

STUDENTS' VIEWS ON HIGHER EDUCATION TRANSFORMATIONS CAUSED BY THE COVID-19 PANDEMIC: A COMPARATIVE STUDY FOR LATVIA AND UKRAINE

Svetlana Ušča

Rezekne Academy of Technologies, Latvia

Oleksandr Malykhin

Institute of Pedagogy of National Academy of Educational Sciences of Ukraine, Ukraine

Nataliia Aristova

Institute of Pedagogy of National Academy of Educational Sciences of Ukraine, Ukraine

Abstract. *The study's primary purpose was to compare Latvian and Ukrainian students' views on transforming traditional learning process connected with implementing infection control measures aimed at preventing the spread of coronavirus and their consequences on higher education in both countries. In this study, the total number of respondents consisted of 207 undergraduate, graduate and postgraduate students from Latvia and Ukraine. Latvian research sample was presented by 109 students including 11 male students (10.09%) and 98 female students (89.91%). Ukrainian research sample consisted of 98 students including 16 male students (16.33%) and 82 female students (83.67%). A convenience sampling technique was used for selecting the research sample. The survey was conducted in October 2020 - March 2021. The current research is carried out within the project of National Academy of Educational Sciences of Ukraine "Organization of Educational Process in the Content of Unpredicted Changes (the Covid-19 Pandemic): Comparative Analysis (Ukraine – EU countries)", No. 0121U108690.*

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Introduction

Since the onset of the Covid-19 pandemic, it has spared no aspect of human life including higher education. In response to the mass coronavirus outbreaks throughout the world the governments in many countries implemented infection control measures and stay-at-home policies to prevent the spread of the disease (UNESCO, 2020; WHO, 2020a; WHO, 2020b). People were advised to limit person-to-person contacts, avoid commuting and gathering together in large groups etc. The governments in many countries closed public and private general secondary schools, high schools, universities and training centers to protect

schoolchildren and students against coronavirus. Moreover, they recommended that academic institutions of all levels remained closed until the improvement of epidemiological situation. In this regard, universities in many countries were forced to radically reconsider the approaches to delivering education to students and to offer the move towards remote learning regarded as “a short-term mitigation option to act as a replacement for face-to-face teaching” (Cowden, Mitchell, & Taylor-Guy, 2020). But, unfortunately, transformations in the sphere of higher education caused by the Covid-19 pandemic and the forced move towards remote learning raised new challenges for both students all over the world.

Investigating the attitudes of university lecturers and students in Poland and Korea, S. Juszczuk and S. Kim (2020) came to the conclusion that for many students and university lecturers synchronous, face-to-face education seemed to be more effective and appropriate. According to researchers, both students and university teachers associated face-to-face education with “the possibility of more frequent interaction with teachers and with each other, a greater chance of understanding difficult content, the possibility of more frequent questions and answers from teachers or colleagues...” (Juszczuk & Kim 2020, p. 126).

M. Rizun & A. Strzelecki claimed that after introduction of coronavirus control measures many students considered remote learning to be a good idea although they had a low to medium feeling that “distance learning enhanced their effectiveness, improving course performance and productivity” (2020, p. 15). The scholars also stated that many students hoped to go back to traditional education (Rizun & Strzelecki, 2020).

M. Adnan & K. Anwar also provided an opinion that a significant number of students had reservations about the effectiveness of remote learning and innovative technologies used by higher education institutions for delivering education and educational services (2020). According to M. Adnan & K. Anwar (2020), the sudden move towards online education resulted “in a completely different learning experience for students”.

We come to accept today that the Covid-19 pandemic has already affected the proper functioning of universities all over the world and its consequences continue to complicate the delivery of quality education. Expressing a consensus view of the present situation, many researchers claim that the sudden move towards remote teaching and learning has become a great shock for all participants of educational process (Bao, 2020; Malykhin, Usca, & Aristova, 2021; Topuzov, Malykhin, Usca, & Aristova, 2021; Usca, Dzerviniks, Lubkina, Vindece, & Poplavskis, 2021). And although remote learning is not a new concept, online courses and the digital educational environments of many universities were far from perfect and were not ready for a large-scale online teaching and learning after the introduction of quarantine measures. Besides, having faced with such a

challenge for the first time, university lecturers and students throughout the world found it difficult to handle all problems quickly and decisively.

A review of current literature on transformations in the sphere of higher education caused by the Covid-19 pandemic provides the opportunity to claim that the most studies are focused mainly on negative changes connected with the introduction of coronavirus control measures and do not include any positive experience gained by both university lecturers and students. And taking into account that a wide range of serious academic publications on this matter topic has already been written, we can state that research papers on comparative analysis on educational changes occurring in different countries are not enough which is a great cause of concern. Thus, the study's primary purpose is to compare Latvian and Ukrainian students' views on transforming conventional learning process connected with measures aimed at preventing the spread of the coronavirus and their consequences on higher education in both countries.

Methodology

Research Sample

In this study, the total number of respondents comprised 207 students from Latvia and Ukraine. Latvian research sample was presented by 109 students including 11 male students (10.09%) and 98 female students (89.91%). Latvian respondents were from Rezekne Academy of Technologies (Rezekne, Latvia). Ukrainian research sample consisted of 98 students including 16 male students (16.33%) and 82 female students (83.67%). Ukrainian respondents were from Kyiv National University of Technologies and Design (Kyiv, Ukraine), Taras Shevchenko National University of Kyiv (Kyiv, Ukraine), National Aviation University (Kyiv, Ukraine) and Kamyanets-Podilsky Ivan Ohienko National University (Kamyanets-Podilsk, Ukraine). A convenience sampling technique was used for selecting the research sample. The survey was conducted in October 2020 – March 2021.

Instruments and Procedure

Considering the fact that after the implementing coronavirus measures and the move towards remote teaching and learning, scholars and practitioners in Latvia and Ukraine ran into a problem to find in the shortest period possible technologies, methods and tools of teaching and learning that were the most optimal for distance education, the international team of researchers developed a web-based questionnaire aimed at comparing Latvian and Ukrainian students' views on transforming traditional learning process connected with the Covid-19 pandemic. For Latvian research sample the web-based questionnaire was provided in Latvian and for Ukrainian research sample it was provided in Ukrainian. The developed web-based questionnaire included two parts. The first

part was targeted at figuring out socio-demographic information about Latvian and Ukrainian students including their age, gender and educational background. The second part contained the following questions:

1. *Can you indicate if the educational process has changed for worse with the sudden closure of university due to the Covid-19 pandemic and the move towards remote learning? In case of a positive answer, list negative educational changes connected with the need to stay at home and to study remotely.*

2. *Can you indicate what has changed for better with the sudden closure of university due to the Covid-19 pandemic and the move towards remote learning? In case of a positive answer, list positive educational changes connected with the need to stay at home and to study remotely.*

3. *What is your view on higher education transformations caused by the Covid-19 pandemic?*

After conducting the web-based survey, the researchers analyzed the Latvian and Ukrainian respondents' comments question by question.

Data Analysis

To compare Latvian and Ukrainian students' views on higher education transformations connected with implementing coronavirus control measures, the responses given by Latvian students and Ukrainian students were analyzed descriptively and comparatively. All the researchers were directly involved in processing the information obtained, comparing the data received among Latvian and Ukrainian respondents, discussing the data processed, displaying the obtained data in the form of tables and figures and making general conclusions.

Results and Discussion

The first question was aimed at finding out if the educational process had changed for worse with the sudden closures of universities due to the Covid-19 pandemic and what negative changes were of the utmost concern to Latvian and Ukrainian respondents. Tables 1-2 demonstrate the main negative changes in the sphere of higher education caused by implementing coronavirus control measures in Latvian and Ukrainian respondents' points of view.

The obtained results suggested that the systems of higher education in both countries had been undergoing almost identical negative changes. Thus, as reported by Latvian (72.48%) and Ukrainian (84.69%) respondents the most significant negative change was the change in the learning load. The social-emotional distance also became one of the most considerable negative changes connected with the closures of universities for both Latvian (71.56%) and Ukrainian (74.49%) respondents. As shown in Tables 1 and 2, 63.30% of Latvian respondents and 75.59% of Ukrainian respondents were dissatisfied with the speed of their Internet. Latvian (71.56%) and Ukrainian (54.08%) respondents

found it difficult to cope with essential educational material independently. Moreover, 62.39% of Latvian respondents and 43.12% of Ukrainian had to admit the quality of online lectures, practical classes and seminars was reduced. Both Latvian (46.79%) and Ukrainian (59.18%) respondents reported about the poor digital infrastructure of higher education institutions. As indicated in Table 1, Latvian respondents were also seriously concerned about restrictions connected with their academic mobility (25.69%) and the considerable reduction of motivation (18.35%). According to Table 2, Ukrainian respondents were extremely dissatisfied with the lack of technical support from higher education institutions (26.53%) and irregular study time (17.35%). Thus, we can state that although the interruption of conventional face-to-face instruction and the move towards remote learning as part of the coronavirus prevention measures was considered to be the only right decision, the reality proved to be far more mundane.

Table 1 Latvian students' opinions on negative changes in the sphere of higher education occurred with the move to remote learning (made by Authors)

| Negative changes | N | % |
|--|----|-------|
| Change in learning load | 79 | 72.48 |
| Inability to cope with essential educational material independently | 78 | 71.56 |
| Lack of high-speed Internet | 69 | 63.30 |
| Quality reduction of online lectures, practical classes and seminars | 68 | 62.39 |
| Social-emotional distance | 52 | 47.71 |
| Poor digital infrastructure of higher education institutions | 51 | 46.79 |
| Academic mobility restrictions | 28 | 25.69 |
| Deterioration of health and emotional well-being | 26 | 23.85 |
| Reduction of motivation | 20 | 18.35 |

Source: own study

N=109

Table 2 Negative changes in the sphere of higher education caused by implementing coronavirus control measures in Ukrainian respondents' points of view (made by Authors)

| Negative changes | N | % |
|--|----|-------|
| Change in learning load | 83 | 84.69 |
| Lack of high-speed Internet | 78 | 79.59 |
| Social-emotional distance | 73 | 74.49 |
| Poor digital infrastructure of higher education institutions | 58 | 59.18 |
| Inability to cope with essential educational material independently | 53 | 54.08 |
| Quality reduction of online lectures, practical classes and seminars | 47 | 43.12 |
| Deterioration of health and emotional well-being | 34 | 34.69 |
| Lack of technical support from higher education institutions | 26 | 26.53 |
| Irregular study time | 17 | 17.35 |

Source: own study

N=98

Then, Latvian and Ukrainian respondents were asked to list the most serious educational problems they faced shortly after the introduction of infection control measures and the closures of universities. The obtained results concerning Latvian students' responses to the question of interest to us were given in Table 3.

Table 3 The most serious educational problems Latvian students experienced shortly after infection control measures were taken (made by Authors)

| The most serious educational problems | N | % |
|---|----------|----------|
| Excessive learning load | 79 | 72.48 |
| A wide range of telecommunications applications and messengers to work with | 69 | 63.30 |
| Internet connection problems | 69 | 63.30 |
| Insufficient level of digital competence | 68 | 62.39 |
| Inability to be socialized with others | 52 | 47.71 |
| Lack of a single platform to work on | 51 | 46.79 |
| Lack of adequate technical equipment to study remotely | 22 | 20.18 |
| Lack of immediate feedback provided by university lecturers | 21 | 19.27 |
| Study-related stress | 19 | 17.43 |
| Health problems | 7 | 6.42 |

Source: own study
N=109

Table 4 presents the most serious educational problems Ukrainian students experienced shortly after coronavirus control measures were taken.

Table 4 The most serious educational problems Ukrainian students faced shortly after the closures of universities (made by Authors)

| The most serious educational problems | N | % |
|---|----------|----------|
| Excessive learning load | 83 | 84.69 |
| Internet connection problems | 78 | 79.59 |
| A wide range of telecommunications applications and messengers to work with | 63 | 64.29 |
| Insufficient level of digital competence | 58 | 59.18 |
| Inability to be socialized with others | 52 | 53.06 |
| Poor digital infrastructure provided by university | 47 | 47.96 |
| Lack of adequate technical equipment to study remotely | 43 | 43.88 |
| Study-related stress | 34 | 34.69 |
| Health problems | 20 | 20.41 |
| Homework procrastination and late assignment submissions | 15 | 15.30 |

Source: own study
N=98

The results showed that for 72.48% of Latvian students and 84.69% of Ukrainian students one of the most serious educational problems they faced shortly after the move towards remote learning was the increase in their learning

load. Both Latvian (63.30%) and Ukrainian (75.59%) respondents were not always able to attend on-line lectures, seminars and classes regularly because they experienced Internet connection problems. These data established the fact of respondents' unequal access to educational services provided by higher education institutions. Such a situation, to our regret, takes place in many countries throughout the world which is proved by findings obtained earlier by different scholars (Ali, 2020; Cowden, Mitchell, & Taylor-Guy, 2020). For today the list of countries with the fastest average mobile Internet connections comprises South Korea, China, UAE, Qatar, Saudi Arabia, Netherlands, Norway, Canada, Australia, Bulgaria and, unfortunately, Latvia and Ukraine are not included in it (O'Dea, 2020). In our research, 63.30% of Latvian respondents and 64.29% of Ukrainian respondents experienced some problems with a wide range of telecommunications applications and messengers. Among telecommunications apps and messengers listed in the comments were Skype, Google Meet, Zoom, MS Teams, Viber, Webex Cisco etc. As it turned out they were easy to use, but switching between them was rather time-consuming and sometimes confusing. Moreover, for some students it was quite a challenge to download all these apps or/and messengers on their devices because of their low storage capacity. Latvian (62.39%) and Ukrainian (59.18%) students stated that although they had PCs, laptops and other gadgets, their level of digital competence was not sufficient to feel confident while using different digital software and resources, let alone to respond to the need to acquire professional knowledge and skills remotely. Life in the Digital Age requires that every member of the world society demonstrates a high level of digital competence which is among eight key competences for lifelong learning (European Commission, 2018). The results obtained, as it turned out, confirmed earlier research concerning the insufficient level of Latvian and Ukrainian students' digital competence (Mirke & Cakula, 2019; EGAP, 2020). Latvian (47.71%) and Ukrainian (53.06%) respondents indicated that one of the most serious problems they experienced was the inability to be socialized with others. After the introduction of quarantine, the respondents in both countries had to stay indoors and avoid any person-to-person contacts with their friends, distant relative, neighbors etc. Some of them were removed from dormitories and had to return home which, in our point of view, adversely affected the process of their adaptation to university life (Topuzov et al., 2020). Lack of a single platform to work on was one of the main serious problems for 46.79% of Latvian respondents, and poor digital infrastructure provided by university was one of the most serious problems among Ukrainian respondents (47.96%). It means that although universities all over the world devoted much attention to developing various online courses, they proved to be ill-prepared to cope with the sudden move to remote learning. 20.18% of Latvian respondents and 43.88% of Ukrainian respondents stated that they didn't have adequate technical equipment to study remotely. Commenting on their responses they explained that they had to share a

computer with a brother/sister. Some of them mentioned that they also had problems with video-cameras and sound systems on their laptops and PCs which they had no opportunity to fix without the assistance from professionals. Both Latvian (17.43%) and Ukrainian (34.69%) respondents indicated that they experienced study-related stress. Moreover, Latvian (6.42%) and Ukrainian (20.41%) respondents reported that they started experiencing health problems including headaches, vision problems, backaches, pains in the neck and shoulders etc. As we found out Latvian students (19.27%) were disappointed by the lack of immediate feedback provided by their university lecturers. In their opinion, it was the reason for some misunderstanding and lowering their academic performance. For 18.35% of Latvian students the move towards remote learning had a detrimental impact on their motivation and desire to study and for Ukrainian ones (15.30%) it became a significant reason for so-called homework procrastination and late assignment submissions.

The third question was targeted at finding out if the educational process had changed for better with the sudden closures of universities due to the Covid-19 pandemic and what positive changes occurred after implementing coronavirus control measures including the move towards remote learning. Table 5 presents the responses of Latvian and Ukrainian respondents.

Table 5 Positive changes connected with the closure of universities and the delivery of educational services remotely after introducing infection control measures (made by Authors)

| Positive changes | Latvian respondents (N=109) | | Ukrainian respondents (N=98) | |
|---|-----------------------------|-------|------------------------------|-------|
| | N | % | N | % |
| Opportunity to improve digital competence | 84 | 77.06 | 68 | 69.39 |
| Free access to lectures recorded by university teachers from different universities | 44 | 40.37 | 39 | 39.80 |
| Wider use of massive open online courses | 41 | 37.61 | 32 | 32.65 |
| Spending more time with family | 31 | 28.44 | 47 | 47.96 |
| Savings in both time and travel cost | 31 | 28.44 | 49 | 50.00 |
| Increased online interaction | 29 | 26.61 | 38 | 38.78 |
| Opportunity to create individual learning pathways | 35 | 32.11 | 23 | 23.47 |
| Increased ability to identify various types of media | 23 | 21.10 | 25 | 25.51 |
| Opportunity to improve time management skills | 6 | 5.50 | 19 | 19.39 |
| No positive changes | 0 | 0.00 | 7 | 7.14 |

Source: own study
N=207

It should be noted that despite negative problems faced by respondents in both countries, transformations in the sphere of higher education caused by the Covid-19 pandemic brought some positive changes. Thus, for both Latvian

(77.06%) and Ukrainian (69.39%) students one of the main positive changes was the opportunity to improve their digital competence. For 40.37% of Latvian students and 39.80% of Ukrainian students the positive experience was connected with the free access to lectures recorded by university teachers from different universities. Moreover, many Latvian (37.61%) and Ukrainian (32.65%) respondents discovered massive open online courses and were impressed by their content and quality. 28.44% of Latvian and 47.96% of Ukrainian students reported that conditions they were obliged to live in enabled them to re-evaluate the family values. One more positive change mentioned by the same number of respondents in both countries was the opportunity to save time and travel cost they spent to get to university. 26.61% of Latvian respondents and 38.78% of Ukrainian respondents tried to cope with their inability to communicate with their peers on campus and off-campus and started to interact with them online. The need to search for educational information on the Internet enabled to increase Latvian (21.10%) and Ukrainian (25.51%) students' ability to identify various types of media. The move to remote learning was considered by many Latvian (31.11%) and Ukrainian (23.47%) respondents as a potential opportunity to create their individual learning pathways and increase their knowledge. For 5.50% of Latvian students and 19.39% of Ukrainian students the move towards remote learning became a real opportunity to improve their time management skills. It should be also noted that 7.14% of Ukrainian students did not see any positive changes connected with the move towards remote learning.

The last question was aimed at finding out Latvian and Ukrainian respondents' views on transforming traditional learning process connected with implementing infection control measures and their consequences on higher education in both countries. It was determined that 5.50% of Latvian students' views were positive. Negative view was expressed by 46.79% of Latvian students. And 47.71% of Latvian respondents were unable to express their opinion for sure. The results of the web-based questionnaire show that Ukrainian respondents' views on this issue were approximately the same. Thus, 17.35% of Ukrainian students were generally receptive to delivering educational services remotely as a means of replacing face-to-face instruction. 39.80% of Ukrainian students held unfavorable views on delivering educational services remotely and 42.85% of Ukrainian students were not able to respond unambiguously to the question.

The obtained results clearly demonstrate that evaluating changes occurred in the sphere of higher education, respondents in both countries were almost entirely dissatisfied with the quality of educational services delivered online. Recognizing the complexity of the situation, respondents in Latvia and Ukraine stressed the importance of remote learning but they pointed out that it was probably more like a quick response to the sudden interruption of conventional face-to-face instruction. In their comments both Latvian and Ukrainian respondents expressed

the hope to continue their learning and communication with peers and university lecturers in the classrooms.

Conclusions

To sum up, the obtained results show that in real conditions of delivering theoretical knowledge and equipping Latvian and Ukrainian students with practical skills via the Internet it became apparent that students faced many educational problems which were approximately equal for the systems of higher education in both countries. Among the most serious problems connected with the move to teaching and learning remotely respondents in both countries indicated excessive learning load, a wide range of telecommunications applications and messengers, Internet connection problems, the insufficient level of digital competence, the inability to communicate with peers in-person, the lack of a single educational platform to work on, the lack of adequate technical equipment to study remotely, the lack of immediate feedback provided by university lecturers, the study-related stress and health problems. Besides, views expressed by Latvian and Ukrainian respondents on delivering educational services remotely due to the infection control measures taken to prevent the spread of coronavirus disease were rather similar. But despite a considerable number of respondents who doubted the effectiveness of remote learning, educational problems they faced became real drivers of their development and change, gaining fresh insights acquiring and improving essential knowledge and skills.

And, it should be also added that while analysing the two-year experience of teaching and learning under conditions of the Covid-19 pandemic, we came to the conclusion that the dominant forms of instruction in higher school are remote and blended. In the majority of recent scientific publications authors analysed problems and negative consequences of unexpectedly rapid transition to remote and blended learning. On the contrary, the most focus of our research was to identify not only negative changes but also positive ones connected with the closure of universities and the delivery of educational services remotely after introducing infection control measures. After identifying the set of positive changes (presented in Table 5) and understanding that remote and blended learning are objective realities of today's higher education and, with a higher probability, are the objective realities of tomorrow's higher education, we do believe that future research should emphasize more on finding the most effective ways to implement the best practices of remote and blended learning in higher education institutions.

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