of procedures and the actions algorithms for training communication subjects) and quality of distance education in general (Simpson, 2002), etc.

This enumeration of problems in distance education is obviously far from being complete in its content and can be appended both in terms of peculiarities in the distance education system operation within this or other national institutional environment and of cultural and mental peculiarities in higher education students.

The problematics of the distance education is quite often represented in scientific researches by Ukrainian scientists. A considerable contribution to the research of the issues of digitalizing education and the use of the distance form of learning in the training process was made by: V.Yu. Bykov, who conducted the analysis of the distance form of learning application in the European universities (Bykov, 2005). Yu.M. Bogachkova, V.Yu. Bykov O.P. Pinchuk established peculiarities in forming and organizing the operation of the distance education resource centers network for general education establishments (Bogachkov, Bykov & Pinchuk, 2014).

A.M. Gurzhiy, R.S. Gurevich, M.E. Kademina, V.O. Umanets established the place and the role of information-communicative technologies in the vocation-and-technical education system (Gurzhiy, Gurevich, Kademina & Umanets, 2016). L.V. Kravtsova, T.V. Zaitseva, N.G. Kaminska elucidated the results of creating a distance learning platform (Kravtsova, Zaitseva & Kaminska, 2017).

S.V. Kurbatov researched the problematics in the distance education development in Ukraine through the prism of temporal and spatial challenges (Kurbatov, 2011). V.M. Kuharenko, S.M. Berezenska, K.L. Bugaichuk considered the distance education potentials through the prism of mixed learning and provided recommendations as to conditions of its efficient application (Kukharenko, Berezenskaya & Bugaychuk, 2016). N.V. Morze, O.G. Glazunova established the content and technologies needed to form the distance training potentials to teach competencies (Morse & Glazunova, 2012).

O.G. Romanovsky, O.V. Kvasnyk, V.M. Moroz, N.V. Pidbuska, S.M. Reznyk, V.V. Shapolova and A.I. Cherkashyn performed the analysis of the extent of separate determinants influencing the distance education development (Romanovsky, Kvasnyk, Moroz, Pidbutska, Reznik, Cherkashin & Shapolova, 2019). M.L. Smulson, Yu.I. Mashbitz, M.I. Zhaldak substantiated the content of the concept of designing efficient developmental environments of distance learning (Smulson, Mashbyts & Zhaldak, 2012). L.A. Shtefan, O.P. Borzenko considered the peculiarities of organizing distance learning for student youth in higher education institutions of Canada (Stefan & Borzenko, 2015) and so on.

In its most simplified form, the itinerary of problems in distance education, developed as a result of analyzing the works by Ukrainian researchers, can be viewed through the prism of the following problems:

1. Organization-and-pedagogical problems, namely inability to ensure full-fledged real time communication between the training process participants; a decrease in efficiency of pedagogic control on the part of a teacher and as a result the loss of the ability of timely adjustment of the content, focuses of attention, and dynamics of the training process; overloading of students with learning materials, etc.
2. Information-technology problems, namely technical limitation of training communication participants' access to the internet as well as imperfect software and outdated technical equipment to be applied; imperfection of the procedures of identifying the students, especially in the course of knowledge assessment without the use of visual contact between the teacher and the student, etc.
3. Psychological problems, namely the loss of emotional contact between the teacher and students and, correspondently, actuation of the risk of ruining such principles of learning as anthropocentrism and humanism; a distinct correlation between training communication efficiency and the level of a student's independence, motivation, and ability to self-regulation, etc.

The problems of distance education within the education environment of Ukraine generally correspond to those that are characteristic of higher education systems of other foreign countries, although they have some specific peculiarities in its content. Among such peculiarities, the following should be accentuated on: imperfection of software and technical support of distance education procedures; unpreparedness of most of the teachers for systematic use of distance training instruments in day-to-day teaching practices. Another issue is society's prejudiced attitude to the outcomes of the distance form of attaining education leading to lack of motivation in students and teachers to use the distance form of education for obtaining professional knowledge.

The comparison in the problematics of scientific researches enables to speak of a certain discrepancy between the focus of interest shown by Ukrainian and foreign scientists in their choice of the related topics. The prevailing majority of the mentioned scientific works by foreign scientists concentrated on learning the opinion of the training communication participants on the distance form of learning, namely the correlation of the obtained results with the competencies stipulated by the education program. Also, a considerable part of the research by foreign scientists was focused on determining psychological aspects of the interaction between the immediate participants of the training communication (teacher – student; student – student; tutor – student). Despite a variety in the directions of studying the distance learning problematics, which is observed in foreign scientific thought, the prevailing majority of them was built up around the object of teaching. In other words, the student acted as either a source of obtaining by scientists the information needed for their research, or was positioned as an expert in estimating these or other aspects of the distance education or its outcomes.

Such attention of scientists just to the objects of training communication can be explained through a norm of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), which positions the students along with the higher education institutions' personnel at the level of one of the chief stakeholders as to evaluation the quality of the training process and the training results (European Association for the Quality Assurance of Higher Education, 2015). In other words, it is the student who is the key element in the training system implemented by means of the distance learning instruments, and consequently, his/her estimation is of utmost importance. It should be reminded that among the principles of quality assurance management (the ISO 9000:2007 standard), the principles of "orientating at the customer" and "involvement of employees in management" are identified as being of utmost importance (the National Standard of Ukraine, 2008).

Unlike foreign scientists, the national (Ukrainian) researchers tended to concentrate on the issues that were for the most part of strictly technical character or dealt with procedural and support aspects, namely theoretical aspects of distance learning, the methodology of applying information-communicative technologies in the training process, pedagogic technologies in the distance learning, science-and-methodology ensuring of the distance training quality, etc. Among the mentioned directions of scientific search, there are no those directed immediately at the acquirer of education (learner-centered approach). Within the national (Ukrainian) scientific thought there is practically no researches focusing on the specifics in evaluating the process, the results, and the development perspectives of the distance education by the training communication objects (pupils, students, trainees, etc.), with the exception of evaluating purely psychological aspect of their behavior. This has determined the occurrence of a certain disproportion in the research of the corresponding phenomenon.

Such a disproportion not only tells on the quality of knowledge about the distance education in general, which in itself is a sufficient reason for drawing researchers' attention. It also affects the efficiency of measures taken by higher education institutions' administrations and the national government concerning the use of the advantages of the distance form of education and minimizing the risks involved. Besides, the knowledge concerning the peculiarities of precisely Ukrainian higher education students' perception of these or other aspects of distance education is of utmost importance for clarifying the market strategy by those foreign universities that are interested in entering the Ukrainian education services market. This accentuation of authors' attention is determined, among other things, by a considerably large number of those interested in obtaining a higher education in Ukraine (according to the Ministry of education and science of Ukraine, the number of applicants in 2018 was calculated to be 335.8 thousand, and in 2019 it reached 354.1 thousand people). On the other hand, part of these applicants try to obtain an education outside the national higher education system (according to the CEDOS analytical center, more than 80 thousand citizens of Ukraine obtain their education abroad).

The decrease in Ukrainian population's well-being level caused by the current global economic crisis will enhance the growth of the number of those interested in obtaining a higher education at foreign higher education institutions. This growth may occur on account of those applicants for higher education who had intended leaving Ukraine for studying abroad, but were unable to afford that due to financial problems. Daytime training at a foreign university is usually more financially burdensome for a student than studying at the same university, but on conditions of the distance form of training. Besides, the growth in the number of Ukrainian applicants who choose the distance mode of training at foreign universities may also take place due to the growth in price of education services in Ukraine.

As of 2020, the Ministry of science and education of Ukraine has established the norm of indicative cost of education, which has made it more expensive. Due to these conditions, Ukrainian applicants may consider obtaining a qualification through distance training at a foreign university as an alternative to obtaining daytime education at a national higher education institution. The choice of this alternative is determined by the fact that the cost of daytime education at Ukrainian universities is quite compatible with that of distance training at foreign higher education institutions.

Therefore, an analysis of the Ukrainian student's opinion about the distance education is of utmost importance for the subjects of higher education system of Ukraine, for instance to improve the state policies in the higher education sphere. It will also be useful for the administrations of foreign universities, for instance to improve the content and practices of applying the mechanisms of running an enrollment campaign and raising their attractiveness level at one of the most powerful education services markets of the Eastern Europe.

PAPER OBJECTIVE

Considering the mentioned afore, and due to controversies in the world statistics as to changes in popularity level of the distance form of education, the goal of this article was to find out students' opinion on quality of distance training by conventional comparing it with face-to-face learning. Another issue to be studied was the expediency of using it at various levels of providing an education service, and to determine efficiency of applying individual instruments of distance training.

METHODOLOGY

Prior, attention was drawn to the fact that due to the threat of spreading the COVID-19 infection, all the higher education institutions of Ukraine with no exception, like those in most of the countries of the world, have stopped using the traditional form of teaching in their training systems and transited to the distance form of training. The forced step by the Ministry of education and science of Ukraine concerning the limitation of training by solely distance form of education has stipulated the raise in researchers' interest in the studying of this problematics.

The researches of this phenomenon in the scientific environment of Ukraine were conducted mostly with the use of strictly theoretical methods of scientific cognizance and with the accentuating on the issues of distance education that are strictly of technical and procedural-and-support character. The use of theoretical methods by scientists to study the phenomenon of distance education has stipulated the development of the system of laws, ideas, and paradigms of knowledge. The researchers' preferences for applying theoretical methods of scientific cognizance have certainly raised the extent of the research of the distance education problematics, especially in the context of applying the theoretic-and-methodological approach to understanding its content.

At the same time, such preference for theoretical methods has caused the occurrence of a disproportion in the comprehensiveness of studying the topic, and, consequently, has affected the quality of the scientific knowledge obtained. A distortion of scientific knowledge related to the distance education makes it next to impossible to establish the perspective and the determinants of its development in the national higher education environment. It also considerably diminishes the efficiency of its application within the system of the interaction between the subjects and the objects of training communication. The correction of this disproportion seems possible on account of amassing the knowledge related to the distance education, which was obtained by means of the empiric methods of scientific cognizance. These methods are used, as a rule, to research the practices of functioning of the object to be studied.

In order to ensure observing the principles of systemacy and comprehensiveness in the research of the distance education problematics, the authors of this publication selected the instruments pertaining to the empirical methods of research, namely the method of survey in the form of an expert interview and questionnaire. Choosing the survey as one of the principal instruments of obtaining information was stipulated, on the one hand, by comparative ease of using it and the possibility to increase significantly the number of experts involved in analyzing the problematics. Its another advantage is comparatively reliable information (it is traditionally believed that information obtained through an anonymous polling is more accurate and reliable). Also, the use by the publication's authors of the surveying method enabled to involve the students interested in participation in science research as stakeholders, and also as interviewers (on par with immediate initiators of polling), as well as technical workers for initial processing of the information obtained. Gaining experience by the students involved in organizing and carrying out a scientific research can be considered as so-called parallel results. Involving students in participation in scientific projects is a desirable step on the part of researchers both in the context of forming conditions for students' gaining certain skills and development of the competencies stipulated by the education program, and from the point of strengthening the solidarity of the university community of an individual higher education institution.

The students were involved into conducting the research on their free will and without their obtaining any material remuneration. It should also be noted that involving students in conducting the poll as interviewers enhanced the raise in quality of the fulfilled questioning. This raise in quality was stipulated by the fact that that the persons involved in questioning as respondents are more trustful, and, correspondently, give more candid answers to those interviewers who are closer to them by their age and social status. The availability of values orientations similar in their content (a common system of norms) along with the absence of differences in age usually facilitates establishing of trust between the communication participants. Thus, involving the student youth into taking part in the survey as interviewers to conduct a research is not only useful (gaining experience of participating in science-research work), but also justified, considering a possibility of raising quality of the information thus obtained.

The goal was achieved on account of organizing and carrying out the questionnaire "The attitude towards the distance education and its quality estimation". This poll is the second stage in realizing the author's program of a non-grant-supported project "Higher education quality evaluation" (by S.A. Moroz), participated by

such counter-agents as the Baltic International Academy (Riga, Latvia) and the Institute of the International and Comparative Education at the Beijing Pedagogic University (Beijing, China).

At the first stage, there was conducted a poll of Ukrainian, Latvian, and Chinese students along with employers from Ukraine concerning the quality of higher education regardless of the form of training. Some of the obtained results were published in the author's previous works (Moroz, Buka & Gren, 2019; Moroz & Buka, 2018; Moroz, 2019). The fulfilment of the second stage in the author's project supposed organizing of another poll of students from the mentioned countries concerning the quality of higher education but with adjustment of its content to the distance form of education. Presently, the analysis of the Ukrainian students' responses has been completed, and processing of the Chinese students' responses is going on. By the end of this (2020) year, it is planned to conduct the poll for the Latvian students and to complete the analysis of the results obtained. In this publication, the authors intend to present to scientific community some of the results of surveying Ukrainian students.

In accordance with the procedures for the second stage of the project (carrying out the poll titled "The attitude towards the distance education and its quality"), the author(s) developed a questionnaire. The authors' preferences for applying the survey method was determined by the fact that it is this method of collecting information that enables a researcher to find out the opinion of many stakeholders in a comparatively short time. According to S. Yaremchuk's research, the survey is one of the most efficient, widespread, and reliable method of collecting initial social information. In the scientist's opinion, up to 90% of information on the subject of immediate attention can be obtained through surveying (Yaremchuk, 2015). Besides, in sociological scientific thought there is an opinion that it is the survey that possesses the largest potential for a precise clarification of an opinion of a considerably large social group and obtaining reliable knowledge about the society (or individual representatives of society) and its (their) attitudes (Moser, 2017; Bulmer, 2017).

Compiling the questionnaire, the authors took into account methodological recommendations by T. Lukina concerning peculiarities in compiling the structure and the contents of questionnaires for monitoring researches in education (Lukina, 2012). Also, the authors studied the outcomes of implementing the grant project titled "Quality of Education Ensuring System in Ukraine QUAERE-562013-EPP-1-2015-1-PLEPPKA2-CBHE-SP: Development Based on European Standards and Recommendations" in the part related to theory and practices of compiling questionnaires concerning the problematics of ensuring quality of education activities (Report on the results of questioning higher education institutions of Ukraine, 2015). Compiling the questionnaire's content was made with taking into account the methodological advice by Seymour Sudman, Norman M. Bradburn and Norbert Schwarz as to the peculiarities in forming the questions of the poll and the sequence in presenting them (Sudman, Bradburn & Schwarz, 2010). The final formulation of the poll questions, as well as clarifying the level of comprehending them by potential respondents, took place on the results of a pilot interview with a students' focus group. At this stage of fulfilling the research, the authors of this publication acted as interviewers.

A possibility of involving students as the subjects of expert evaluation was substantiated in its time by V.P. Sadkovyi and V.M. Babayev. Therefore, sharing the scientists' opinion on necessity of involving students into the procedures to ensure the quality of education activities and the quality of higher education (Moroz, Sadkovyi & Babayev, 2018), the authors think it expedient to leave their choice of the respondents' category without further explanations.

During the pilot interview, it was established that the focus-group representatives understood the poll questions and the offered variants of responses correctly. Also, in this interview, potential respondents displayed their interest in the participation in the project and demonstrated their ability to conduct a balanced evaluation. In other words, the focus-group representatives (participants in the interview) did not demonstrate the so-called "tiredness of interviewing – being interviewed" and expressed not only their wish, but also their readiness to act on par with experts in estimating the quality of higher education. On analyzing the pilot group's opinion regarding the focus of attention of the interview, the project's authors improved the formulations of some of the questions and the variants of possible responses to them. The discussion with the experts of the distance form of training problematics and the quality of education that can be ensured as a result of applying it, enabled the authors to obtain preliminary information concerning the students'

attitude towards these or other aspects of the distance training application as well as its quality. Later on, in the course of analyzing the results obtained from the survey, this information will be used to formulate certain generalizations.

The questionnaire, amended on the results of discussing it with the experts, consisted of twelve questions, the content of three of them constituting the basis of this publication. The complete list of the poll questions is provided in the table 1.

Table 1. The questions to the questionnaire titled “The attitude towards the distance education and its quality evaluation” and the order in which they appear

No	The question formulation
1-3	demographic information
4	Evaluate the extent of the manifestation of separate factors of the distance education development. (respondents are offered to determine the extent of influence of several factors on the dynamics of the distance education development in Ukraine)
5	In your opinion, can the quality of higher education obtained through the distance form of training correspond to that ensured by the traditional forms of the training process organization?
6	Do you think that in future, the distance form of education will become a more popular form of obtaining education on speciality (profession) compared with the traditional forms of training?
7	At which of the training communication levels is the use of the distance form of training most efficient? (the respondents are offered to choose the education level (initial, first and second higher education levels; education-science and science levels; the qualification improvement level and that of mass information courses) where the use of the distance form of training will be the most efficient)
8	In your opinion, which of the following statements is the most correct? (the respondents are offered to choose one of the statements regarding the level of independence of the distance form of obtaining education)
9	Evaluate the significance of these or other advantages of the distance form of training (from the offered list of advantages of the distance form of education, the respondents are offered to evaluate the extent of their manifestation)
10	Evaluate the significance of these or other disadvantages of the distance form of training (from the offered list of disadvantages of the distance form of education, the respondents are offered to evaluate the extent of their manifestation)
11	Have you or your acquaintances an experience of using the distance form of learning for obtaining a profession?
12	Evaluate the efficiency of using the instruments of distance education in training communication (respondents are offered to evaluate the potentials of using these or other instruments of distance education)

Considering the fact that the so-called closed questions were offered in the questionnaire, each of them was followed by the offered variants of responses. These options in the form of specific statements (to be chosen by respondents) were used for all the questions, except questions 9 and 10, or in the form of a numerical scale to evaluate the level of manifestation of a specific phenomenon (the respondents were offered to evaluate the significance level of this or other phenomenon by the ten-point scale). Considering the limitations of this publication, and taking into account the chosen object of our scientific interest, the authors have decided to limit the analysis of the responses by those given to questions 5, 7, and 12 of the questionnaire.

The survey was conducted between December 2017 and November 2019 on the territory of the administrative units of Eastern Ukraine. Due to a comparatively long period of the project realization and the changes in the teams of the interviewers, the organizers of the research systematically met with the students willing to join the project. During such sessions, the interviewers’ training took place, their tasks were clarified, and the plans for the time and locations of polling were adjusted.

544 respondents aged between 18 and 35 took part in the survey. They were students (trainees, postgraduates) of higher education institutions, as well as persons who had recently obtained a higher education acted as respondents. Of the total number of the filled-in and returned questionnaire forms, 17 turned out to be unfit for further analyzing. Therefore, the findings that follow were developed on the results of analyzing 527 questionnaire forms.

The conducted survey can be considered quite representative for the Eastern Ukraine, so the conclusions formulated on the results of analyzing the respondents’ answers can be of certain value for both the subjects

of state management of higher education system development, and for higher education institutions administrations. This value can be substantiated, for instance, through the prism of the need in constant development of the information-analytic support of taking administrative decisions in the higher education system. Besides, the processed generalizations and the formulated conclusions can be of practical significance for foreign in relation to Ukraine higher education institutions in the aspect of their improvement of the content and practices of using marketing strategies to raise their positioning level in the education services market of Ukraine.

FINDINGS AND DISCUSSION

Previously, the authors have drawn attention to the fact that in this publication they intend to limit the analysis of the respondents' answers to only those questions of the poll that are relevant to the subject of the research. In other words, the focus of the authors' attention was concentrated on analyzing students' opinion on the following issues:

1. comparing the quality of higher education obtained by means of traditional forms of the training process organization with that obtained by means of the distance form (question 5 in table 1);
2. perspectives in using the distance form of training on separate levels of higher education, as well as in the qualification improvement system and for the mass information non-specialty-related courses (question 7 in table 1);
3. the estimation of the efficiency of applying these or other instruments of distance education within the training communication (question 12 in table 1).

The results of the analysis of the respondents' answers related to the first item of the above enumeration are given in Figure 1.

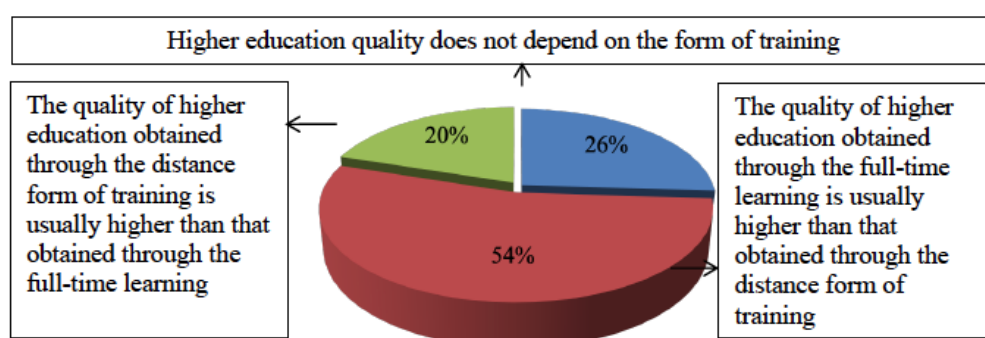


Figure 1. Comparison by students of the quality level of higher education obtained through the full-time learning and the distance form of education

Considering the division of the respondents' preferences given in figure 1 concerning their choice of one or the other statement, it is possible to formulate the following principal generalizations.

Firstly, most of the students (54%) are positive that the quality of higher education obtained through full-time learning is higher if compared with that of higher education obtained through the distance form of training. This result was quite expected by the survey initiators, due to the fact that at the initial stage of conducting the expert interviews in order to specify the questionnaire's content, most of the respondents supported this very idea. Such preference by students can be explained by the absence of deep-rooted traditions of the distance education system operating in Ukraine. Another reason is insufficiently complete readiness of society to accept the distance form of training on the level of a comparatively independent form and as such that is capable of ensuring a rather high level of quality of the knowledge obtained through it.

This assumption made by the authors was confirmed in the course of several selectively held interviews with representatives of job agencies and employers. At the same time, it is impossible to consider the lack in popularity of the distance form of training with potential consumer of educational services as their biased attitude. For instance, only 65% of the US universities have determined the distance education development as strategic direction of their development (Karpenko, 2014), i.e., nearly every third university in the country (35%) does not recognize the perspectives in the development of this form of training. Therefore, there occurs a situation wherein the distance form of education is, on the one hand, ever more often considered by potential consumers of educational services as an alternative form of obtaining professional knowledge in higher education, while on the other hand, its quality does not correspond to the requirements that have been formed in the labor market.

Secondly, every fifth respondent (20%) is positive that the quality of higher education obtained by means of distance learning is higher in comparison with that obtained by means of full-time training. Considering the fact that 26% of respondents deny the existing of a dependency of the higher education quality on the mode of obtaining it, the aforementioned result is quite considerable in its significance. In other words, 46% of the students who took part in the poll have demonstrated quite a positive attitude to the distance form of obtaining a higher education of sufficient quality.

This result was unexpected for the survey initiators, for during the preliminary expert interviews, students had demonstrated some mistrust to the distance form of learning and expressed their doubts concerning the quality of thus obtained knowledge. Despite the sufficient level of support for the distance form of learning on the part of the students, the fact of relative restraint of respondents in their expressing ideas about the quality of higher education obtained by means of this form influences considerably the sum total expert estimation.

In the authors' opinion, among the prevailing reasons for the distance form of education lacking in popularity with applicants for higher education is the absence of culture of individual and systematic work of students on gaining knowledge and forming professional skills through information-and-communication technologies. In other words, the larger part of learners need a constant emotional influence on the part of teachers. Besides, during the pilot with students, there was established a rather low motivation level in the latter for gaining professional knowledge. At the full-time form (face-to-face) of education, the low motivation level in students is usually compensated by the teacher's professional skills and his/her ability to maintain a high level of interest in students' in both the immediate academic subject and in the specialization in general.

It can be conventionally assumed that the students who preferred the statement that "the quality of higher education obtained by means of the distance form of training is usually higher than that obtained by means of full-time learning" are more motivated and capable of studying on their own. If this assumption is true, it will be possible to state that only one student in five in the higher education system has a persistent motivation for learning activities. This assumption is not relevant to the object of the research and needs additional confirmation in other directions of scientific researches.

The results of the respondents' answers to the second item of the research are given in Figure 2.

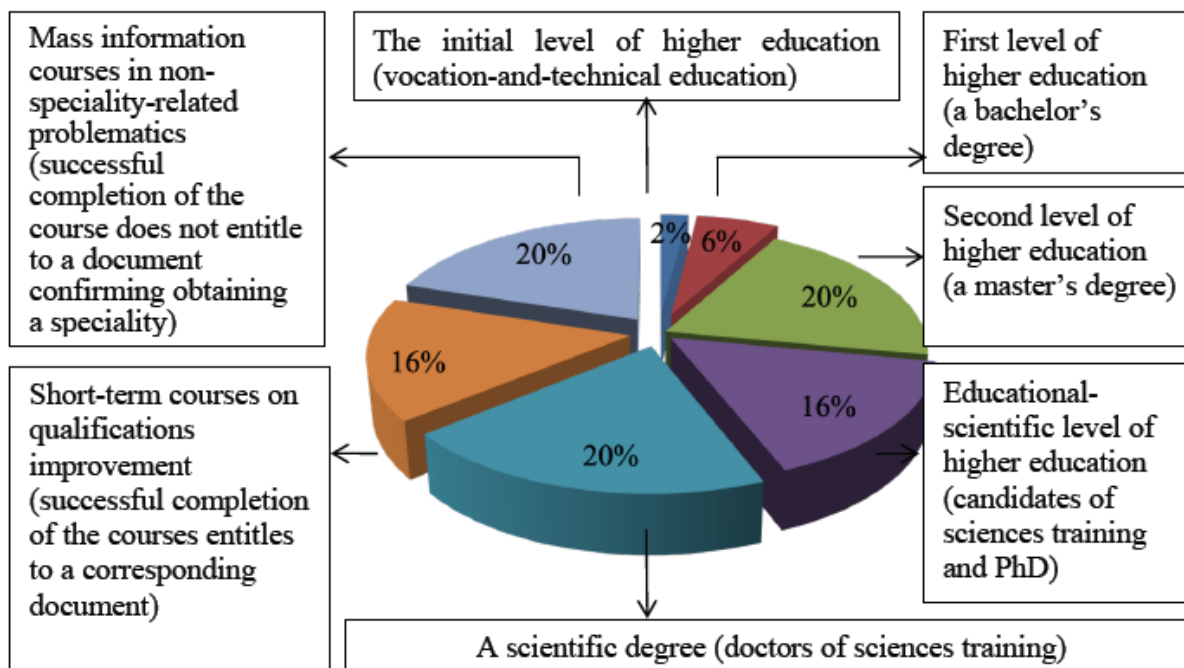


Figure 2. Efficiency of the distance training form application at different levels of higher education, as well as in the qualifications improvement system and mass information courses

On the results of the respondents' answers as to the expected efficiency effect of applying the distance form of training at different levels of higher education makes it possible to formulate the findings that follow.

First, in the respondents' opinion, the distance form of education is the most efficient within the system of masters and doctors of sciences training, as well as in the system of mass information courses. This result is quite interesting relating to the higher education level (the respondents did not appreciate the efficiency of the distance learning at the initial and the first levels of higher education; neither they did for the PhD training system). Notably, the same efficiency values for each of the levels (20%) were demonstrated by the respondents.

Such a choice can be explained through the prism of cause-and-effect connections between the higher education levels, the volume and the significance of practical classes for obtaining a profession and the peculiarities in the stages of a person's socialization. For instance, the persons who obtain speciality at the initial and first levels of higher education are usually relatively young, and are not completely formed personalities. At this stage of their socialization, a person needs immediate and daily participation of pedagogues in correcting their behavior. It is next to impossible to ensure such (immediate) participation of pedagogues in the formation of a student's personality within the system of distance education.

Also, it should be noted that at the initial and the first stages of higher education, obtaining practical skills on speciality is one of the determinants of student's motivation for studying. The distance education potentials in forming practical skills on speciality are rather limited, therefore a comparatively low evaluation of e-learning's efficiency at these education levels by the respondents is quite reasonable.

The respondents' preferences presented above can also be explained through the prism of the topicality of the trainers' control. For instance, at the initial and the first stages of higher education, as well as at the PhD training level, the control of a student's or a postgraduate's activities is of considerable importance. At the master's and the science levels of higher education, the function of control gives way to the function of self-control by its impact on the trainee. The master's degree level is the final one for obtaining an education in professional training of a future specialist.

A similar situation is observed at the science level, which is also final in the system of training science and science-pedagogic personnel of the highest qualification. At those levels of education, which are final in a

separate cycle of specialists training, respondents evaluate the potentials of the distance form of education at the highest level. In other words, the distance form of education, in the respondents' opinion, is more efficient at the final stage of specialists training, that is, at the stage when the training communication object is quite a formed personality with an established values system and motivation constructs.

Second, the use of the distance form of learning beyond the system of higher education, despite the research initiators' expectations, was not evaluated by the respondents as highly as expected. For instance, the sum total significance of the "short-term qualifications improvement courses" and "mass information non-speciality-related courses" items scored 36% (16% and 20% correspondently). Such a result can be explained by mistrust of society (in this case, respondents) to the training process subjects. During the expert interview, it was established that the prevailing majority of the experts identifies "short-term courses" and "mass information courses" with organizations non-related to the training process. There is a situation when the respondents perceive studying at "courses" not as the principal mechanism of raising qualitative characteristics of their professional potential beyond the university education system, but as a source of satisfying an interest. At the same time, the authors have to ascertain the fact that more than one-third of respondents (36%) awarded the maximum effect of the distance form of learning precisely to the extra-university education environment.

Considering the aforementioned, the authors can ascertain the fact of the readiness of students to accept the distance form of obtaining a speciality as the chief mechanism of forming qualitative characteristics of their professional potential within the system of masters and doctors of sciences training, as well as in the mass information courses system.

The results of analyzing the respondents' answers by the third item are given in Figure 3.

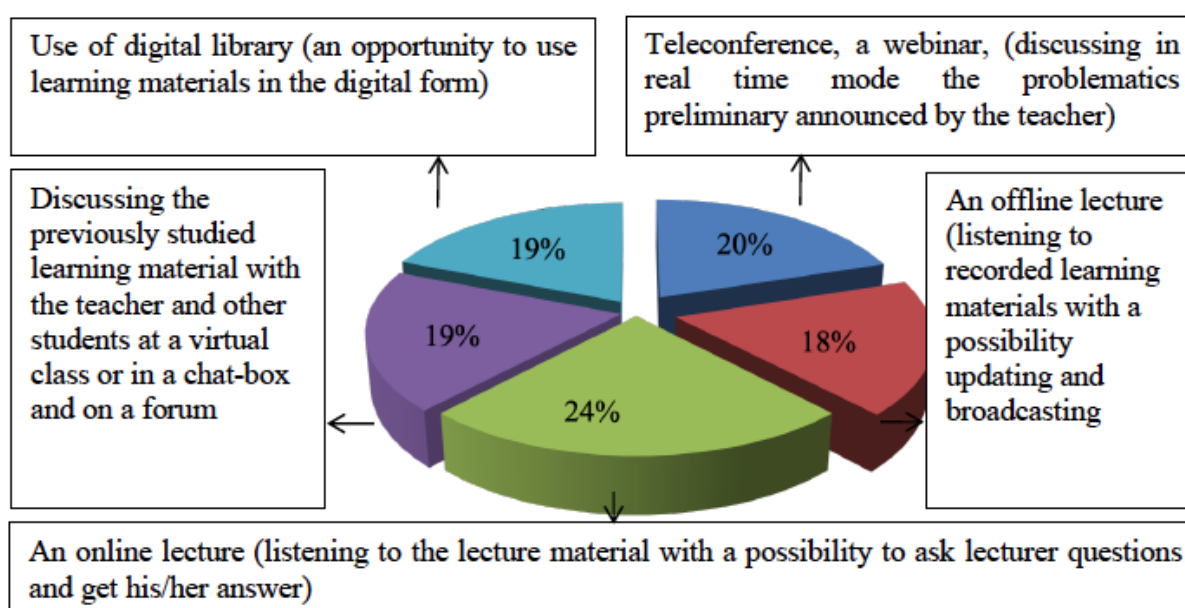


Figure 3. Efficiency of using the distance learning instruments by subjects of training communication

On analyzing the respondents' answers considering evaluation of the efficiency of using the main instruments of distance learning by training communication subjects, it is possible to formulate the following generalizations.

First, the most efficient instrument of the distance form of learning in students' opinion is the online lecture with the possibility of further communication with the teacher in real time after its finishing. Nearly one in five of the respondents (24%) evaluated precisely this instrument of distance learning as the most efficient tool. This result, on the one hand, turned out to be quite expected, for during the preliminary expert interviewing the students expressed this very idea.

On the other hand, this result somewhat contradicts to the commonly agreed ideas as to the most significant advantages of distance education. Among such advantages the scientists agree, among other things, on the ability for the student to choose individually the time for organizing his/her learning process. For instance, V. Yu. Bykov in his characteristic of distance education accentuated on its ability to adapt the training process to the needs and abilities of the training communication objects. In the scientist's opinion, this advantage of the distance education is disclosed through its ability to ensure delivering the learning materials at a convenient time for a student and at a convenient for him/her place (Bykov, 2008).

This advantage is of utmost significance for those students who combine their training at a higher education institution with professional activity. The controversy between students' awarding maximum scoring to such an instrument as "an online lecture with a possibility of asking the lecturer a question after the lecture" as the one that ensures higher education quality as opposed to such a criterion of distance education as "an ability for a student to choose the time of training individually" can be explained by the category the respondents pertain to. The prevailing majority of the students involved in the polling were obtaining higher education at the full-time form of education, therefore their responses to the questionnaire were chosen from the point of their own experience of using the distance learning instruments for studying only separate topics or academic disciplines. In other words, the prevailing majority of respondents did not have the experience of combining the study at a higher education institution with professional activity, therefore taking into account the factor of a student's choosing time and place of learning was not reflected in the respondents' answers.

Second, by students' evaluation, nearly the same efficiency level in ensuring the quality of the distance higher education was given to such instruments as teleconference in the form of real-time discussing the topic previously announced by the teacher (20%), discussing of the previously studied learning material with the teacher and other students in a chat-box and (or) at a forum (19%), and the use of digital library (19%).

Nearly the same significance level of these two first instruments of ensuring the education process quality at the distance form of training can be explained by their dialogism, that is, their ability to correspond to a student's communicative need. According to the researches by J. Collins, M. Hammond and J. Wellington, the distance education influences negatively the dynamics of forming communicative skills in students and decreases their socializing level (Collins, Hammond & Wellington, 1997). It is most probably that this very fact was the reason for the respondents' evaluating the significance of the instruments in question at quite a high level.

The smallest potential scoring in ensuring quality of the distance education according to the respondents' evaluation was awarded to an off-line lecture (18%). This result turned out to be unexpected for the research organizers, for in the course of holding preliminary expert interviews, the students expressed their support for this instrument, at least as one of the most efficient instruments. At the same time, the students' opinion concerning a comparatively small efficiency of the use the instrument of offline lectures by the participants in the distance learning can be explained by the principal disadvantages of distance education. For instance, V. Arkorful and Nelly Abaidoo have determined the absence of communication between the education process participants as one of the most significant factor by its impact on the quality of education (Arkorful & Abaidoo, 2015). The use by the training communication subject of an offline lecture as the distance education instrument does not provide for a possibility of obtaining the explanations of the learning material, which are attainable when using other instruments (online lecture, teleconference, webinar, etc).

Third, in the case when the distance education instruments, offered for students to evaluate, are conventionally subdivided into the three classification groups by the criterion of their technological difficulty in using, it will be possible to speak of the existence of a certain difference in their significance levels within the system of ensuring quality of higher education.

To the group of accessible instruments of distance education by its technical-and-technological complexity of using them (the first classification group) can be referred the off-line lecture and the use of a digital library. These methods, despite the need in preliminary digitalization of learning materials and preparing the medium for storing and using them, are comparatively simple. To make a video recording of one's lecture and to ensure access to it is not difficult for a teacher even beyond the web-resources of a higher education institution. We certainly can speak of the quality of a video recording made by a teacher or of the presentability level of the end-product, but all these issues are somewhat beyond the issue of technological

complexity and pertain to the quality criterion in its pure sense. Omitting a discussion concerning the issues of mutual connection between the technical-and-technological complexity of using a product and its end-quality, for this topic deserves a separate study, the authors will draw attention to the fact that the significance of the distance education instruments included in the first group was evaluated by students at 37%.

To the second group of comparatively accessible by their technical-and-technological complexity level instruments of distance learning can be related the learning material discussing in a chat-box or on a forum. Prior, the authors have drawn attention to the fact that students had evaluated the significance of this distance-learning instrument for ensuring the quality of higher education at the level of 19%.

The use of this instrument requires the availability of the so-called interaction field wherein the communication between the training process participants takes place. The forming and registration of such an environment, as well as moderating its use requires additional attention on the part of the teacher and (or) the tutor. Unlike the group of distance education instruments classified by the authors to the first group, a discussion in a chat-box or on a forum cannot be conducted without participation of the training communication subjects. Teachers (tutors) should constantly take care of administrating the forum's and (or) chat-box' operation and take measures of maintaining its topicality and content on a high level. At the same time, the use of this instrument enables recording and analyzing students' activeness in discussing these or other issues, which in its turn raises the level of control of students' learning activity.

To the group of the distance education instruments with a high complexity of use (the third classification group) can be referred a teleconference and a webinar. According to the respondents' evaluation, the sum total significance of these instruments of ensuring the quality of the distance higher education equals 44%, which is the largest by its value indicator among the classification groups.

The use of the third classification group instruments is the most complicated, for it supposes organizing a real-time interactive communication. In addition, the use of this instrument requires a simultaneous presence of the training communication participants in the virtual environment in real time. Technical support of this process is beyond the competencies of teachers (the efforts of one teacher for using these instruments is not enough) and requires resource support of the IT-subunit of a higher education institution. In other words, the use of the third classification group instruments of distance education is only possible on condition of coordinated concentration of the potentials of the training communication participants and representatives of the university IT-subunit in real time. Doubtless, such coordination of efforts and means within just one instrument of distance education is quite a complicated direction in the training process organization.

Therefore, considering the level of their technological complexity, the distance education instruments influence its quality rather differently. The most influential of them are the most complicated to be used in the training process. The research of the cause-and-effect connection between the complexity level in the distance education instruments applied by a teacher and the quality of the competencies formed in students through them is somewhat beyond the limits of the studied issue, therefore it should be considered as another direction of scientific research.

Fourth, if the distance education instruments offered for students' evaluation can be conventionally subdivided into two classification groups by the criterion of the mode of their use (the instruments of online and offline use), it will be possible to state the fact of their different significance in the quality ensuring system of higher education.

To the distance education instruments with the online mode of use, one can refer a teleconference, an online lecture, and learning material discussion in a chat-box or on a forum. The sum-total value of these instruments' significance in ensuring the distance education quality was evaluated by students to be 63%. This result decisively attests, on the one hand, to the predominance of the communicative component in the training process, and, on the other hand, to a subconscious desire of students to minimize the disadvantages of distance education. For instance, such a disadvantage of the distance education as the absence of a possibility for a student to obtain teacher's commentaries and explanations concerning the presented material or to quickly obtain answers to the arisen questions (Santana de Oliveira, Penedo & Pereira, 2018) can partially or even totally be overcome as a result of a teacher's using online instruments.

The sum total significance of the influence of the distance education instruments used in offline mode (offline lecture and the use of a digital library by a student) equals, according to the respondents' answers, 37%. Such a significance of these instruments' influencing the quality of distance education is not the dominant one but, at the same time, quite substantial. The use of these instruments in the training process augments such advantages of the distance form of training as flexibility (the absence of a rigid time-table of classes and the ability to choose a convenient schedule), and its availability (unlimited in time and the number of repetitions accessibility of the material) (Santana de Oliveira, Penedo & Pereira, 2018).

Fifth, if the distance education instruments offered for students to evaluate are conventionally subdivided into two classification groups by the criterion of being used individually or by a group, it will be possible to speak of the existence of a certain balance between their significance levels in the system of ensuring the quality of the distance higher education.

The individual mechanism of the material assimilation at the distance form of training supposes a student's listening to (or watching) offline lectures and using a digital library. On condition of abstracting from the need in students' participating in discussing learning material after teleconferences and online lectures, these instruments can also be included to the group of the individual materials assimilation instrument. The group instruments of material assimilation at the distance form of education presume discussing the learning material during teleconferences (webinars), online lectures, and during communicating in a chat-box or on a forum.

Prior, the authors have drawn attention to the fact that separate instruments from this classification group, namely a teleconference (webinar) and an online lecture are positioned equally in two classification groups simultaneously, and therefore the significance of each of them for ensuring the quality of higher education cannot be evaluated correctly. Despite the need in perceiving the instruments of the individual and the group mechanisms of obtaining knowledge within one complex in distance education, it is still possible to speak of a certain disproportion between the mentioned groups of the distance higher education quality ensuring instruments. On condition of abstracting from the numerical expression of this disproportion, it is possible to state that collaborative learning is more significant, and consequently, more efficient for the distance form of higher education.

Sixth, if the distance education instruments offered for students to evaluate are conventionally subdivided into two classification groups by the criterion of the purpose for re-translation of theoretical knowledge versus formation of practical skills, it is possible speak of a disproportion between the levels of their significance for ensuring the quality of the distance higher education. This disproportion cannot possibly be demonstrated through a numerical expression. It is complicated not only because of simultaneous positioning of some of the distance education instruments in two classification groups, but also due to actual limitations of distance training in practical skills formation.

As researches have demonstrated, not all education programs and academic subjects can be taught with using the distance form of training (Arkorful & Abaidoo, 2015). For instance, in the list of branches of knowledge and specialities, there are those training for which requires physical presence of a higher education student at doing certain tasks (doing practical work on certain equipment; personal participation in controlling technological processes, etc.). It is difficult to imagine a doctor, a pilot, or a fire fighter whose training was conducted by means of solely the distance training instruments.

Nevertheless, such assumption should not be perceived as a categorical negation of the place and the role of distance education in the formation of practical professional skills in future specialists, for there are so-called simulators and virtual training equipment for preparing specialists in the mentioned specialties. These simulators can certainly be applied without physical presence of students at a specialized laboratory or in a room with training equipment. In other words, distance education possesses certain potential in forming practical skills in specialists-to-be, but the efficiency in utilizing its instruments in the training process is quite limited. Therefore, it is possible to assume that the use of the distance education potentials is more justified in those branches, training for qualifications of which does not require forming and development of practical skills.

Going back to the established classification groups, the authors propose to consider a possibility of their conventional filling in. The conventionality of inclusion of the distance education instruments to this or

another classification group is connected, first of all, with the fact that any of the distance education instruments possesses a rather limited potential in practical skills formation, and, consequently, the classification that follows is a separate case. To the group of theoretically directed instruments were included off-line and online lectures, as well as using a digital library. To the group of practically directed instruments were included a teleconference and discussing of the learning material in a chat-box and (or) on a forum. Despite the conventionality of the offered classification and insufficient precision of referring certain instruments to the classification groups, it is possible to speak of a greater significance level of the theoretically directed instruments.

When interpreting the conclusions formulated above should be noted, that “The attitude towards the distance education and its quality” survey was conducted before the COVID-19 pandemic and the forced transition of most of higher education institutions to the distance mode of operation. Despite this, the formulated above conclusions have certain practical value not only for characterizing the normal mode of higher education institutions’ operation but also to characterize the conditions of the enforced utilizing of the distance form of training exclusively. On analyzing these conclusions, the authors propose the following recommendations on the use of distance education instruments under the conditions of enforced transition of higher education institutions exclusively to the distance form of receiving / passing knowledge in the training process, namely:

- the most efficient of the distance education instruments for students who under normal conditions had studied in the face-to-face mode is an on-line lecture and a teleconference. The use of these very instruments ensures a so-called live communication between the training process participants and facilitates students’ adapting to the new conditions of an education program realization;
- among the distance education instruments, the most efficient ones from the perspective of the quality of training activity and that of higher education are those that provide for organizing of training communication between a teacher and students in real time (a webinar, an on-line conference, etc.);
- the individual and the group mechanisms of knowledge assimilation possess the same potentials in forming professional competencies in future specialists, therefore they should be applied by a teacher in their inseparable dialectic connection, that is in complex;
- the use by a higher education institution of these or other distance education instruments should take place with taking into account their material, technical, and personnel resources on the one hand, and the level of students’ technical and psychological readiness to use the distance education instruments;
- the lack in the prevailing majority of both teachers and students of skills in using information technologies, as well as psychologic discomfort from being under new conditions of training organization should be taken into account by both teachers when organizing current and final assessment of students’ knowledge, and the university administration when taking managerial or personnel decisions or on issues of expelling students for poor academic performance.

The above-formulated recommendations are not exhaustive and more can be added on the results of further researches that will be conducted following the higher education institutions’ returning to normal conditions of their operation.

CONCLUSIONS

Considering the findings stated above, as well as the results obtained by the authors in the course of solving other tasks of the “Attitude towards the distance education and estimating its quality” survey and left beyond this publication (due to the limits in the volume of the publication), it is possible to formulate the conclusions that follow. These conclusions are based on the results of analyzing the answers of 527 respondents to some of the questions of the “Attitude towards the distance education and estimating its quality” questionnaire; the students’ opinion, expressed by them in the course of pilot interviews, was also taken into account.

1. The prevailing majority of students are interested in a possibility of using the distance form of learning for obtaining professional knowledge and developing competencies both as the principal means of obtaining a speciality, and as an additional instrument in studying separate modules and (or) academic subjects.

Due to the absence in the national (Ukrainian) higher education institutions of sustainable traditions in realizing of education programs by means of the distance form of training, the most attractive for students is the second direction in the use of distance education, namely the use of its instruments for studying separate modules and (or) academic subjects. This interest may be put in the foundation of strategies development of both national higher education institutions (for instance as the direction of raising their competitiveness level) and those foreign universities that intend entering the education services market of Ukraine. When building up such a strategy, the higher education institutions' administrations should take into account that society does not demonstrate a high level of trust to the results and quality of the distance higher education.

In order to popularize the distance form of training among the applicants and higher education students, the universities interested in raising the level of their presence in the world education services market in general and in the Ukrainian one in particular should offer to potential consumers financially inexpensive and short-term education courses with the use of the distance education instruments. Getting a positive experience of using the distance form of education in such training courses by consumers of education services will enhance, on the one hand, the raise in the level of trust to distance education, and, on the other hand, it will influence beneficially the image of an individual higher education institution.

2. The distance education instruments are quite diverse, and therefore they need certain classification. The classification of methods can be made:

- by the technical-and-technological complexity criterion (accessible and comparatively accessible by their technical-and-technological complexity level instruments, as well as high-complexity-level instruments);
- by the mechanism of obtaining knowledge criterion (the instruments of individual and group use);
- by the criterion of the purpose of use (the instruments for re-translation of theoretical knowledge and forming practical skills), etc.
- The given list of classification groups is not exhaustive, so it can be supplemented by further scientific research. The significance of each of the classification group for distance education quality ensuring is different. The numerical expression of this significance is not always possible, for some of the distance education instruments are positioned simultaneously in several classification groups. At the same time, it is possible to speak of a possibility of comparing the instruments' significance between one another, that is, without attributing them to any specific classification group.
- Therefore, the distance education instruments can be ranged by their level of significance for ensuring quality of the higher education in the following way (in the order of the significance level decrease for each instrument):
- an on-line lecture (listening to the lecture material by the student with a possibility of asking questions to the teacher and get the answer in real time);
- a teleconference and (or) a webinar (discussing by the training communication participants of the previously announced problematics in real time);
- discussing of the learning material in a chat-box and (or) on a forum;
- an off-line lecture (listening to the previously recorded lecture material with unlimited number of repetitions).

Despite the variety in the online mode instruments, it should be understood that their potentials for ensuring quality of higher education have certain limitations. Among such limitations, noted by the students involved in the expert interviews, is the unstable quality of the communication channel (technical imperfection of equipment and situationally low speed of the internet connection). Contrary to this, the experts highlighted the high quality of the content offered in the off-line regime. So, the teacher's choice of this or other instrument of distance learning to be used in the training process should be determined by not only its significance level for ensuring quality of higher education, but also by the ability of using the chosen instrument's potential in specific conditions of realizing the education program.

In other words, before starting a distance-training course, a representative of the IT-subunit of a higher education institution should obtain and estimate the information on the quality of the communication channel between the teacher and the student. Availability of such information will enable a teacher to select the most expedient distance education instruments to be used in specific circumstances. The substantiated selection of the distance education instruments will enhance raising its quality.

3. Prior to the beginning of applying the distance form of learning, as well as the use of the information-and-communication technology potential within separate courses or academic subjects, the applicant's motivation level and his/her personality type and behavior peculiarities should be established. The availability of the information on the personality type of an individual applicant will enable teachers to take into consideration the peculiarities of his/her world-view and to place them into such an academic group, where training is maintained with predominant use of the offline or online instruments of distance education.

Determining an applicant's personality type to be considered in the training process will certainly be expedient on condition that a higher education institution is able to form at least two academic groups with different modes of the distance learning instruments application. Establishing the personality type of an applicant who has expressed their wish to obtain a higher education by means of information-communicative technologies, as well as determining their motivation level to use the distance education instruments can be made during the applicant's submitting their documents needed for enrollment to the higher education institution. Among the possible instruments to be used for determining the motivation level of an applicant and their personality type are testing, interview, expert interview, etc.

If these instruments could be integrated within a combined mechanism, for instance a higher education institution getting acquainted with an applicant could be supplemented with the diagnostic means by the university's IT sub-unit to establish an efficient interaction channel with a student-to-be. IT workers could establish the speed of the internet connection and clarify the capability of the applicant's technical equipment to ensure efficient use of the distance training instruments.

Among the most perspective directions in organizing further scientific research in this area, attention should be paid to those related to a detailed study of the content of the mechanism of acquaintance with an applicant willing to use the distance form of learning to obtain a higher education.

The conclusions formulated on the results of analyzing the interviewing of students are of considerable significance for improvement the management system of higher education sphere under conditions of the COVID-19 challenges. Among the perspective directions of improving the mentioned system are the following:

A. At the organizational (university) level:

- in order to raise the teachers' readiness to apply the distance education instruments in the training process, the authors propose to consider a possibility of stimulating them by university administration to raise their qualification in theory and practice of applying information-and-communication technologies for receiving / passing knowledge. Besides, the competencies in the use of the distance education instruments can be included by a university administration to the list of competition requirements when announcing a vacancy for science-and-pedagogic positions;
- in order to raise a higher education institution's readiness for applying the distance form of training, the authors offer to include to its development strategy the tasks that provide for establishing a university IT unit and its material-and-technical development. Operation of such a unit within the structure of a higher education institution will ensure, on the one hand, methodological support of using the distance education instruments and, on the other hand, it will raise the quality of education activity;
- for the training process participants to attain positive experience in the use of information-and-communication technologies in training process organization, the authors propose to consider a possibility of introduction and realizing the policy of e-administration at a university. Implementation of such policy will result in students' and teachers' having a possibility of not only experiencing the advantages of computerized interaction, but also of gaining skills in using it in everyday life;

- in order to ensure education activity quality under enforced application by higher education institutions of the distance training form, the authors propose to consider a possibility of using those distance education instruments that provide for real-time communication of the training process participants. The so-called live communication will, on the one hand, raise the quality of students' assimilating learning material (as mentioned above) and, on the other hand, it will make a positive impact on students and teachers' psychological state. The human need in communication increases sharply when restricted and has to be taken into account when organizing distance training;
- in order to create a friendly and efficient education environment at a higher education institution, especially during the period of its enforced transition to the distance education, the authors propose to consider an opportunity of organizing and improving on-line work of each structural unit of a university and of its every employee. Introduction of short-term and possibly not financially burdensome courses on development of these or other professional competencies can become the mechanism of fulfilling this proposition. Creation of the atmosphere of involvement in the university community along with the training process participants' gaining additional professional skills (after attending of virtual attending courses) will facilitate, on the one hand, corporation culture development and a raise in the unity level of the training process participants. On the other hand, it will ensure a raise in quality of a university activity and quality of higher education in general.

The directions in improving the management system of higher education sphere at the organizational (the university) level should be perceived through the prism of the place and the role of a university institution in enhancing development of a person, an organization, a state, and a society.

B. At the state (national) level:

- in order to ensure sustainability of a state's human capital development, as well as to ensure its citizens' security in the time of risks of uncontrollable spread of infectious diseases, the authors propose to provide for a norm to be included into the state accreditation system of education programs on a possibility of training in the distance mode. In other words, every education program offered by a higher education institution should provide for a possibility of organizing the training process both in the face-to-face and in the distance mode;
- in order to ensure development of theoretic-and-methodological foundation for the distance education system's operation, the authors propose to consider a possibility of providing grants by the state for science institutions to conduct researches in corresponding directions. As a result of such researches there should be developed models of organizing distance education adapted to the traditions of higher education system's operation in Ukraine, as well as recommendations concerning their efficient application;
- in order to ensure universities' readiness for a rapid transition to the use of the distance education form, the authors propose to consider a possibility of including to the programs of highly qualified specialists' training (PhD programs) the elements which would enable forming competencies in the use of information-and-communication technologies in future teachers at higher education institutions;
- in order to popularize the distance form of learning with pupils and students youth and as a result to raise the level of their readiness for using the distance learning instruments, the authors propose to consider a possibility of institutionalizing the norms as to obligatory realization of some elements of education programs or their separate modules in the distance mode;
- in order to encourage higher education institutions to use the distance education instruments in the training process, the authors propose to consider a possibility of introduction of a state program for support of the corresponding initiatives. Among the instruments of realizing such a program might be state subventions for purchasing equipment and software for applying information-and-communication technologies. The results of using such subventions will secure for the state the stability of its higher education system in case of challenges like COVID-19, while universities will be able to raise their readiness for using the distance training instruments

(development of simulators for each program of specialists training, renovation of computers and multimedia equipment, obtaining licensed software, and so on).

The directions of improving the higher education management sphere at the state level should be perceived through the prism of their indirect influencing a raise in the national security level. The relation of the distance education issues to the national security problematics is one of perspective directions in organizing further scientific research.

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