DOI: 10.20535/2410-8286.252683

ACADEMIC STAFF ADAPTATION TO THE CHALLENGES OF THE COVID-19 PANDEMIC: A CASE OF PAVLO TYCHYNA UMAN STATE PEDAGOGICAL UNIVERSITY

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Currently, higher education system is characterized by the growing role of personal ability to adapt to the challenges of COVID-19 and finding opportunities for further development considering the global changes in all spheres of life. It puts pressure on the institutions in general and academic staff in particular. This paper aims at studying the challenges academic staff of the English Language and Methods of Teaching Department of Pavlo Tychyna Uman State Pedagogical University has faced during the COVID-19 pandemic and staff's preparedness and consequent adaptation amid new conditions that are constantly appearing because of the pandemic. The article presents a case study research to answer the following questions: What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective? In what ways has academic staff adapted to the challenges of the COVID-19 pandemic? The study uses predominantly quantitative and occasionally qualitative analysis to gain insights into our researched issues. The research has shown a steady increase in the number of department lecturers who feel ready for the challenges of online and blended teaching caused by the pandemic and comfortable with their professional competence due to sustainable adaptation to the current situation. The research prospects are clearly seen in the further process of adaptation and professional activities paradigm re-evaluation under the constantly changing global and local conditions as well as researching the issue in a broader context of similar or corresponding cases.

Keywords: adaptation; challenges; academic staff; pandemic; higher education;, online teaching; blended teaching.

Introduction

The influence of the COVID-19 pandemic on learning and teaching is huge because of the transition from face-to-face to the distance/blended/online format and education has become one of the most affected areas.

The impact of COVID-19 on universities and other higher education institutions around the world was analyzed and shared by UNESCO in IAU Global Survey Report (2020). It is mentioned that "one particular issue that the COVID-19 pandemic has shown is the need for increased international and global perspectives to analyse the various impacts of COVID-19 in the short, medium and long term "(Marinoni Van't Land & Jensen, 2020, p. 6). Indeed, pandemic affects all of us and touches every sphere of life. For sure, it had an immediate effect on higher education, such as "emergency online education" and caused all the challenges that followed. In general, the educational process has been transformed and changed the direction to distance mode (Watermeyer et al., 2021). The world will never be the same and humanity must learn to adapt to new realities and current conditions.

Literature review

In recent years, there has been an increasing amount of literature about teaching and learning peculiarities in higher education in different countries during the COVID-19 pandemic, e.g. China (Bao, 2020; Zhu, 2020), Romania (Coman et. al., 2020), Turkey (Aksu, 2020), Ghana (Owusu-Fordjour, Koomson & Hanson, 2020), Georgia (Basilaia et. al., 2020; Basilaia & Kvavadze, 2020), Brazil (Salvagni, Wojcichoski & Guerin, 2020), Pakistan (Dogar et. al., 2020), India (Chugai & Pawar (2021), Ukraine (Melnychenko & Zheliaskova, 2021). Much of the current literature pays particular attention to the challenges to implement remote education in a pandemic context (Salvagni, Wojcichoski & Guerin, 2020; Toader et. al., 2021; Piotrowski & King, 2020; Toquero, 2020; Chang, 2020). The comparative research between three countries highly impacted by the pandemic (Spain, Italy, Ecuador) shows that teachers and students show their preference to face-to-face learning, but they recognize positive elements in virtuality (Tejedor et. al., 2021).

There is a large volume of published studies describing the huge impact of COVID-19 on the educational process (Rashid & Yadav, 2020; Pokhrel & Chhetri, 2021; Khan, 2021; Marinoni Van't Land & Jensen, 2020). The pandemic requires a very rapid response and transformation of pedagogic practice. This situation generates a huge strain on academic staff and sets several tasks. The study of Stukalo and Simakhova (2020) convinced that COVID-19 has a significant impact on the Ukrainian higher education system and causes effective transformation of the university structure, which leads to the necessity to

modernize teaching methods, find new approaches to the educational process organization, and self-education approach application. Overall, there seems to be some evidence to indicate that the digitalization of higher education and the creation of digital universities are identified as necessary responses to today's societal challenges (Areshonkov, 2020) and the importance of digital personal assistants as well as online and lifelong learning in delivering world-class learning and teaching (Bonfield et. al., 2020; Dey, Al-Karaghouli & Muhammad, 2020). The educational process in general moves to the distance mode and blended learning (Nenko, Kybalna & Snisarenko, 2020; Shandra, Yuzik & Zlenko, 2021; Mizyuk, 2019; Mishra, Gupta & Shree, 2020). Yuryi Malyovanyi (2020) in his study mentioned the priority directions of improvement and development of distance learning. However, the researcher is convinced that there are reservations about the absolutization of distance learning opportunities and the possibilities of establishing it as the only dominant type of education in Ukraine.

According to Gokuladas & Baby Sam (2020), in the educational field, all challenges amidst a pandemic could be categorized into psychological challenges (loss of continuity; attitude towards e-learning option; lack of community feeling and/or isolation) and operational challenges (technology adaptation within a short span of time; communication challenges; difficulty in ensuring parity while delivering remote teaching; infrastructural facilities to host e-learning classes; hindrances for inclusive education) that educators are likely to face as a result of the outbreak of pandemic (p. 145-148). Certainly, mental health and well-being during the COVID-19 pandemic in higher education also belong to psychological challenges. The study (Nurunnabi, Almusharraf & Aldeghaither, 2020) explores universities' health and wellbeing in the G20 countries during the COVID-19 epidemic. It reveals that the lockdown, social distancing, and self-isolation requirements are stressful for many individuals and have caused students' health and wellbeing concerns. Certainly, for academic staff, it is necessary to be stress-resistant, flexible, creative, adaptable to new circumstances, and effective as mentioned by a group of Ukrainian researchers who developed attributes of effective teachers in Ukraine (Levrints (Lőrincz), Myshko & Lizák (2021).

Brammer and Clark (2020) claim that COVID-19 has stimulated significant pedagogical innovation and provides opportunities for higher education along with challenges. They investigated the speed and quality of adaptation of professional and academic staff to new communities and the acceptability of experiments with new ways of engaging in teaching and research. Researchers say that the variety of alternative methods of helping students in distance learning, creativity, development of new forms of support and evaluation of learning, and the willingness of staff to implement new technologies, is a response to the challenges of pandemic time. The study of Dey, Al-Karaghouli & Muhammad (2020) highlights some of the issues about adoption and adaptation faced during COVID-19. The authors consider the topic of adaptation of academic staff to the challenges of the COVID-19 pandemic relevant and exciting because the study results can affect the organization of the educational process in a particular educational institution and be attractive to other academic partners to improve the quality of education as a whole.

To sum up, we have observed a great research interest in the topic of the COVID-19 pandemic in relation to education and the challenges that are arising from it. Now, we need to bring the issue to a narrower context in order to see how the academic staff of a particular institution and department adapts to the above- mentioned challenges.

Aim and hypothesis

The hypothesis of the study lies in the presumption that the level of academic staff readiness for the challenges of online teaching was at a relatively low level before the COVID-19 outbreak but gradually has increased as well as the level of their professional competence with the help of adaptation steps taken by the staff itself and department administration.

The aim of the paper is to study the challenges, the academic staff of English Language and Methods of Teaching Department of Pavlo Tychyna Uman State Pedagogical University had to face during the COVID-19 pandemic, as well as the staff's preparedness and consequent adaptation amidst new conditions that appeared as a result of the pandemic. It is also important to define education assurance in the context of blended and distance learning and find out the staff's attitudes and feelings in different periods of the pandemic. According to the aim, we are striving to reveal the answers to the following research questions:

1. What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective?
2. In what ways has academic staff adapted to the challenges of the COVID-19 pandemic?

Methods

Research design

Taking into account relevant theory and state-of-the-art resources, we decided that the use of a case method based on the survey would be a reliable and effective scientific approach for the grounded research; therefore, it may provide our study with sustainable data and significant findings to make this research worthwhile. The structure of the case study is presented below in Table 1.

Table 1. *Case study structure*

Case anatomy	Academic environment of English Language and Methods of Teaching Department of Pavlo Tychyna Uman State Pedagogical University
Case topic	Academic staff adaptation to the challenges of the COVID-19 pandemic
Case questions	1. What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective? 2. In what ways has academic staff adapted to the challenges of the COVID-19 pandemic?
Case data	The findings of the survey and their interpretations
Case solution	Inductive and divergent
Case analysis	Open case – several possible answers and solutions
Case timespan	March 2020 – December 2021

Participants

21 representatives of the academic staff of the English Language and Methods of Teaching Department took part in the survey. We believe that the mentioned number of participants of the research can provide us with feasible and reliable results as the methodology of a case study indicates the recommended number of participants (cases) between 5 and 50, consequently, 21 participants comprising 84% of the department academic staff can prove the results objective in the described academic environment. Detailed information about the participants of the study is given in Table 2.

Table 2. *Data about participants*

Position	**Professor**	**Associate professor**	**Senior lecturer**	**Lecturer**
	1 respondent	11 respondents	2 respondents	7 respondents
	5%	52%	10%	33%
Gender	**Male**	**Female**		
	5 respondents	16 respondents		
	24%	76%		
Age	**23-26 years**	**30-35 years**	**36-45 years**	**55-65 years**
	2 respondents	5 respondents	11 respondents	3 respondents
	10%	24%	52%	14%
Work experience	**1-3 years**	**4-10 years**	**11-20 years**	**more than 20 years**
	2 respondents	6 respondents	8 respondents	5 respondents
	10%	28%	38%	24%

Instruments and procedure

We consider a survey to be the most effective tool for collecting data for our case study. Our group of authors compiled a list of questions of different types: multiple choice, as well as open short and long questions (see Apendix 1). A number of multiple-choice questions gave the respondents the opportunity to choose more than one variant for answering the questions and, as the result, some data can vary more than 100% frame. Having had a successful experience in collecting data we chose Google Forms as an online tool for conducting the survey.

The survey consists of 4 parts: the 1st is called "Introduction" and includes personal information, though without personal identification; the 2nd part is devoted to teaching and learning during the first year of the COVID-19 pandemic in 2020, the 3rd contains questions about teaching and learning during the COVID-19 pandemic in 2021, and the last, the 4th part, is about academic staff reflection and perspectives. In the following part of our study, we will present and interpret all the results of the survey.

Data analysis

Initially, the data for the research was collected by means of a Google Forms questionnaire distributed among the participants at the beginning of December, 2021. We are convinced that this type of survey proves to be a reliable, feasible, rapid and economic way to deduce and generalize findings. For this study, we used the questionnaire consisting of 39 questions, grouped in 4 parts, in which the department academic staff could select or give their answers and share their personal opinions. Overall, it took 2 weeks to receive and collect survey responses from participants. The collected data was further analyzed and discussed, conclusions were drawn during December, 2021–January, 2022.

Ethical issues

The project was conducted with regard to the Ethical Guidelines for Educational Research (BERA 2011) and reviewed by the Board of Department of English Language and Methods of Teaching of Pavlo Tychyna Uman State Pedagogical University in order to grant permission for the research. Following ethics, participation in the project was voluntary. 21 lecturers out of 25 opted to participate (over ¾ of the department academic staff), making the findings reliable. Participants were informed about the nature of the research which was anonymous, and about the way, its findings would be used before they proceeded with the questionnaire. The participants of the research had confidence that they are protected and that the elicited information would not be misused.

Results

As mentioned above, the survey consists of 4 parts (sections). In the "Introduction" section, we asked 9 questions. The first four questions were given to find out the position, gender, age and work experience of our respondents.

In the frame of our research, it is necessary to define the subjects, which the respondents teach, with the focus on whether they are theoretical or practical. The respondents mentioned 11 subjects, 7 of which are theoretical and 4 – practical. However, it would be wrong to think that the main part of the respondents can share their experience in distance and blended learning mainly in the context of theoretical courses. According to the curriculum, practical courses contain more academic hours. Some of them are studied for four terms while others are even for eight terms and the majority of the lecturers teach several courses, that is why the number of times the practical subjects were mentioned by lecturers in the survey is 27. In order to see the correlation between these two types of subjects, we used the formula (X : Y) where X stands for practical subjects and Y – for theoretical ones. We have got the correlation 1 to 3,8, which gives us more information about practical courses adaptation.

In the first section, the respondents were asked to indicate the students' age range they work with. The results are presented in figure 1.

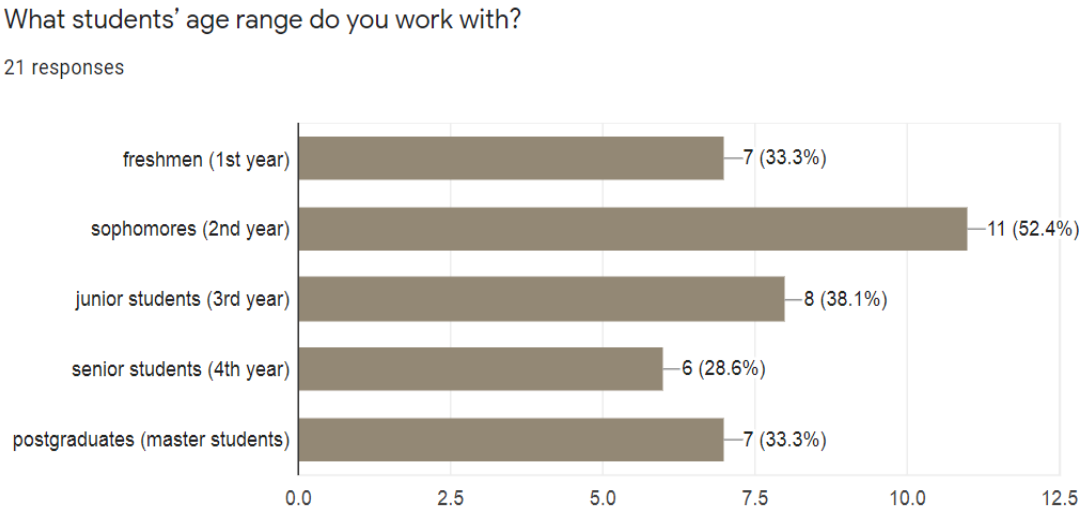

Figure 1. *Students' age range*

The last three questions of the "Introduction" section led respondents to the main issue of our study. These questions were set to determine the previous experience of distance learning and teaching, which our participants could have had before the period of the pandemic. The first of the three questions sought to discover if our respondents had such experience at all and 38,1% of them answered positively while the other 61,9% didn't work remotely. Figure 2 below illustrates the data.

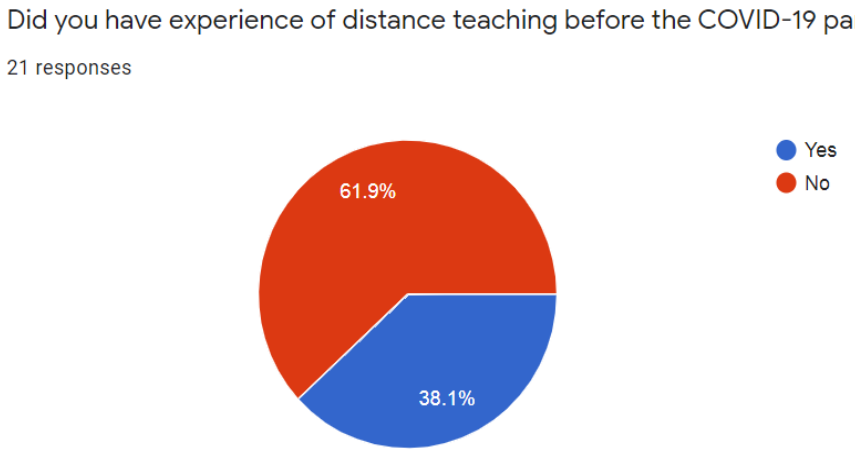

Figure 2. *Distance teaching experience data*

The next question with an open answer was suggested only for those respondents who worked distantly before the pandemic. We got the following answers which are presented in Table 3:

Table 3. *Ways of work in the distance learning mode before the COVID-19 pandemic*

Way of work		**Number of respondents**	**Percentage (%)**
Platform Moodle		3	14
Online apps for video conferences	Skype	3	14
	Google Meet	1	4
	Zoom	1	4
	Viber	2	9
Uploading tasks for students with the following check		2	9
Using online apps for lesson content creating		2	9

The data results in Table 3 lead us to the conclusion that before the pandemic fewer than 14% of our lecturers used online apps or platforms to work with students.

The last question of prerequisites to our research concerned the courses, webinars or workshops on how to organize distance learning that our participants could have taken. So, 11 of 21 respondents answered positively and 10 gave a negative answer. Furthermore, some of them mentioned the exact courses they took. Mostly, there were workshops organized by our chair, and the mode of those events was both offline and online. But also there was one teacher development course and some workshops conducted by other organisations or institutions.

Section two of the survey is devoted to teaching and learning during the first year of the COVID-19 pandemic (2020) which consists of 12 questions. It contains the same number of corresponding questions in section three, in order to compare some issues. The comparative analysis of the responses to these questions will be presented in the third section description. Other questions will be described below.

Firstly, we asked our respondents to assess their readiness for the remote learning process at the beginning of the lockdown. Such self-assessment gave us the starting point of the research. The results are presented in figure 3 and they are not very encouraging.

Figure 3 shows that only 42 % of respondents assessed their readiness in "5" and more, the rest 58% felt unconfident under new conditions. In the following two questions, the respondents were asked to indicate students' and their own digital skills level during the first year of the pandemic. Despite different results, the digital skills level assessment, which is presented in Figures 4 and 5 respectively, shows that if taking data from 5 to 10 in both figures the results are almost the same. As for lecturers' opinion of students' readiness, we have got slightly increasing data – 71%, while self-assessment shows 67%. It means that lecturers consider that students had better digital skills than they did.

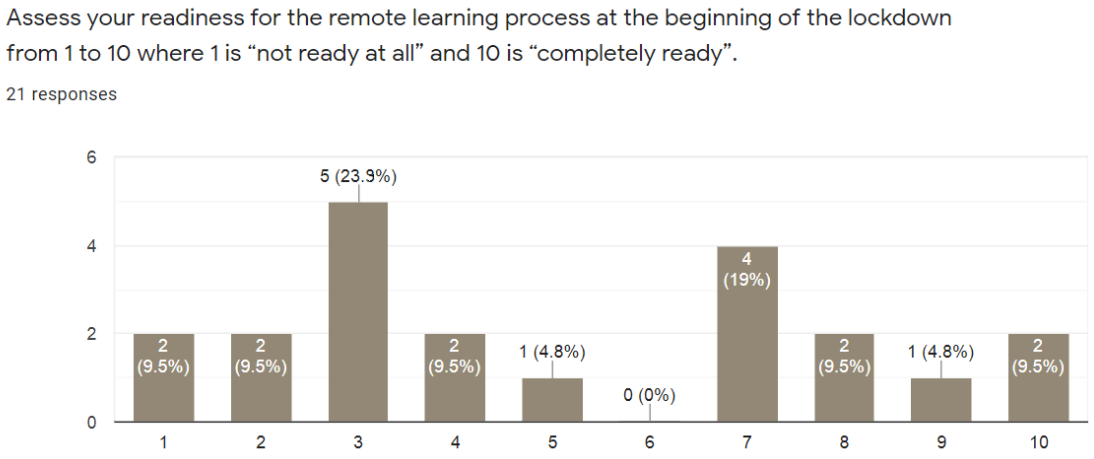

Figure 3. *Distance learning readiness assessment*

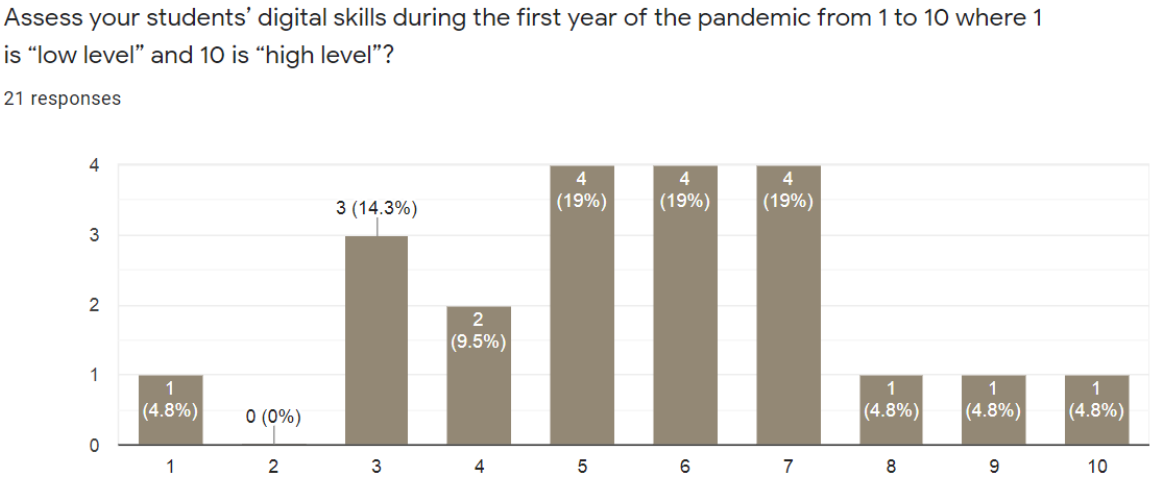

Figure 4. *Students' digital skills assessment*

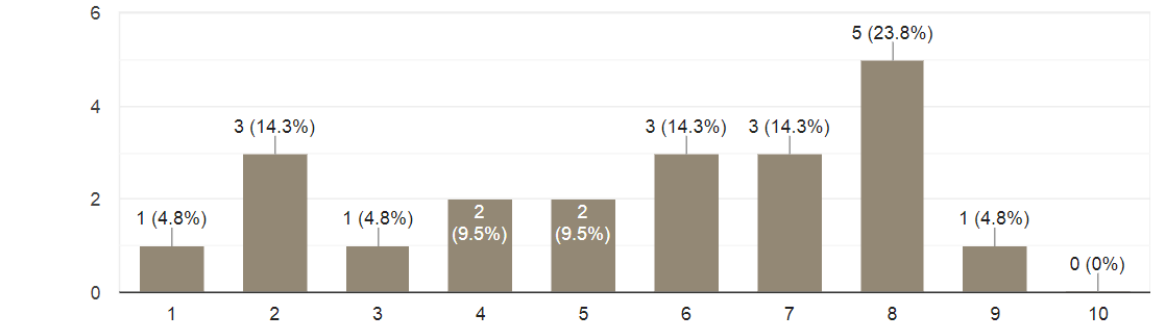

Figure 5. *Staff's digital skills assessment*

Furthermore, the respondents shared their experience at the lessons of teaching management. Taking into consideration the lack of any opportunities for offline learning mode, lecturers together with their students needed to use an online platform. The academic staff of Pavlo Tychyna Uman State Pedagogical University has used Moodle platform for online teaching. But it is not the only platform accessible online, and it was important for us to find out which platforms the respondents used. Unexpectedly, the answers to this question show that not all the lecturers know the difference between platforms and applications as they mentioned many services that are not platforms. However, it is important to indicate that the results of these

responses suggest that the majority of respondents used Moodle platform (67%), though 2 respondents also used the Google Classroom platform (9%). We also gained our interest in platform functionality evaluation and asked the participants to share their impressions. The results are shown in figure 6.

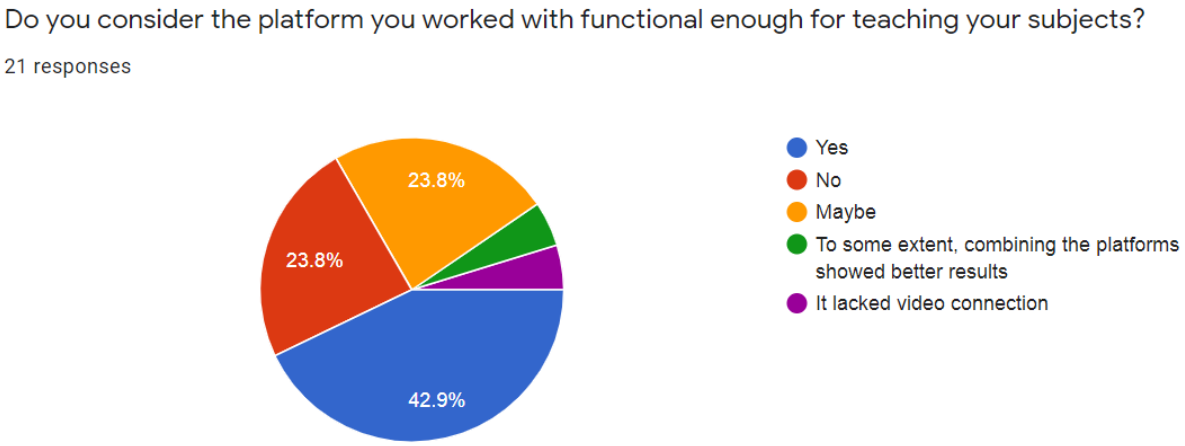

Figure 6. *Platforms functionality evaluation*

As can be seen from Figure 6, 9 respondents (42,9%) were satisfied with the platform they worked with. In our opinion, these results cannot be considered as positive because when we have summed up the rest of the responses we got a bigger percentage (57,1%) of those who couldn't teach their subjects in the way they wanted or expected because of the platform functions limitations.

Further, three questions were asked to indicate the ways lecturers used to get students' feedback and testing. When the participants were asked about the ways of checking home assignments, the majority (85,7%) commented that their students sent them the papers via email. The other results are shown in figure 7.

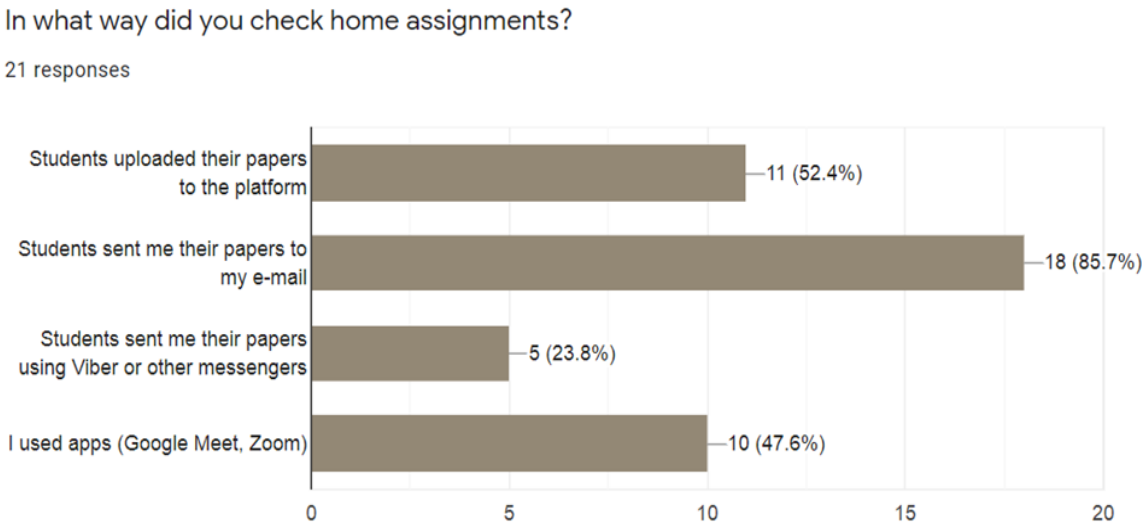

Figure 7. *Ways of home assignment checking*

In response to the question about the ways of taking tests, 100% of the respondents reported that they used Moodle platform tests. It is worth mentioning that there are some other variants of responses such as using apps (Google Forms) and sending tests as Word files via email. In the response to the same question about exams, most of the surveyed indicated that they used apps for video conferences (Google Meet, Zoom) – 61,9 % of the participants. Other responses to this question included 38,1% of answers that the participants used Moodle platform or Google Form tests. Comparing the two results, it is obvious that the lecturers preferred the oral mode of interaction for exams and found the necessary tools for arranging them.

The following three questions of this section were set to find out more about the online resources which the respondents considered helpful during the first year of the pandemic. In response to the question "What online resources or apps did you start to use for your subjects teaching after the first term of distance learning?" a range of responses were elicited. The majority indicated Google Meet (47%) as an app they started using for online teaching. Other responses included Zoom, YouTube videos, Google Forms,

Mentimeter, Quizlet, LiveWorksheets, Kahoot, Learning Apps, etc. As we expected the respondents to name many apps and resources, the question was, if they found all the necessary resources to replace face-to-face activities with relevant ones in the online classroom. Only one participant (4,8%) answered negatively, others succeeded to replace but in a different way. The most remarkable result to emerge from the data is that 33,3% of the total respondents number found all the necessary online services for online teaching. Nevertheless, the respondents indicated activities and modes of interaction that they couldn't replace, some of them are worth maintaining:

- group work/discussions;
- oral activities checking;
- pairwork/interaction monitoring;
- jigsaw reading;
- test protection from alleged cheating;
- work in micro-groups and regrouping;
- board games.

The third section is called "Teaching and learning during the current year of the COVID-19 pandemic (2021)". The first question is mostly the same as in the previous section but the period is different. It was important for us to investigate if anything changed after a year of distant learning and in what way. As we have reported earlier, at the beginning of the pandemic 67% of respondents accessed their digital skills from "5" to "10" using 10 points scale. In 2021, the percentage increased rapidly to 90%. The difference is seen in the diagram in figure 8.

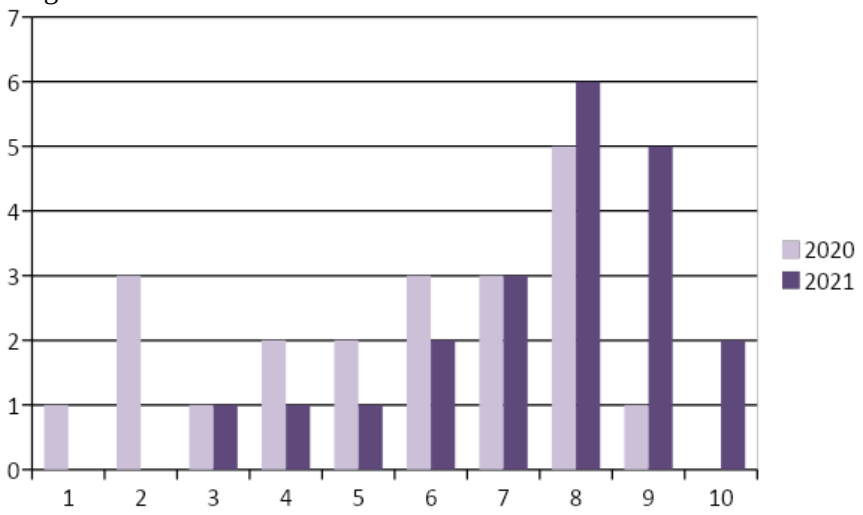

Figure 8. *Lecturers' digital skills self-evaluation in 2020 and 2021*

In response to the question about students' digital skills evaluation, there is also a clear trend of increase. In 2020, there were 71% of responses from "5" to "10" while in 2021, 95% of the participants evaluated students' digital skills using the same indicators. More detailed data can be seen in figure 9.

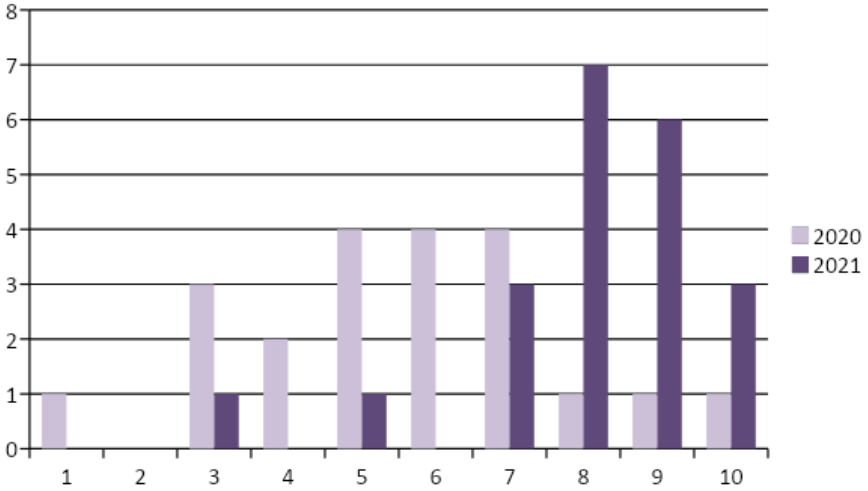

Figure 9. *Lecturers' evaluation of students' digital skills in 2020 and 2021*

These results are expected, but we also aimed at finding out which skills the respondents have developed. The most-reported skills can be listed as follows:

- use of online platforms and apps;
- online conversation;
- use of online Jamboard;
- creating online tests;
- sharing screen and tabs with students online;
- work with breakout rooms;
- planning online lessons using Google Calendar;
- lessons recording;
- managing students' grades using Excel Tables;
- creating online documents.

According to the lecturers' point of view, students developed the following digital skills:

- use of the platforms and apps;
- creating posters online;
- work with social media;
- use of mobile phones for learning purposes;
- using emails;
- searching for the necessary information on the Internet;
- creating presentations;
- sharing students' screens for presentation demonstrations.

As can be seen from the lists above, the skills are almost the same with some differences caused by purposes if those skills are necessary for teaching or learning.

Other questions were set to compare the ways lecturers used to get students' feedback and testing in 2020 and 2021. The respondents were asked to indicate the ways of checking home assignments, taking tests and exams. The results are shown in the table below.

Table 4. *Data of checking and testing ways during distance and blended learning*

Ways of checking and testing	Percentage (%)	
	2020	2021
Home assignment checking		
Papers uploading to the platform	52,4	52,4
Sending papers to email	85,7	57,1
Sending papers to messengers	23,8	14,3
Using apps (Google Meet, Zoom)	47,6	85,7
Checking traditionally, using blended learning	0	38,1
Tests taking		
Online, using Moodle or other platforms	100	90,5
Online, using apps (Google Forms)	14,2	28,6
Sending the tasks for tests via e-mail	19	28,6
Offline, in the traditional way, using blended learning mode	0	28,6
Exams taking		
Online, using Moodle or the other platform	57,1	33,3
Online, using Google Meet, Zoom	61,9	71,4
Online, using other apps (Google Forms)	14,2	0
Offline, in the traditional way, using blended learning mode	0	33,3

The following key findings emerged from the analysis of checking and testing ways preferred by lecturers. In 2020, sending papers to email and messengers were used more than other ways for home

assignment checking, while in 2021, using apps increased and also offline checking was possible, as during some periods in 2021 the university worked in the mode of blended learning. The data on test-taking ways shows that in 2021 there was an increase in the use of online apps and tools and a decrease in platform use consequently. The same dynamics is seen in the exam taking section where platforms were used more in 2020 but in 2021 services for video conferences were mostly used. Surprisingly, no responses were given to indicate using other apps like Google Forms, though it can be explained by additional opportunities for offline mode and video conference apps.

Respondents were asked to indicate the online resources or apps they use for teaching their subjects in the current period. The same question was asked in the second section and we have already listed the responses above but we are interested in finding out if the choice of online services has changed and if yes, what these changes are. The collected data are presented in the table below.

Table 5. *Online resources or apps use for teaching during the pandemic*

Online resources or apps	Data in percentage (%)	
	2020	2021
Apps		
Google Meet	47,6	61,9
Zoom	9,5	9,5
Google Classroom	9,5	9,5
Google Forms	4,7	14,2
Testportal	0	4,7
Google Workspace	0	4,7
Google Podcasts	0	4,7
Google Pictures	0	4,7
Google Documents	4,7	4,7
Breakout rooms	0	4,7
Jamboard	0	4,7
Random Group Generator	0	4,7
Resources		
YouTube	14,2	23,8
BBC Learning English	9,5	9,5
Mentimeter	9,5	9,5
Live worksheets	19	9,5
My Grammar Lab Platform	0	4,7
TED talks	4,7	9,5
Quizlet, Kahoot	4,7	4,7

As was expected, the data is different, especially in app use. The most striking results to emerge from the data comparison were the increase in Google Meet use (in 14,3 %), Google Forms use (in 14,2%) and a great number of other Google apps use. Also, it is worth mentioning that respondents tried several apps for the same purpose in order to choose the best one, for example, Google Form app and Testportal for creating tests or taking exams. The resource use also changed, as shown in table 5 – in 2021, respondents used YouTube and TED talks more often, also My Grammar Lab Platform appeared in the list of used resources.

The most interesting results came from the responses about the problems of online educational process management that the respondents had at the beginning of lockdown and at the current time of the survey. Five most reported problems at the beginning of lockdown were: possibilities for students' cheating (81%), students' preference to work without cameras (76,2%), poor students' attendance (66,7%), lack of interaction modes with students (57,1%), lack of digital skills (52,4%). Interestingly, there are differences in data of the current period, where the most reported problems are: lack of students' motivation (52,4%), lack of digital skills (33,3%), time management and lack of interaction modes with students have the same number (28,6%), paper checking and assessment (19%). It is crucial that the list of problems has changed a lot. The respondents have solved many problems, which they had in 2020. Now, the main problem to face is the lack of students' motivation.

In the response to the last question of the third section "What online activities cannot be used in current blended learning, especially in face-to-face mode?" a range of responses is "none or just some". A small number of the surveyed reported that they had difficulties with jigsaw activities or writing tests using online tools. But one participant commented: "If you work in face-to-face mode and online (for those who cannot be physically present in the classroom) simultaneously it's difficult to split students into micro-groups and it takes more time to manage the blended classroom".

The last section in the survey deals with respondents' reflections on the distance and blended learning modes and perspectives for future teaching. It includes 10 questions for sharing opinions and impressions of the pandemic period.

In the first question of this section, the respondents were asked to indicate their points of view on what technologies and skills they need for teaching their subjects more efficiently if the distance learning mode goes on. The list of responses was diverse but there were some items that participants had in common. In order to systemize the responses, we grouped them in the following collective notions: digital skills improvement (33,3%), resources use (33,3%), psychological support (14,2%), teaching management (28,5%), gadgets and the Internet allowance (9,5%). The results are shown in figure 10.

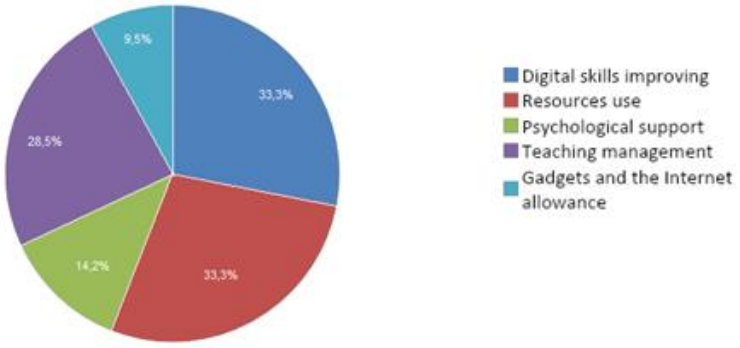

Figure 10. *Technologies and skills needed for further teaching*

Answering the question about ways for students' digital skills improvement, more than a half of the respondents (66,6%) reported that students have to take courses on technologies or visit workshops or other events, 9,5% of the surveyed responded that students need motivation to raising and the same figure of participants considered that students have enough digital skills for online learning.

The most expected responses were to the questions about the benefits and drawbacks of online and face-to-face learning. 12 of the surveyed (57,1%) see the benefits of online learning in work flexibility, preferable conditions for time and location management; a bit less – 11 respondents (52,3%) – consider that one of the main benefits is digital skills developing, 3 responses (14,2) are concerned with additional possibilities for SEN students and next 3 – are about students' autonomy development.

As for face-to-face learning benefits, one participant's comment reflects the majority of other respondents' point of view: "The atmosphere of conventional communication, observation of facial expression, monitoring the feedback of the class, informal communication during breaks, possibility to indulge students in after-class activities, the possibility to promote team spirit". Possibilities for live communication were supported by 10 respondents (47,6%), for different modes of interaction and dynamic increasing – 11 responses (52,3%) were reported, alleged cheating monitoring was also mentioned by 3 participants (14,2%). One respondent reported that the main benefit was spending less time in front of the computer.

The next item of the survey is online and face-to-face learning modes drawbacks defining. Interestingly, the majority of online benefits turned out to be the drawbacks of face-to-face mode and vice versa. The most mentioned drawbacks of online learning are as follows:

- problems with Internet connection (28,5%);
- lack of social interaction (23,8%);
- harmful for health (19%);
- low students' motivation (14,2%);
- some activities (e.g. pair or group working) cannot be used (9,5%);
- choosing the appropriate resources (9,5%).

It is also important to list other drawbacks from the survey: less time for doing activities, no eye contact with students, wasting time on waiting while tabs or windows are opening, checking students' oral answers

(dialogues) which they can read from their screens, the problem with alleged cheating while doing tests, lack of soft skills development, sometimes electricity went off or there is some loud noise inside or outside the house, it is easier for students to skip classes, problems with developing time management skills, expenses on buying gadgets, lack of digital skills.

The list of traditional learning is shorter, as 4 respondents (19%) indicated that there were no drawbacks at all. Nevertheless, the problems reported by participants are as follows: time and money consuming mode, as you spend time to get to the university location (19%); lack of necessary equipment and applications (19%); necessity to carry all the textbooks and other visual materials with you (14,2%); scheduling problems (14,2%); fewer possibilities for students to attend classes (9,5%); risk of COVID infection, lack of home comfort, loading with paperwork, doing online tests due to the lack of needed facilities (4,7%). Generally speaking, more than half of respondents consider that the blended mode of learning is rather effective for teaching their subjects. Interestingly, distance learning mode is preferred by only 4,8% of participants, while the rest of the surveyed feel more comfortable teaching in the offline traditional mode as shown in figure 11.

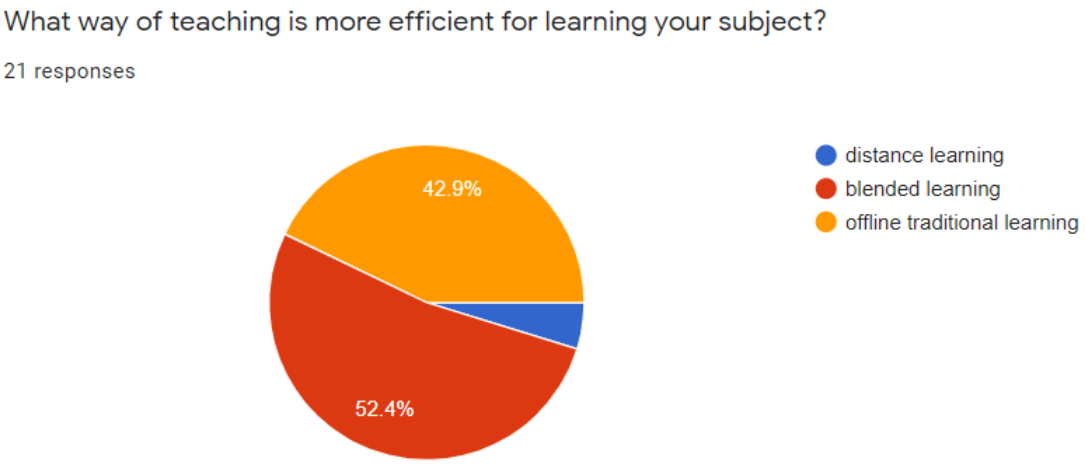

Figure 11. *Modes of teaching preferred by respondents*

In response to the next question, respondents were asked to assess how their way of teaching distantly differs from traditional face-to-face teaching from 1 to 10 where 1 is “not different at all” and 10 is “totally different”. Almost one-third of the participants (33,3%) evaluated this item in 5 points, the same figure is for 6-8 indicators and the rest is from 2 to 4 points. Interestingly, points 1 and 10 weren't chosen by participants, as shown in figure 12.

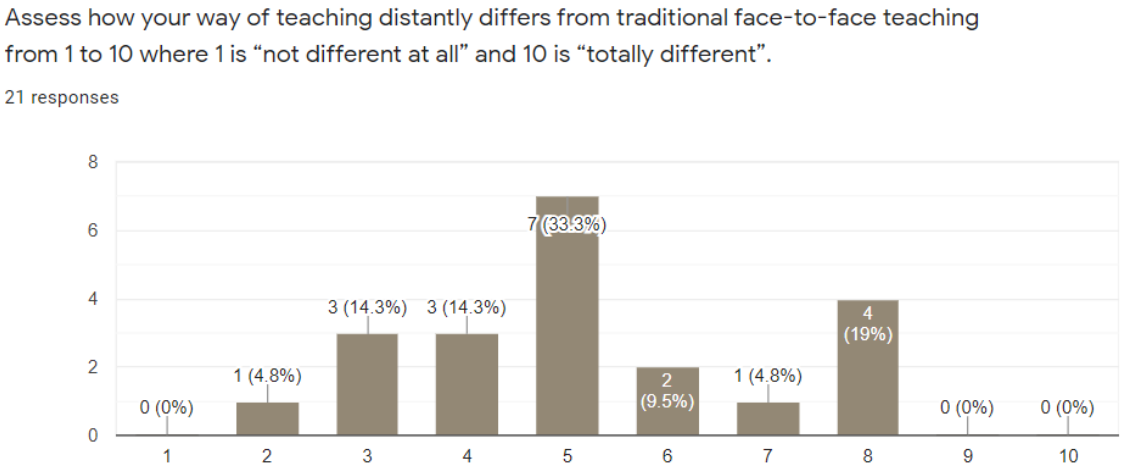

Figure 12. *Respondents’ evaluation of teaching ways*

In the following question, respondents were required to assess the changes in the methodology of teaching the subjects between online and offline learning modes. 28,8% of the respondents haven’t changed methodology much (3 points), on the other hand, 19% of the surveyed have greatly changed their way of teaching (8 points). Other data are presented in figure 13.

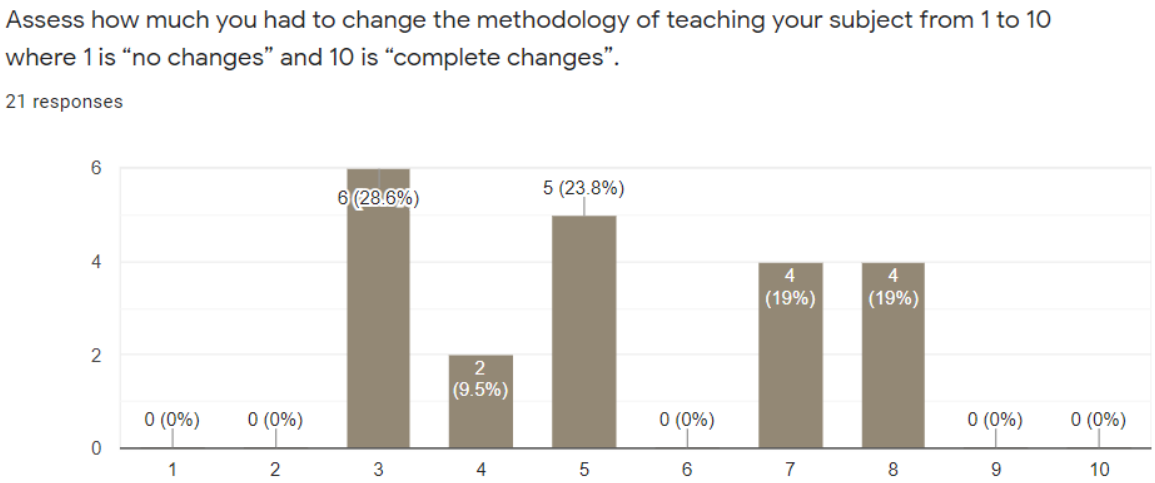

Figure 13. *Respondents' evaluation of teaching methodology changes*

The last question of the survey required respondents to share their opinion about the ways of teaching they consider the best in the nearest future. About one third want to teach offline in the traditional way (33,3%); 19,1% would like to teach online distantly. But, the majority of those who responded (47,6%) to this item reported that blended learning mode would be preferable to others in future. Moreover, one participant commented on how it should be: "I think that the best way would be if interactive lectures and lessons were online but credit lessons for students' dialogues or vocabulary checking and doing tests or exams should be in face-to-face mode".

Discussion

The results obtained via survey require further discussion as to empirically find out the academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective and outline the ways how academic staff has adapted to teach in constantly changing conditions.

The main problem requiring study was determined as an investigation of the changes of academic staff readiness and competence level to the challenges of online teaching in the process of adaptation to the COVID-19 pandemics conditions.

According to the case study methodology and following the experience of relevant research, e.g. a case study of Peking University, (Bao, 2020; Zhu, 2020), a case study of CUI, Abbottabad Pakistan (Dogar et. al., 2020), we have chosen a survey by means of an online questionnaire as a prevailing method to adopt for the research. The study uses predominantly quantitative and occasionally qualitative analysis in order to gain insights into the issues we aimed to research. Data for this study gave us the opportunity to involve lecturers of the department teaching various subjects, both theoretical and practical.

Firstly, almost 2/3 of the respondents (61,9%) did not have the sustainable experience of distance teaching before the outbreak of COVID-19, consequently, their level of readiness for it can be considered low, even tending to be lacking at all. Besides, the number of lecturers who regularly used online apps or platforms to work with students before the pandemics are stunning (14%) though more than half of them took courses, webinars or workshops on how to organize distance learning in the past. Consequently, 58% of the respondents mentioned their unconfidence and unpreparedness when they faced new conditions. One of the reasons for this might be the abrupt change of conditions: academic staff had been preparing for purely distant learning but never realized it could become a reality at a glance. As a result, at the beginning of the pandemic lecturers tended to use Moodle platform (67%) which was familiar to them and only 2 respondents also used the Google Classroom platform (9%) as an addition to Moodle. However, only 42,9% of the respondents indicated they were satisfied with the platform they worked with because of its functional limitations. We cannot consider these results positive though presume that the majority of Ukrainian universities faced the same problem and their academic staff had to look for other options to maintain the quality of the educational process.

We cannot consider these results positive though presume that the majority of Ukrainian and international universities (as mentioned by Brammer & Clark, 2020; Toquero, 2020; Gokuladas & Baby Sam, 2020) have faced the same problem and their academic staff had to look for other options to maintain the quality of the educational process. In our case, the answer was found in face-to-face apps, particularly Google Meet, the use of which showed the increasing number from 47% to 62% and then to 86% and from

the spring term of 2021/22 academic year this number should reach 100%. The variety of apps used by the lecturers is also worth mentioning – Zoom, YouTube videos, Google Forms, Mentimeter, Quizlet, LiveWorksheets, Kahoot, Learning Apps, etc. – as every respondent felt like finding new options for teaching when distance learning was underway. As a result of this outburst of internal motivation and adaptation to new conditions, the number of respondents who accessed their digital skills from "5" to "10" using 10 points scale increased from 67% in 2020 to 90% in 2021. To our minds, another important reason to boost the lecturers' adaptation process is the increase of the students' digital skills level assessed by the numbers 71% in 2020 and 95% in 2021 from "5" to "10" using 10 points scale respectively.

We praise the variety of skills that the department lecturers managed to develop under new conditions namely: sustainable use of online platforms and apps; ability to maintain quality online conversation; use of online Jamboard; creating online tests; sharing screen and tabs with students online; work with breakout rooms; planning online lessons using Google Calendar; lessons recording; managing students' grades using Excel Tables; creating online documents etc.

We consider worth further attention to the increasing number of Google Workspace users as it is free of charge for the University staff and provides a number of quality apps and products as well as the intensive use of the resources from YouTube and Ted talks for the actualization of the lesson content. However, implementation of other apps into the educational process would be a good asset for the variety and quality reasons as the academic staff is still facing the problem of the lack of students' motivation and the urge for further digital skills development, though we believe this is just a matter of time and effort. We got this conclusion after eliciting the lecturers' needs for further improvement in the nearest future which were grouped in the following collective notions: digital skills improvement (33,3%), resources use (33,3%), psychological support (14,2%), teaching management (28,5%), gadgets and the Internet allowance (9,5%).

Finally, it should be mentioned that the majority of department lecturers clearly see the difference between traditional offline, distance and blended teaching, their advantages and drawbacks though in a bit subjective perspective, and their opinion about the ways of teaching they consider the best in the nearest future (traditional way – 33,3%, 19,1% – online, 47,6% – blended teaching) should be definitely taken into consideration by the department and University administration. The implications drawn from our research results can be considered by education researchers when dealing with similar issues in corresponding contexts and cases as well as by educational authority representatives when deciding on institutional policy and strategic planning.

Limitations

The only limitation worth mentioning is that the research is built around a case study and it imposes restrictions as to the number of research participants and the area of the research environment. On the other hand, a case study gives a huge opportunity to have a better insight into an actual problem in a specific context.

Conclusions

To sum up, the study has shown a steady increase in the number of department lecturers who feel ready for the challenges of online and blended teaching caused by the pandemic and comfortable with the level of their professional competence as the result of sustainable development adaptation to the current situation.

We managed to find the answers to both research questions. Firstly, the level of academic staff readiness to teach under conditions of the COVID-19 pandemic, as well as the level of its digital competence, were relatively low at the outbreak of the disease and the beginning of lockdown. The lack of readiness was caused by psychological and technological impediments of personal and traditional character. It was a turning point for the department academic staff as some senior lecturers chose to retire rather than get used to new conditions. However, the majority of the staff representatives entered the adaptation period and have taken a number of successful steps.

Secondly, the department academic staff has been adapting to the challenges of the COVID-19 pandemic in a number of different ways, namely: self-education, continuing professional development events of different types (seminars, webinars, online marathons, online conferences etc.), joint workshops with colleagues from partner Universities, guidance by the University department of distance education, support from peers and heads of subject sections (traditional practice at our department), periodical department meetings aiming at solution of urgent organizational and methodological issues etc. Obviously, the majority of the staff representatives managed to adjust to current conditions though the constantly changing epidemic leaves room for further improvement, so additional research after some time might be needed in order to verify and update the conclusions of the study.

Finally, the necessity for extensive introduction of blended teaching forms and methods in the nearest future expressed by the department academic staff coincides with the latest ideas of the academic community and educational authorities. Consequently, further research perspectives can be connected with continuous adaptation and professional activities under the changing conditions of the pandemic as well as providing a broader context to the issue by bringing together similar cases from different higher education institutions.

References:

Aksu, Z. C. (2020). Distance Education in COVID-19 Pandemic: Insights from Turkish Students. *Research Methods in Social Sciences Final Report.*

Areshonkov, V. (2020). Tsyfrovizatsiya vyshchoyi osvity: vyklyky ta vidpovidi. Visnyk Natsional′noyi akademiyi pedahohichnykh nauk Ukrayiny [Digitalization of higher education: challenges and answers]. *Bulletin of the National Academy of Pedagogical Sciences of Ukraine, 2(*2).https://doi.org/10.37472/2707-305X-2020-2-2-13-2

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Hum Behav & Emerg Tech., 1-3*. https://doi.org/10.1002/hbe2.191

Basilaia, G. & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, *5*(4). https://doi.org/10.29333/pr/7937

Basilaia, G., Dgebuadze, M., Kantaria, M., & Chokhonelidze, G. (2020). Replacing the classic learning form at universities as an immediate response to the COVID-19 virus infection in Georgia. *International Journal for Research in Applied Science and Engineering Technology*, *8*(3), 101-108. https://doi.org/10.22214/ijraset.2020.3021

Bonfield, Ch.A., Salter, M., Longmuir, A., Benson, M. & Adachi, Ch. (2020). Transformation or evolution?: Education 4.0, teaching and learning in the digital age. *Higher Education Pedagogies, 5*(1), 223-246. https://doi.org/10.1080/23752696.2020.1816847

Brammer, S., & Clark, T. (2020). COVID-19 and Management Education: Reflections on Challenges, Opportunities, and Potential Futures. British Journal of Management, 31(3), 453-456. https://doi.org/10.1111/1467-8551.12425

Chang, H.S. (2020). Online Learning in Pandemic Times. *Revista Romaneasca pentru Educatie Multidimensionala,* 12(2Sup1), 111-117. https://doi.org/10.18662/rrem/12.2Sup1/296

Chugai, O. & Pawar, A. (2021). Studying English under Covid-19 Quarantine: Ukrainian and Indian Students' Perspectives. *Advanced Education, 8*(17), 4–10. https://doi.org/10.20535/2410-8286.213928

Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability, 12*(24), 10367. https://doi.org/10.3390/su122410367

Dey, B. L., Al-Karaghouli, W., & Muhammad, S. S. (2020). Adoption, adaptation, use and impact of information systems during pandemic time and beyond: research and managerial implications. *Information Systems Management, 37*(4), 298-302.

Dogar, A. A., Shah, I., Ali, S. W., & Ijaz, A. (2020). Constraints to Online Teaching in Institutes of Higher Education during Pandemic COVID-19: A Case Study of CUI, Abbottabad Pakistan. *Revista Romaneasca Pentru Educatie Multidimensionala, 12*(2Sup1), 12-24. https://doi.org/10.18662/rrem/12.2Sup1/285

Gokuladas, V. K. & Baby Sam, S. K. (2020). Psychological and Operational Challenges in Educational Field amidst Pandemic. Revista Romaneasca Pentru Educatie Multidimensionala, 12(2Sup1), 143-151. https://doi.org/10.18662/rrem/12.2Sup1/300

Khan, M. A. (2021). COVID-19's impact on higher education: a rapid review of early reactive literature. *Education Sciences, 11*(8), 421.

Levrints (Lőrincz), M., Myshko, S., & Lizák, K. (2021). Attributes of Effective Foreign Language Teachers: Insights from Ukraine. *Advanced Education, 8*(19), 33–41. https://doi.org/10.20535/2410-8286.235940

Malyovanyi, Y. I. (2020). Dystantsiyne navchannya: Realiyi i perspektyvy [Distance learning: Realities and prospects]. *Bulletin of the National Academy of Pedagogical Sciences of Ukraine, 2*(1). https://doi.org/10.37472/2707-305X-2020-2-1-10-1

Marinoni, G., Van't Land, H., & Jensen, T. (2020). The impact of Covid-19 on higher education around the world. *IAU global survey report*. https://www.unibasq.eus/wp-content/uploads/2020/06/iau_covid19_and_he_survey_report_final_may_2020.pdf

Melnychenko, A., & Zheliaskova, T. (2021). Transformation of Educational Process in Covid-19 Pandemic: A Case of Igor Sikorsky Kyiv Polytechnic Institute. *Advanced Education, 8*(18), 4–10. https://doi.org/10.20535/2410-8286.237575

Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open, 1*, 100012. https://doi.org/10.1016/j.ijedro.2020.100012

Mizyuk, V. (2019). Blended learning as a modern educational technology for integrating the learning process in education institutions. *Naukovyy visnyk Mykolayivs'koho natsional'noho universytetu imeni V. O. Sukhomlyns'koho. Pedahohichni nauky, 66*(3), 172-177. https://doi.org/10.33310/2518-7813-2019-66-3-172-177

Nenko, Y., Kybalna, N., & Snisarenko, Y. (2020). The COVID-19 Distance Learning: Insight from Ukrainian students. *Revista Brasileira de Educação Do Campo, 5*, e8925. https://doi.org/10.20873/uft.rbec.e8925

Nurunnabi, M., Almusharraf, N., & Aldeghaither, D. (2020). Mental health and well-being during the COVID-19 pandemic in higher education: Evidence from G20 countries. *Journal of Public Health Research*, *9*(Suppl 1).

Owusu-Fordjour, C., Koomson, C. K., Hanson, D. (2020). The Impact Of Covid-19 On Learning - The Perspective Of The Ghanaian Student. *European Journal of Education Studies,* 7 (3), 88-100. DOI:10.5281/zenodo.3753586

Piotrowski, C., & King, C. (2020). COVID-19 pandemic: Challenges and implications for higher education. *Education, 141*(2), 61-66.

Pokhrel, S. & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future, 8* (1), 133-141. https://doi.org/10.1177/2347631120983481

Rashid, S., & Yadav, S. S. (2020). Impact of Covid-19 Pandemic on Higher Education and Research. *Indian Journal of Human Development, 14*(2), 340–343. https://doi.org/10.1177/0973703020946700

Salvagni, J., Wojcichoski, N., & Guerin, M. (2020). Challenges to implement remote education in brazilian higher education in a pandemic context. *Educacao Por Escrito, 11*(2), e38898.

Shandra, N., Yuzik, O., & Zlenko, N. (2021). Zmishane navchannya u zakladakh vyshchoyi osvity: vyznachennya, rivni ta katehoriyi [Blended learning in higher education institutions: definitions, levels and categories]. *Grail of Science, 1*, 360-364. https://doi.org/10.36074/grail-of-science.19.02.2021.075

Stukalo, N. & Simakhova, A. (2020). COVID-19 Impact on Ukrainian Higher Education. *Universal Journal of Educational Research*, *8*(8), 3673-3678. https://doi.org/10.13189/ujer.2020.080846

Tejedor, S., Cervi, L., Pérez-Escoda, A., Tusa, F., & Parola, A. (2021). Higher education response in the time of coronavirus: perceptions of teachers and students, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 43. https://doi.org/10.3390/joitmc7010043

Toader, T., Safta, M., Titirișcă, C., & Firtescu, B. (2021). Effects of digitalisation on higher education in a sustainable development framework – Online learning challenges during the COVID-19 pandemic. *Sustainability*, *13*(11), 6444. https://doi.org/10.3390/su13116444

Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, *5*(4), em0063. https://doi.org/10.29333/pr/7947

Watermeyer, R., Crick, T., Knight, C., & Goodall, J. (2021). COVID-19 and digital disruption in UK universities: afflictions and affordances of emergency online migration. *Higher Education*, *81*, 623-641. https://doi.org/10.1007/s10734-020-00561-y

Zhu, T. (2020). Empirical Research on the Application of Online Teaching in Chinese Colleges and Universities Under the Situation of Novel Coronavirus Pneumonia Prevention and Control. *International Journal of Emerging Technologies in Learning (iJET)*, *15* (11), 119-136. https://doi.org/10.3991/ijet.v15i11.13935

Received: 08 February, 2022
Accepted: 03 May, 2022

Appendix 1. List of questions for online survey

Introduction

1. Your position
2. Your gender
3. Your age
4. What is your work experience?
5. What subject(s) do you teach?
6. What students' age range do you work with?
7. Did you have experience of distance teaching before the COVID-19 pandemic?
8. If you had the experience in distance teaching before the COVID-19 pandemic, describe the ways how you worked in the distance learning mode.
9. Did you take any courses, webinars or workshops on how to organize distance learning which were helpful for teaching your subject? If yes, indicate the courses in the variant "other".

Teaching and learning during the first year of the COVID-19 pandemic (2020)

10. Assess your readiness for the remote learning process at the beginning of the lockdown from 1 to 10 where 1 is "not ready at all" and 10 is "completely ready".
11. Assess your students' digital skills during the first year of the pandemic from 1 to 10 where 1 is "low level" and 10 is "high level"?
12. Assess your digital skills during the first year of the distance learning mode from 1 to 10 where 1 is "low level" and 10 is "high level"?
13. What platforms did you use when you started to work remotely during the lockdown?
14. Do you consider the platform you worked with functional enough for teaching your subjects?
15. In what way did you check home assignments?
16. In what way did your students take tests?
17. In what way did your students take exams?
18. What online resources or apps did you start to use for your subjects teaching after the first term of distance learning?
19. Did you find all the necessary resources to replace face-to-face activities with relevant ones in the online classroom?
20. What traditional offline activities you were not able to use online?
21. What problems with online educational process management did you have at the beginning of lockdown?

Teaching and learning during the current year of the COVID-19 pandemic (2021)

22. Assess your current students' digital skills after two years of the distance learning experience from 1 to 10 where 1 is "low level" and 10 is "high level"?
23. What digital skills have your students developed?
24. Assess your digital skills after two years of the distance learning experience from 1 to 10 where 1 is "low level" and 10 is "high level"
25. What digital skills have you developed?
26. In what way do you check home assignments at the current time?
27. In what way do your students take tests? In what way do your students take exams?
28. What online resources or apps do you use for your subjects in the current period?
29. What problems with online educational process management do you have at the current time?
30. What online activities can not be used in current blended learning, especially in face-to-face mode?

Reflection and perspectives

31. If distance learning mode goes on, what technologies and skills do you think you need for teaching your subject more efficiently?
32. What should be done for improving your students' digital skills?
33. What benefits do you have from online distance learning?
34. What drawbacks does online distance learning have?
35. What benefits do you have from traditional face-to-face learning?
36. What drawbacks does traditional face-to-face learning have?
37. What way of teaching is more efficient for learning your subject?
38. Assess how your way of teaching distantly differs from traditional face-to-face teaching from 1 to 10 where 1 is "not different at all" and 10 is "totally different".
39. Assess how much you had to change the methodology of teaching your subject from 1 to 10 where 1 is "no changes" and 10 is "complete changes".
40. What way of your subject teaching do you consider the best in the nearest future?
41. I give consent to process the submitted data within the framework of the research