## E-learning

Vol. 14

E-learning
in the Transformation
of Education
in Digital Society

University of Silesia in Katowice Faculty of Arts and Education Sciences in Cieszyn

## E-learning

Vol. 14

# E-learning in the Transformation of Education in Digital Society

Monograph

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# EDUCATION IN THE CONDITIONS OF PANDEMIC AND WAR: UKRAINIAN STUDENTS' REPRESENTATIVE OPINIONS

## Nataliia Klishevych<sup>1</sup>, Roman Pavliuk<sup>2</sup>, Vadym Sulitskyi<sup>3</sup>, & Tetiana Liakh<sup>4</sup>

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**Abstract:** The article deals with the results of the study of students' attitudes to distance learning in the conditions of a pandemic and martial law in Ukraine, the impact of distance learning on the quality of educational services and internships at the Institute of Human Sciences. The study helped to recognise the achievements, identify problems and improve the organization of the educational process at the Institute of Human Sciences during the pandemic and martial law; to analyse the quality of educational services and take into account their suggestions in preparation for the new academic year; to improve students' internships by providing suggestions to heads of internship bases. The main results of the study are formulated in Conclusions: the quality of education does not depend on the forms of teaching, but depends on the scientific and methodological support of educational disciplines by teachers, their use of the latest forms and methods of teaching, compliance of the content of the topics under consideration with modern trends and events taking place in the world; distance learning is perceived by students as a temporary inconvenience, to which they have successfully adapted thanks to the opportunity to work using e-learning courses and use various Internet platforms for communication with teachers and colleagues; internships in various social institutions contribute not only to the formation of students' certain practical skills and abilities, but also positively affect the formation of their general and special (professional) competences; practical orientation training and the policy of student-centeredness give positive results and make students competitive in the labour market in Ukraine; the pandemic and the state of war (martial law) in the country have made students more responsible, independent, patient, and tolerant.

**Keywords:** pandemic; martial law; e-learning; quality of educational services; student; teacher; internship.

#### INTRODUCTION

The relevance of the study is due to the global COVID-19 pandemic and the adaptive quarantine on the territory of Ukraine, which has been in force since March 12, 2020. Due to quarantine restrictions, the education sector required correction and numerous changes in its work to ensure that the quality of educational services was at a high level. A new test for modern education was the full-scale military invasion of Russia into Ukraine on February 24, 2022. According to UNICEF, (UNICEF, 2022), more than 11.3 million people left their homes in the first month of the war. More than 4.2 million people left Ukraine to seek refuge in other countries. The number of internally displaced people reached 7.1 million. On February 25, 2022, the Ministry of Education and Science of Ukraine recommended that higher education institutions suspend the educational process for security reasons. Starting from March 14, 2022, the educational process in most regions of Ukraine will be resumed in a remote format. Given the new challenges, the priority in the educational process was to improve existing and introduce new distance learning tools. In the organization of the educational process, the main task was the maximum focus on the needs and abilities of students.

Recent studies on the peculiarities of the organisation of the educational process during the pandemic confirm the effectiveness of using e-learning courses, distance technologies, taking into account the characteristics and capabilities of both students and teachers; peculiarities of communication during the distance learning format; creating conditions for maintaining mental health, reducing stress, etc.

#### LITERATURE REVIEW

Thus, it is important during the COVID-19 pandemic to analyse the specifics of the formation of competences of education recipients through distance learning. In particular, the research of Pavliuk and Liakh (2019) is devoted to the study of approaches to the formation of ICT competence of future social work specialists in higher education institutions; Liakh et al. (2021) studied the peculiarities of the formation and development of the professional competences of social workers in the conditions of distance learning.

The challenges and needs of education providers during the pandemic and military conflicts were studied in different countries: Morze and Varchenko-Trotsenko (2021) in Ukraine; Cuaton (2020) in Philippines; Matsuoka (2021) in Japan; Yang (2020) in China, etc.

Heasly and Iliiko (2022) emphasize the need to develop new tools for distance education, to form graduate employability skills.

According to Muzaffar et al. (2021) e-learning in higher education has grown significantly over the last decade due to its inevitable benefits in critical situations such as natural disasters (e.g., the COVID-19 pandemic, etc.) and military circumstances.

Incorporating digital citizenship into online experiences has proven to be a positive response to COVID-19 to provide a safe and flexible learning environment through advanced technology (Akcil & Bastas, 2021).

In this context, universities should be a reference point in shaping and preserving public health (Quinn et al., 2021).

Higher education is considered an important tool for the general development of any country. Researchers like Singh et al. (2021) point out that a good ecosystem in terms of political will, visionary leadership, fair budget, good infrastructure and a good teaching community are among the basic requirements for higher education to move towards new and higher horizons.

The current state of digital education and prospects for the development of digital competences are presented in the studies of such scientists as Buinytska, Kobylin, Kuzminska, Mazorchuk. They emphasize that the sustainable development of the University is ensured through the creation of a modern digital educational environment (Morze & Buinytska, 2019; Kuzminska et al., 2020).

Thus, we faced the need to study three aspects of the impact of the pandemic and the war on the distance learning of students of the Institute. We face the following questions: How did the pandemic and martial law affect the quality of student learning? How do students feel about distance learning during the pandemic and martial law? How to organize internships during distance learning? We hypothesized that distance learning affects the quality of student learning during a pandemic and martial law. We needed to find out whether this process had a positive or negative impact.

#### 1. COMMON ACHIEVEMENTS, PROBLEMS AND WAYS TO IMPROVE THE ORGANIZATION OF THE EDUCATIONAL PROCESS AT INSTITUTE OF HUMAN SCIENCES

We have developed e-questionnaires on three main issues: a survey that will help to recognize our common achievements, identify problems and improve the organization of the educational process at the Institute of Human Sciences; a survey on the analysis and improvement of the quality of educational services provided by the Institute of Social Sciences; a survey on the students' internships.

All questionnaires were offered to students by filling out a Google form and sent to the corporate mail. The surveys were designed in such a way that the questions touched upon all aspects of the educational process and issues that can affect the quality of student learning. To test the hypothesis, we used mathematical statistics methods to process the results and compare the data.

Students were required to carefully fill out and honestly answer all items of these questionnaires. To achieve real results, the survey was anonymous. All responses were processed automatically. The study was conducted from June 2021 to June 2022. The survey involved 97 students enrolled in the following study programmes: Psychology -11.3%; Practical Psychology -40.2%; Social Work -10.3%; Social Pedagogy -16.5%; Speech Therapy -21.6%. Among them: 79.4% studied full-time, and 20.6% - part-time.

The gender picture of the survey is the following: women -84.3%; men -15.7%. This is due to the fact that in Ukraine these specialties are considered more female, and men are less willing to study in these study programmes. The obtained data correlate with the results of the admission of female and male students to the Institute of Human Sciences (mean statistical error  $\pm 0.002$ ).

Thus, the results of the survey represent the opinion of students of all areas of professional training carried out at the Institute of Human Sciences.

The survey, which helped to recognize common achievements, identify problems and improve the organization of the educational process at Institute of Human Sciences during distance learning, included 12 questions. We received the following data:

- 1. How satisfied are you with the results of your studies in the chosen educational programme (1 dissatisfied, 5 maximally satisfied)?
- 58.8% of students are maximally satisfied with the results of their studies in the chosen educational programme; 33% are satisfied; 5.2% are more satisfied than not, 3.1% are more dissatisfied than satisfied (see Figure 1).

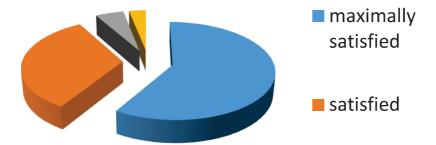


Figure 1. Distribution of respondents' answers to the question about satisfaction with studying in the chosen educational programme

Source: Own work.

Dissatisfaction with the results of studies in the chosen educational programme is explained by the large number of tasks that students need to complete; lack of "live communication"; the need to spend a lot of time at the computer. It should be noted that our university has e-learning courses in all disciplines to ensure the educational process, there are e-learning courses in all disciplines of any educational programme. They are developed in accordance with the working programmes of the academic disciplines and undergo appropriate professional certification in order to provide students with scientific and methodological materials for the courses they study. Electronic training courses include lectures, seminars, practical tasks, independent and module tests. In addition, each type of lesson has deadlines, methodical advice, a visual component, and reasonable and understandable requirements and evaluation criteria. In the e-learning course, the percentage of the workload of each student is monitored and the electronic system of evaluation and calculation of points in the register are monitored. Thus, it was e-learning courses during the pandemic and the transition to distance learning that allowed students to master the educational programme well. E-learning courses have become a tool to organize and conduct the educational process during the war, since students can work and complete tasks in the e-learning course from any corner of the world.

- 2. Rate the modernity and practical orientation of the educational programme (1 does not meet modern trends), has no practical orientation, 5 fully meets modern trends, has a practical orientation):
- 63.9% of students recognized the modernity of educational programmes and their orientation to practice; 26.8 believe that most of the educational disciplines they studied have modern content and are practically oriented. At the same time, 7.2% of students said that they lack a practical component in their studies. They explain this by the lack of an opportunity to do something on their own. It should be noted that during distance learning, the following types of online classes became popular among students: webinars with leading practitioners; master classes for employees of public and state institutions on a particular type of activity in a particular sphere of life, guest lectures; webinars, etc. Thus, students had the opportunity not only to acquire certain scientific knowledge in academic disciplines, but also to see and independently practice their skills during practical activities. For example: a webinar on combating domestic violence helped students to get acquainted with methods and techniques of overcoming conflicts in the family.
- 3. Rate the level of mastering social skills (emotional intelligence; critical thinking; creativity; stress resistance; teamwork, etc.) in the learning process (1 low (non-competitive) level, 5 high (competitive) level). The results of the distribution of students' answers are presented in Figure 2.

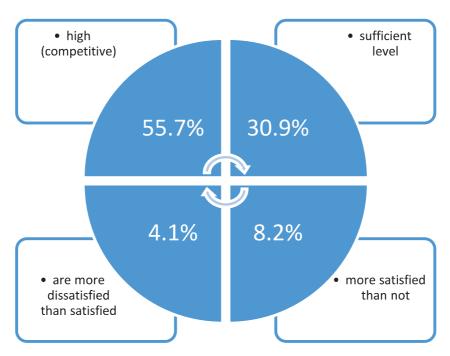


Figure 2. Distribution of respondents' answers on the level of mastery of social skills (emotional intelligence; critical thinking; creativity; stress resistance; teamwork, etc.) in the learning process

Source: Own work.

As we can see from Figure 2, 55.7% of students acknowledged that the level of their social skills is sufficient to ensure their high competitiveness in further professional activity; 30.9% – note their sufficient level in this area of training; 8.2% – believe that

they are more satisfied than not; 4.1% are more dissatisfied than satisfied. Students explain their dissatisfaction by the lack of prospects in the future, the randomness of the chosen specialization, low self-esteem. However, this can also be explained by the fact that dissatisfied students had high expectations, which, in their opinion, were not justified due to distance learning. Thus, distance learning did not significantly affect students' mastering of social skills, which significantly increase their competitiveness in further professional activities.

4. What information resources did teachers use for your online learning? Among the most common electronic information resources recognized by students, teachers used Hangouts (Google) Meet, Moodle (72.2%), ZOOM (11.3%), SKYPE, Telegram, Viber, E-mail, etc. (from 1% to 4.4%). It should be noted that no student named such an electronic resource as YouTube. At the same time, 1% of students identified that teachers use Instagram and Facebook. Thus, it can be concluded that teachers need to expand their own digital competence in order to use a greater variety of electronic information resources to improve the educational process. This will help to make classes interesting and useful. It is also advisable to use various platforms, for example – POWTOON, for students to practice practical skills when solving situational tasks.

The results of a study by Muthuprasada et al. (2021) showed that the majority of respondents (70%) are willing to choose online classes to manage curricula during this pandemic. Most students preferred using a smartphone for online learning. Through content analysis, we found that students prefer recorded sessions with a quiz at the end of each session to improve learning efficiency.

5. As we can see, the teachers conducted most of the classes in Moodle. Therefore, our next question was: "Is the Moodle platform easy to use for distance learning?" 68% of students noted the convenience of using this platform during distance learning and its provision; 25% – recognized partial benefits. Among other students, less than one percent did not use this electronic resource and chose another way (e-mail, Viber, Telegram, etc.) to communicate with teachers. These data correlate with the results presented in point 4. Among the disadvantages of the Moodle platform, students identified: lack of a modern interface, limited technical capabilities and functionality. 6. Is it convenient to use Hangouts (Google) Meet for online classes?

Students found this communicator convenient for online classes (88.7%); 10.3% – consider it partially convenient due to an unexpected technical failure during classes. As for 1% of students, they did not use this electronic resource and chose another way (e-mail, Viber, Telegram, etc.) to communicate with teachers. This fully correlates with the results obtained in point 4 and point 5.

Thus, we can conclude that the total involvement of students in distance learning is 99%. The results of our study partially coincide with the results of other researchers (Kuzminska et al, 2020).

7. Would you like to see elements of distance education used in the future for other students?

64.9% of students admitted that they would like elements of distance learning to be used in the future for other students; 28.9% – spoke in favour of partial use of this form of work with students; 5.2% of students are strongly against distance learning;

1% – noted that distance learning (even elements) will not be as effective as face-to-face meetings and field workshops. Thus, despite the preference among students to use distance learning in the further educational process, almost a third of them have doubts about the effectiveness of this form of education.

8. What do you think are the advantages of distance education?

Among the most common answers (100%) we have: convenience. I am always in touch with teachers and can complete assignments when it is convenient for me; it was easy to combine with work; studying at home saves time that is usually spent traveling to the university; comfort; learning in a quiet environment. Intermediate evaluation of distance course students takes place in the form of online tests. Therefore, students have less reason to worry. The possibility of subjective evaluation is excluded: the electronic system that checks the correctness of the answers to the test questions will not be affected by the student's performance in other subjects, his social status and other factors; individual approach. With traditional teaching, it is quite difficult for the teacher to pay the required amount of attention to all the students in the group, to adjust to the pace of work of each student. The use of distance technologies is suitable for organising an individual approach. In addition to the fact that the student chooses his pace of learning, he/she can promptly receive answers to questions that arise from the teacher: accessibility, mobility. Everything is in an accessible format (we can say that it is at hand in the phone). You can study anywhere; all you need is an Internet connection; easy assimilation of educational material. More free time.

Thus, among the advantages of distance learning, students highlight: comfort, convenience, accessibility, cost-effectiveness, peace of mind, objectivity of evaluation, mobility, communication.

9. What difficulties did you face and how do you propose to solve them during distance learning?

Almost 92% of the surveyed students answered that there were no difficulties. Among other answers (8%), we find the following statements: it is difficult to concentrate on subjects during distance learning; during the internship, I had to work remotely, because most institutions were closed for quarantine; additional supervision, webinars, online courses; when you were asked to turn on the camera and microphone at the beginning, and you are not alone in the room; communication difficulties during study; a lot of work at the computer; the difficulty adapting to the online learning format; difficulties associated with the need to master time management.

Thus, the disadvantages of distance learning can be divided into four conditional groups: organizational, technical, communicative, methodical.

Among the proposals made by students to improve distance education, the following should be highlighted: increase the number of English language classes; to reduce the amount of workload on students, to convert quantitative indicators of successful learning into qualitative ones; to change the evaluation criteria for individual disciplines; to optimize the teaching of academic disciplines; to improve the information technology competence of both students and teachers.

10. Was it more difficult to study remotely on 3–4 courses, compared to full-time study on 1–2 courses? (see Figure 3).

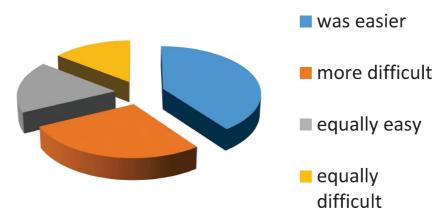


Figure 3. Distribution of students' answers to the question "Was it more difficult to study remotely on 3-4 courses, compared to full-time study on 1-2 courses"

Source: Own work.

Distance learning was easier for 37.1% of students than full-time. Among them are students who are used to constantly working and acquiring knowledge. For 25.8% of students distance learning was more difficult. This is mainly due to time management, problems with the organization of their own time. For 16.5% of students, it was equally easy to study both full-time and remotely. And for 13.4%, it was equally difficult to study both full-time and remotely. Among other answers, we see the following: at first it was difficult to adapt, but over time everything got better; it was difficult to study not because of distance learning, but because of the lack of face-to-face communication with teachers; it all depended on the number of tasks that had to be performed in academic disciplines; it was difficult emotionally.

We would like to highlight the words of gratitude from students to teachers for timely adaptation to changes and excellent organization of distance learning.

#### 11. Has the workload increased during distance learning?

The workload increased for 46.4% of students. This is due to the need for students to independently process a large amount of information, additionally attend guest lectures, take additional training courses on various educational Internet platforms. 37.1% of students believe that the workload during distance learning remained the same as during full-time classes; 13.4% noted that the workload has decreased. Students themselves explain this by the fact that teachers quickly adapted to the changes and made timely changes to the e-learning courses.

12. Please provide your suggestions for improving the educational process in the programme you studied.

Among students' suggestions, we came across the following: to pay more attention to practical tasks of theoretical issues considered during classes; to consider more practical aspects of specialists' activities through interactive forms of learning; to apply the latest technologies and teach students their use through assignments for practical work; additional teaching of academic subjects in foreign languages; to conduct more guest lectures, master classes, webinars by leading experts in various academic disciplines; to support the development of scientific media resources of the Institute of Human Sciences on popular Internet platforms.

Thus, the survey on the achievements, problems and improvement of the organization of the educational process at the Institute of Human Sciences during distance learning showed that students are generally satisfied. They have a personal opinion on how to improve and optimize learning. All their suggestions are taken into account in the organization of student learning in the next academic year.

## 2. ANALYSIS AND IMPROVEMENT OF THE QUALITY OF THE EDUCATIONAL SERVICES PROVIDED BY THE INSTITUTE OF HUMAN SCIENCES

We examined the attitude of students to distance learning at the Institute of Human Sciences. The next step was to study the question: "How did distance learning affect the quality of student learning?" We conducted a survey and received the following results:

- 1. To what extent were your expectations met after entering this educational programme?
- 44.8% of students answered that their expectations were fully met; 31% largely met; 17.2% found it difficult to answer this question; for 8% of students, their expectations were either not met or not met at all. As practice shows, students who express dissatisfaction chose a specialty following their parents' recommendations, for the sake of their friends' company, where there was enough passing score on the results of the evaluation of knowledge.
- 2. Among the advantages of studying at the Institute of Human Sciences, students highlight the fact that it is the best space for quality education; the availability of a real choice of educational disciplines of the elective block; taking into account the interests and needs of students; partnerships between teachers and students. The results obtained coincide with the data of the primary questionnaire, which determined the attitude of students to distance learning.
- 3. Among the shortcomings affecting the quality of education, students identify: too much legislation, sometimes complex legal documents; lack of distance learning in some educational programmes; distance learning format; unpopularity of certain educational programmes.
- 4. In your opinion, does the study programme allow you to sufficiently form or develop basic professional competences?
- 65.5% of students answered this question affirmatively; 27.6% rather yes than no; 6% rather no than yes. These data confirm and correlate with the results of points 2–4 of the previous survey, which allows us to conclude that the distance form of education does not significantly affect the quality of education, provided that the educational process is properly organized.
- 5. What disciplines, in your opinion, should be added to your educational programme?

Students gave the following answers to this question: development of social programmes; psychology and legal sciences; preferably more usual practice, rather than therapeutic, is desirable; management and personality psychology.

Analysing students' answers to the questions in comparison with item 3 of this survey, we see contradictions regarding the legislative and regulatory framework. On the one hand, they believe that there is too much such information, on the other hand, they believe that the educational process should be supplemented with legal disciplines. This is explained by different approaches of guarantors of educational programmes to the application of legal disciplines in the educational process of students. For example, the educational programme "Social Advocacy" requires the study of legislation regulating the provision of social services in Ukraine, and the educational programme "Speech Therapy" requires students to know the basics of legislation in the field of inclusive education and work with children with disabilities. 6. 93.1% of students recognized the educational space of the University as favourable for the success of their own studies. These students like to study under any conditions and circumstances. Communication skills in the educational space, learning and mastering new knowledge, skills, abilities and acquiring certain general and special competences that will help them to be competitive in further professional activities are important for them.

- 7. Almost 98% of students admit that the material and technical environment of the University has a positive effect on the success of learning and the quality of knowledge acquisition.
- 8. 96.3% answered the question "What exactly do you lack in the educational space and material and technical environment of the University?": "Offline mode. Because working in a group is easier than remotely." Here we observe a contradiction between the answers to this question and the results obtained in point 9 of the previous questionnaire. At the same time, students recognize the level of informational and organizational support provided to them by the guarantor of the educational programme and the administration in the process of studying a particular educational programme as sufficient (86.2%) and partially sufficient (13.8%). However, students lack the support of fellow students (90%). Thus, it can be concluded that students lack "live" communication with teachers and classmates. And this affects the "emotional background" of students' learning material, but does not significantly affect the quality of knowledge gained.
- 9. Students are completely or partially satisfied with the schedule of the educational process and the schedule of classes (97.3%). But there are also proposals and reflections on: changing senior students' courses to the second shift; quarantine conditions and wartime, which did not allow them to fully enjoy full-time education; increasing the duration of breaks between pairs; early transition to face-to-face education.
- 10. Evaluate the volume of the main types of your workload while studying in the educational programme: the volume of classroom hours is optimal (9.4 points out of 10); the amount of independent work is optimal (9.7 points out of 10); the volume of practical classes is optimal (9.34 points out of 10); the time allocated for coursework is optimal (9.12 points out of 10).

Thus, students recognized that the amount of workload is optimal for distance learning. This is different from the data obtained in point 11 of the previous survey, which indicates a positive attitude of students to learning despite the fact that during distance learning, almost half of them indicated that the study load increased. At the

same time, the students suggested that the time for coursework preparation should be freed from a large number of classroom classes.

- 11. From which sources do you learn about the programme learning outcomes, content, goals of the educational programme (choose all the answer options that correspond to your experience): educational programmes -86.2%; work programmes of academic disciplines -58.6%; at the beginning of the study of the academic discipline -72.4%; presentation of the educational programme -44.8%; reported by the leader or classmates in a joint conversation -3.4%
- 12. It should be noted that students participate in the work of scientific circles, but wish that the work in this direction was more active (82.6%). This also applies to academic mobility programmes for students. At the same time, they acknowledge their awareness of competitions, international exchange programmes, grant offers (98%). They receive this information from teachers, the university website, electronic publications (96.3%). Among the reasons why students do not participate in academic mobility programmes, students most often mention lack of time; insufficient knowledge of foreign languages; do not want to change something in their own lives. Thus, students have the opportunity to use and participate in academic mobility programmes, but due to self-doubt or unwillingness to leave the "comfort zone", low self-esteem, they do not want to do it.
- 13. One of the priority activities of university teachers is the formation of students' knowledge of academic integrity during their studies. 97% of students know and use the basic principles of academic integrity in the educational process. Students are informed about the algorithm of actions in cases of sexual harassment, corruption, discrimination during studies (89%).
- 14. Satisfaction with the quality of education at the Institute of Human Sciences is confirmed by the fact that 93.1% of students recommended others who wish to enter bachelor's and master's programmes to study at the educational programme they are studying.
- 15. Students are satisfied with the level of communication with the guarantor of the educational programme (79.3%) and the counsellor of the student group (89.7%). Thus, in general, students of the Institute of Human Sciences highly appreciated the quality of education in educational programmes. Despite the adverse circumstances (pandemic, war), the education is organized and conducted at a sufficiently high level. Students noted that their expectations regarding this specialty were met; flexible study schedule; favourable educational space; good material and technical equipment of the educational process; sufficient level of support from the guarantor of the educational programme, teachers and tutors of student groups; optimal workload from the main types of educational activities. Among the main shortcomings students indicated participation in the academic mobility of students; work of department scientific circles. Suggestions: to advertise the educational programme in social networks.

#### 3. STUDENT INTERNSHIPS

One of the components of the educational process is the organization of student internships. In our institute, student learning is practice-oriented. Therefore, it is important for us to have feedback on the evaluation of student internships in various social institutions. Our survey gave the following results:

- 1. Students rated the level of theoretical preparation for practice at 9.8 points out of 10. This indicates a high professional level of the teaching staff of the Institute. At the same time, students widely used the knowledge gained during classes, for example, on social work with different types of families. However, there was a lack of certain practical skills in certain types of activities, for example, telephone counselling. This affected the students' assessment of the use of their knowledge in practical activities (9.6 points out of 10).
- 2. Students highly appreciated the opportiunities of the practice bases for their professional growth (9.8 points out of 10), which indicates a high level of qualification of employees of organizations that provided students with practice and good material and technical equipment. This contributed to various opportunities for students to develop professional skills and abilities, such as: working with stress; providing psychological assistance in crisis situations; drawing up psychological characteristics; assessing the needs of recipients of social services, etc. (9.8 points out of 10).
- 3. Students highly appreciated the impact of practice on the formation of professional competences (9.7 points out of 10) and readiness to perform professional functions (9.6 points out of 10).
- 4. Internships in certain social institutions influenced students' choice of employment in the relevant social institutions. According to our analysis of the employment of graduates of our institute, after graduation, 85.3% are employed in the institutions where they did their internship. 67% of them already have a permanent job.
- 5. The highest score (10 points out of 10) was given to the objectivity of the practice supervisors from both the institute and the practice base.
- 6. Internships during the pandemic and martial law in Ukraine helped students to develop such personal qualities as independence, self-organization, patience, tolerance, responsibility, efficiency, etc.

Thus, students highly appreciated the internships in social institutions. They noted that their theoretical training, which they received at the Institute of Human Sciences, allowed them to complete the tasks of the practice and prove themselves as highly qualified workers on the basis of practice. The most necessary theoretical knowledge for performing the tasks of this type of practice turned out to be knowledge of the theory of social work, social work with service recipients in territorial centres of social services, gerontology, social protection of the population. Also, all applicants noted that the practice bases offered various forms and methods of work to develop practical skills and abilities in accordance with the practice tasks. They especially noted that the most productive for improving their practical competence were familiarization with the assessment of the problems of recipients of social services, analysis of the work of the "Social assistance at home" centre and other areas;

counselling; work with documents; performing practical tasks; conducting interviews in crisis and stressful situations.

Thus, according to the answers of the respondents, it can be noted that the internships during the pandemic and martial law were organized at a high level, students were able to fully complete the tasks provided for by the internship programmes, as well as practise, improve and form practical skills and abilities.

#### CONCLUSION

The conducted research helped us to recognise the achievements, identify problems and improve the organization of the educational process at the Institute of Human Sciences during the pandemic and martial law; to analyse the quality of educational services provided to students, and take into account their suggestions in preparation for the new academic year; to improve the internships of students by providing suggestions to the supervisors of internship bases. In addition, we can draw the following conclusions:

- 1. The quality of education does not depend on the forms of instruction, but depends on the scientific and methodological support of teachers of educational disciplines, their use of the latest forms and methods of education, compliance of the content of the topics under consideration with modern trends and events taking place in the world.
- 2. Students perceive distance learning as a temporary inconvenience, to which they have successfully adapted thanks to the ability to work in e-learning courses and use various Internet platforms for communication with teachers and colleagues.

The practical implications of the study by Shah et al. (2021) inform policy makers in academia about the psychological needs of students in a virtual learning environments.

- 3. Internships in various social institutions contribute to the formation in students not only of certain practical skills and abilities, but also have a positive impact on the formation of their general and special (professional) competences.
- 4. Practice-oriented education and the student-centred policy give positive results and make students competitive in the labour market in Ukraine.
- 5. The pandemic and the state of war in Ukraine have made students more responsible, independent, patient, and tolerant.

#### REFERENCES

- Akcil, U. & Bastas, M. (2021). Examination of university students' attitudes towards elearning during the COVID-19 pandemic process and the relationship of digital citizenship. *Contemporary Educational Technology*, *13*(1), 291. https://doi.org/10.30935/cedtech/9341.
- Cuaton, G. (2020). Philippines Higher Education Institutions in the time of COVID-19 Pandemic. *Revista Romaneasca pentru Educatie Multidimensionala*, 12, 61–70. https://doi.org/10.18662/rrem/12.1sup2/247.

- Heasly, B. & Iliiko, D. (2022). Overcoming Disruptions Caused by the Pandemic: Purposeful Leading to a More Sustainable World. *Discourse and Communication for Sustainable Education*, 13(1), 1–4. https://doi.org/10.2478/dcse-2022-0001.
- Kuzminska, O., Mazorchuk, M., Morze, N., & Kobylin, O. (2020). Digital Learning Environment of Ukrainian Universities: 'e Main Components to Infuence the Competence of Students and Teachers. In V. Ermolayev, F. Mallet, V. Yakovyna, H. Mayr, & A. Spivakovsky (Eds.). *Information and Communication Technologies in Education, Research, and Industrial Applications*. ICTERI 2019. Communications in Computer and Information Science, 1175, 210–230. https://doi.org/10.1007/978-3-030-39459-2\_10.
- Liakh, T., Spirina, T., Lekholetova, M., & Shved, O. (2021). Building professional competences of social workers through distance learning in the context of the COVID-19 pandemic. In E. Smyrnova-Trybulska. *E-learning in the Time of COVID-19*. "E-learning" 13 (pp. 151–162). Katowice–Cieszyn: STUDIO NOA for University of Silesia. ISSN 2451-3644 (print edition), ISSN 2451-3652 (digital edition), ISBN 978-83-66055-25-4. https://doi.org/10.34916/el.2021.13.13.
- Matsuoka, I. (2021). EDITORIAL: Impact of COVID-19 pandemic on higher education in Japan: Transition to online education and challenges in experiential pharmacy practice. *Pharmacy Education*, 20(2), 91–94. https://doi.org/10.46542/pe.2020.202.9194.
- Morze, N. & Buinytska, O. (2019). Digital Competencies of University Teachers. In E. Smyrnova-Trybulska, P. Kommers, N. Morze, J. Malach (Eds.). *Universities in the Networked Society. Critical Studies of Education*, 10, (pp. 19–37). Cham: Springer. https://doi.org/10.1007/978-3-030-05026-9\_2.
- Morze, N., Varchenko-Trotsenko, L., Terletska, T., & Smyrnova-Trybuls-ka, E. (2021). Implementation of adaptive learning at higher education institutions by means of Moodle LMS. *Journal of Physics: Conference Series*, 1840. IOP Publishing Ltd. https://doi.org/10.1088/1742-6596/1840/1/012062.
- Muthuprasada, T., Aiswaryab, K.S., Girish A., & Jhaa, K. (2021). Students' perception and preference for online education in India during COVID-19 pandemic. *Social Sciences & Humanities Open*, 3(1). https://doi.org/10.1016/j.ssaho.2020.100101.
- Muzaffar, A., Tahir, M., Anwar, M., Chaudry, Q., Rasheed Mir, S., & Rasheed, Y. (2021). A Systematic Review of Online Exams Solutions in E-Learning: Techniques, Tools, and Global Adoption. *IEEE Access*, 9, 32689–32712. https://doi.org/10.1109/AC-CESS.2021.3060192.
- Pavliuk, R.O. & Liakh, T.L. (2019). Approaches to the Development of the ICT Competence Standard in the System of Research-Based Training for the Future Specialist of Social Sphere in Ukraine. In E. Smyrnova-Trybulska, P. Kommers, N. Morze, J. Malach (Eds.) *Universities in the Networked Society. Critical Studies of Education*, 10, (pp. 201–222). Cham: Springer. https://doi.org/10.1007/978-3-030-05026-9\_12.
- Quinn, V.J., Dhabalia, T., Roslycky, L., Wilson, V.J., Hansen, J., Hulchiy, O., Golubovskaya, O., Buriachyk, M., Vadim, K., Zauralskyy, R., Vyrva, O., Stepanskyi, D., Ivanovitch, P., Mironenko, A., Shportko, V., & McElligott, J. (2021). COVID-19 at War: The Joint Forces Operation in Ukraine. *Disaster medicine and public health preparedness*, 16(5), 1753–1760. https://doi.org/10.1017/dmp.2021.88.

- Shah, S.S., Shah, AA., Memon, F., Kemal, A.A., & Soomro, A. (2021). Aprendizaje en line durante la pandemia del COVID-19: aplicación de la teoría de la autodeterminación en la «nueva normalidad». *Revista de Psicodidáctica*, *26*, 169–178. https://doi.org/10.1016/j.psicod.2020.12.004.
- Singh, B., Kaur, J., Sen, R.K., Singh, B., & Chattu, V.K. (2021). The Double Whammy of Pandemic and War: A Systematic Review of India's Education Diplomacy to Address Educational Inequities in Afghanistan. *Education Sciences*, 11(10), 651. https://doi.org/10.3390/educsci11100651.
- UNICEF. (2022, March 24). More than half of Ukraine's children displaced after one month of war. https://www.unicef.org.uk/press-releases/more-than-half-of-ukraines-children-displaced-after-one-month-of-war-unicef/.
- Yang, R. (2020). China's higher education during the COVID-19 pandemic: some preliminary observations. *Higher Education Research & Development*, 39:7. 1317–1321. https://doi.org/10.1080/07294360.2020.1824212.