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**COVID-19 and Higher  
Education in Uzbekistan:  
Lessons from Two  
Universities**

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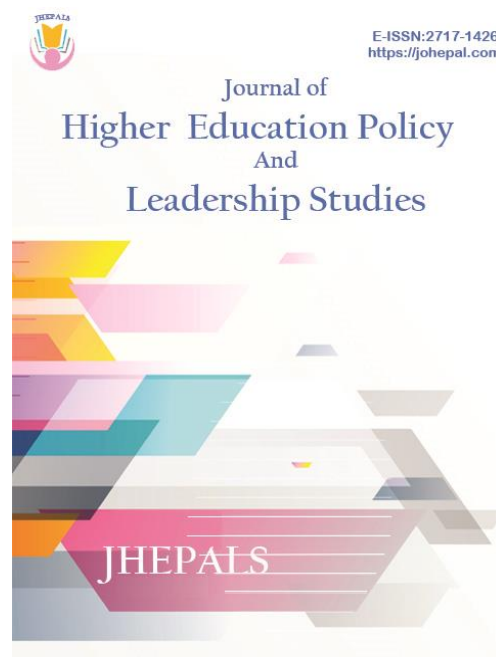
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## **COVID-19 and Higher Education in Uzbekistan: Lessons from Two Universities**

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### **Abstract**

COVID-19 led to a global movement as higher education policy-makers and leaders are disseminating their experiences during the 2020-2022 pandemic era under the heading of “Lessons Learned from COVID-19”. The available research, policy-briefs, interviews, books, conferences, and webinars might include innovative titles and themes; however, the mainstream of all works specially by late 2021 and during 2022 is on the lessons learned from COVID-19. The present research with its qualitative research design aims to portray the experience of academic staff and students from two universities in Uzbekistan: Urgench State University (UrSU) and Tashkent State University of Economics (TSUE). A total number of 414 responses (academic staff 64 and students 350) were received through Google Forms. Data analysis was administered through Strauss and Corbin’s (1998) Constant Comparative method of data analysis with peer reviewing to ensure the credibility of the emerged themes. Educational Weaknesses and Strengths, as well as Psychological Problems: Study at Home and Depression were the two main emerged themes. Leadership advice is also presented by members of both universities to help Higher Education (HE) policy-makers and leaders in Uzbekistan improve the quality of education at their universities and colleges.

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**Keywords:** Higher Education in Uzbekistan; COVID-19; Academic Staff and Pandemic; University Students and Learning in Pandemic

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## **Higher Education Institutions (HEIs) and COVID-19: Global Challenges**

COVID-19 as an unknown shocking change led to numerous crises all over the world and it will be one of those turning points (like World Wars I & II) in the history of human beings. We are a generation who witnessed the urgency of some cliché concepts as social distancing, wearing masks, frequent handwashing and sanitising, getting vaccinated, and national lockdown. It was, for sure, since decades or centuries that all countries were in shock due to increasing number of deaths because of a contagious disease on the one hand, and no clear understanding of the reason, how to avoid, and the key to successful treatment of the disease on the other. Global leaders and health authorities were in constant contact with the World Health Organization (WHO) to get the right answer to their questions; however, there was only a vague question and answer environment in news meetings by the health authorities of the countries worldwide. One of the earliest decisions was national lockdown with a hope to avoid the spread of the COVID-19 virus and the education sector (K-12 & Higher Education) was not an exception.

Universities and higher education institutions released urgent announcements concerning the lockdown conditions and students were obliged to leave their dorms and most international students had been asked to get back to their home countries to stay safe and receive full support in case of emergencies. All teaching activities were transmitted to online platforms (either those available through universities' virtual infrastructures or available free worldwide like WhatsApp, Zoom, Skype, etc.). However, it was a new experience for university officials, academic staff, employees, and students as all were supposed to work off-campus and away from their homes. All meetings by the board of directors and trustees, faculties, and departments were administered through online platforms. Students and academic staff, in some universities, experienced no challenge with the online learning-teaching practice as they had access to the platforms which were well developed, but most students around the world had technical problems during their online class participations due to poor online infrastructures at their universities.

We also remember that our universities had numerous signed memorandum of understandings (MOUs) with their international counterparts and almost all those meetings came to end as soon as national lockdowns were announced by the countries and we rarely witnessed guests from abroad on campuses. In this regard, Tohidian et al. (2022) explain that

We have spoken extensively with some members of the international relations offices as well as university authorities within different parts of the world and it seems that we will witness a new trend in the near future when it comes to international collaborations.

It was a new experience for the members of academia who were used to participate in conferences, workshops, and winter/ summer schools. All were obliged to stick to their laptops and tablets to present their lectures as well as their classes. A quick online search for key terms (COVID-19 and pandemic) through available indexing/ abstracting databases provides us with numerous materials (articles, books, book chapters, conference articles, abstracts, webinars, interviews, etc.) discussing different aspects, effects, consequences, and challenges we faced during COVID-19 time.

## COVID-19 and HE in Uzbekistan

One of the topics common in many research works is the investigation of issues, concerns, challenges, and crises within higher education policy and leadership prior to COVID-19, during the pandemic, and Post-COVID era. Nonetheless, for the sake of the present research, we have narrowed down our key terms to “Higher Education”, “COVID-19”, and “Pandemic” and extensively reviewed the available works published during 2020-2022. An excerpt of our reviewed works is presented in Table 1 with a focus on the title and keywords.

Table 1

An excerpt of works identified through three key terms: Higher Education, COVID-19, Pandemic

NO	Author(s)	Article Title	Keywords
1	Toquero, C. M. (2020)	Challenges and Opportunities for Higher Education amid the COVID19 Pandemic: The Philippine Context	COVID-19, higher education, curriculum, online learning, mental health services, environmental health education
2	Almazova, N., Krylova, E., Rubtsova, A., & Odinkaya, M. (2020)	Challenges and Opportunities for Russian Higher Education amid COVID-19: Teachers' Perspective	COVID-19 pandemic; electronic educational environment; online education; online teaching challenges
3	Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021)	Reimagining higher education during and post-COVID-19: Challenges and opportunities	Virtual classrooms, online etiquette, professional behaviours, college students, distance learning, COVID-19
4	Rashid, S., & Yadav, S. S. (2020)	Impact of Covid-19 Pandemic on Higher Education and Research	COVID-19, higher education, eLearning, virtual education, teaching-learning
5	Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020)	Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective	COVID-19; university student; socio-demographic factors; satisfaction; perception; online learning; mental health; habits; institutions; continents
6	Marinoni, G., van't Land, H., & Jensen, T. (2020)	The impact of COVID-19 on higher education around the world: IAU global survey report	****
7	Burki, T. K. (2020)	COVID-19: Consequences for higher education	****
8	Gonzalez, T., de la Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats. L., Fort, S., & Sacha, G. M. (2020)	Influence of COVID-19 confinement on students' performance in higher education	****
9	Gurukkal, R. (2020)	Will COVID 19 Turn Higher Education into Another Mode?	****
10	Pham, H. H., & Ho, T. T. H. (2020)	Toward a 'new normal' with e-learning in Vietnamese higher education during the post COVID-19 pandemic	COVID 19; e-learning; Vietnam; higher education; distance learning
11	Mishra, L., Gupta, T., & Shree, A. (2020)	Online teaching-learning in higher education during lockdown period of COVID-19 pandemic	Online teaching-learning modes; Perception; COVID-19; Pandemic; Outbreak; Lockdown period; Online education

12	Turnbull, D., Chugh, R., & Luck, J. (2021)	Transitioning to E-Learning during the COVID-19 pandemic: How have higher education institutions responded to the challenge?	COVID-19, Educational technology, Transition, E-Learning, Literature review, Online learning
13	Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021)	Reimagining higher education during and post-COVID-19: Challenges and opportunities	Virtual classrooms, online etiquette, professional behaviours, college students, distance learning, COVID-19
14	Iglesias-Pradas, S., Hernández-García, Á, Chaparro-Peláez, J., Luis Prieto, J. (2021)	Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study	Higher education; Academic performance; Emergency remote teaching; Class size; Online learning; Synchrony
15	Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021)	An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19 pandemic	COVID-19, emergency remote education, higher education, online learning, qualitative research, technology-mediated learning
16	Zawacki-Richter, O. (2021)	The current state and impact of Covid-19 on digital higher education in Germany	Corona pandemic, Covid-19, digitalization, distance education, media use, teaching and learning
17	Jung, J., Horta, H., & Postiglione, G. A. (2021)	Living in uncertainty: The COVID-19 pandemic and higher education in Hong Kong	Coronavirus (COVID-19) pandemic; Hong Kong; uncertainty; collective reflection
18	Shahzad, A., Hassan, R., Aremu, A. Y., Hussain, A., & Lodhi, R. N. (2021)	Effects of COVID-19 in e-learning on higher education institution students: The group comparison between male and female	E-learning portal, System quality, Information quality, Higher education institution, Gender
19	de Boer, H. (2021)	COVID-19 in Dutch higher education	COVID-19; Dutch higher education; University of Twente; Government measures
20	Noori, A. Q. (2021)	The impact of COVID-19 pandemic on students' learning in higher education in Afghanistan	COVID-19 pandemic, Impact of COVID-19, Students' learning, Higher education
21	Agasisti, T., & Soncin, M. (2021)	Higher education in troubled times: On the impact of Covid-19 in Italy	Higher education; crisis management; digital innovation; university services; COVID-19
22	Jiang, H., Islam, A. Y. M. A., Gu, X., & Spector, J. M. (2021)	Online learning satisfaction in higher education during the COVID-19 pandemic: A regional comparison between Eastern and Western Chinese universities	Online learning, Satisfaction, COVID-19 pandemic, Technology satisfaction model, Chinese higher education, Regional comparison
23	Stevanović, A., Božić, R., & Radović, S. (2021)	Higher education students' experiences and opinion about distance learning during the Covid-19 pandemic	Covid-19, distance learning, higher education, motivation
24	Gautam, D. K., & Gautam, P. K. (2021)	Transition to online higher education during COVID-19 pandemic: Turmoil and way forward to developing country of South Asia-Nepal	Higher education, COVID-19 pandemic, Anxiety and behavior, On-class mode of teaching, Online class, Teaching-learning process

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25	Montenegro-Rueda, M., Luque-de la Rosa, A., Sarasola Sánchez-Serrano, J. L., & Fernández-Cerero, J. (2021).	Assessment in higher education during the COVID-19 pandemic: A systematic review	COVID-19; evaluation; higher education; review
26	Holzer, J., Lüftenecker, M., Korlat, S., Pelikan, E., Salmela-Aro, K., Spiel, C., & Schober, B. (2021).	Higher education in times of COVID-19: University students' basic need satisfaction, self-regulated learning, and well-being	COVID-19, higher education, self-determination theory, well-being
27	Nandy, M., Lodh, S., & Tang, A. (2021)	Lessons from Covid-19 and a resilience model for higher education	antifragile model, coronavirus, Covid-19, emancipatory approach, higher education institutions, resilience
28	Mahmood, S. (2021)	Instructional strategies for online teaching in COVID-19 pandemic	Covid-19, higher education, instructional strategies, online teaching, pandemic
29	Crawford, J., & Cifuentes-Faura, J. (2022)	Sustainability in higher education during the COVID-19 pandemic: A systematic review	United Nations Sustainable Development Goals; higher education; coronavirus; systematic review
30	Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022)	Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review	affective engagement, behavioural engagement, cognitive engagement, higher education, Latin America, online learning, student engagement, systematic review
31	Zhang, L., Carter Jr., R. A., Qian, X., Yang, S., Rujimora, J., & Wen, S. (2022)	Academia's responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19	bibliometric analysis, COVID-19, innovative pedagogical strategies, online higher education, technology
32	Flores, M. A., Barros, A., Simão, A. M. V., Pereira, D., Flores, P., Fernandes, E., Costa, L., & Costa Ferreira, P. (2022)	Portuguese higher education students' adaptation to online teaching and learning in times of the COVID-19 pandemic: Personal and contextual factors	Higher education, COVID-19, Online teaching and learning, Students, Adaptation process
33	St-Onge, C., Ouellet, K., Lakhal, S., Dubé, T., & Marceau, M. (2022)	COVID-19 as the tipping point for integrating e-assessment in higher education practices	assessment, higher education, interview
34	Yau, A. H. Y., Yeung, M. W. L., & Lee, C. Y. P. (2022)	A co-orientation analysis of teachers' and students' perceptions of online teaching and learning in Hong Kong higher education during the COVID-19 pandemic	COVID-19, Emergency remote teaching Online learning, Co-orientation, Analysis, Perception study
35	Egielewa, P., Idogho, P. O., Iyalomhe, F. O., & Cirella, G. T. (2022)	COVID-19 and digitized education: Analysis of online learning in Nigerian higher education	Pandemic, coronavirus, diffusion of innovation theory, e-learning, quantitative method, Nigeria
36	Kazemian, S., & Grant, S. B. (2022)	The impact of the COVID-19 pandemic on knowledge sharing in UK higher education	Knowledge sharing, Grounded theory, Enterprise social network (ESN), Consumptive use, Contributive use, Higher education staff, User content

37	Hadjisolomou, A., Mitsakis, F., & Gary, S. (2022)	Too scared to go sick: Precarious academic work and 'presenteeism culture' in the UK higher education sector during the Covid-19 pandemic	academic work, blended learning and teaching, Covid-19, precarious work, presenteeism, presenteeism culture, technology, virtual presenteeism
38	Moussa, N. M., & Ali, W. F. (2022)	Exploring the relationship between students' academic success and happiness levels in the higher education settings during the lockdown period of COVID-19	Happiness, subjective well-being, academic success, higher education, happiness in the UAE

Furthermore, it needs to be highlighted that we have found the works investigated by the researchers within the realm of Higher Education during 2020-2022 have different aims and scope with specific queries as their mainstream based on the needs and prerequisites of each context. A brief overview of our identified challenges and concerns within our reviewed works is available in Table 2.

Table 2  
Brief overview of challenges identified in research 2020-2022

	Challenges for Students and Teachers	Challenges for Higher Education Leadership Team	What We Learn:
2020	Emotional, Technical, Social, Economic (Deaths News, No Right Answer to Public's Questions)	Online Infrastructures, Work from Home Policies, Universities-Governments Competing Policies, Unfair Assessments, Quality Issues, Increasing Number of Deaths among Employees, Academic Staff, and Students, M.A./ Ph.D. thesis/ dissertation defense sessions,	Review of cases in different contexts worldwide and presentation of the witnessed challenges and crises within universities and HE Institutions (HEIs).
2021	Technical, Economic, Imbalance between Teaching Loads and Assessment Policies by HE Institutions	Challenges for Higher Education Leadership Team: Preparing to Return to On-Campus Teaching, Blended Learning, COVID-19 Vaccination, On-site/ Online Assessments (mid- and final exams, Ph.D. comprehensive exams),	Review of cases in different contexts worldwide with more than a year of teaching-learning experience in COVID-19 era and presentation of practical solutions for challenges and cases.
2022	Return to College Challenges since At Home Learning Practices	Monitoring/ Observing Vaccination Policies, On-site Teaching Practices, Internationalization of HE,	Review of lessons learned from living with COVID-19 worldwide and ideas for HE policy-makers and leaders

Since very few works (Khaydarova, 2020; Rakhimov et al., 2022) have touched on the issue, we have found that there is a need to investigate the case of COVID-19 within the higher education context of Uzbekistan as the educational policy-makers and leaders must be aware of the strong and weak points that universities and Higher Education Institutes (HEIs) witnessed since the emergence of COVID-19 lock-down era, blended learning (on-

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site/ online learning), and back to college learning-teaching environment. In this regard, we aim to find answers to the following research question:

How can we improve the quality of HE in Uzbekistan based on the weaknesses and strengths identified during COVID-19?

The present research is a collaboration between two universities in Uzbekistan, Urgench State University (UrSU) and Tashkent State University of Economics (TSUE) to work on a common point of concern.

### **Higher Education in Uzbekistan**

The higher education system of Uzbekistan is divided into three levels: Bachelor programme, Master programme, and PhD programme. The duration of semesters are under the control of The Ministry of Higher and Secondary Education, however, they may vary based on the decisions of the Institutions themselves. The academic year begin in early September. It continues up to late January. It is followed by a spring semester, beginning in February and ending approximately in June. Then, There is summer holidays, the duration of which can be from 10 to 12 weeks. The main goals of the programmes are research work and organisation of scientific and pedagogical work. Bachelor's programmes, the first level of Higher Education, can last from a minimum three up to four years. After completing the programme, students get their Bachelor's Degree Diploma and are allowed to start their professional activities in the chosen spheres. In order to get specific knowledge in the chosen sphere, a Master's Degree must be obtained. It lasts for at least two years and requires a Bachelor's qualification in the chosen area. The postgraduate studies allow candidates to get Doctor of Philosophy (PhD) or Doctor of Science (DSc) degree.

In order to be eligible to a PhD programme, the candidates must own the following qualifications:

- master's degree, diploma of higher education;
- scientific results, including at least one scientific article published in a scientific journal, and at least two theses, reports in collections, scientific papers in relevant scientific areas, which can form the basis of a dissertation research for the degree of Doctor of Philosophy (PhD).

Applicants for training in basic doctoral studies take entrance exams in their specialties and English language (learned at previous levels of education). If applicants have IELTS qualification certificates (with an average score of at least 5.5), TOEFL (PBT) (at least 567 points), TOEFL (iBT) (at least 87 points), CEFR (with a level of at least B2), they are exempted from passing English exam. Education in doctoral studies is carried out in full-time programme.

Two main strategies and goals clarified by Higher Education Development programme are the adoption of distance education as one of the forms of education implemented through Information and Communication Technology (ICT), and increasing international cooperation. The new law of the Republic of Uzbekistan on Education adopted in 2020 aims at expanding the number of new Higher Education Institutions (HEIs) in the country and establishment of campuses by the world's leading universities.

## **Research Methodology**

The present qualitative research tries to help HE policy-makers of Uzbekistan in their attempt to improve the quality of online Education. It is a joint research between Urgench State University (UrSU) and Tashkent State University of Economics (TSUE). The ideal source of data is to receive feedback from all members at the university; however, it is not feasible as academic staff and students are free to choose to participate in our research or not. In this regard, we prepared the interview questions (Appendix) through Google Forms and submitted its link to all the academic staff and students through the available online groups. A total number of 206 responses to the interview questions have been received from UrSU participants (academic staff: 34 and students: 172) and 208 responses from the TSUE participants (academic staff: 30 and students: 178).

Data analysis was administered through Strauss and Corbin's (1998) Constant Comparative method of data analysis with its three phases of open coding, axial coding, and selective coding. Data collection was a non-stop process to obtain an enriched source of data for analysis and dissemination of its results. We have also asked some colleagues to review our interpretation of the responses and the initial emerged themes. Ary et al. (2014) indicates that "colleagues or peers are provided with the raw data along with the researcher's interpretation or explanation. Discussions then determine whether the reviewer(s) considers the interpretation to be reasonable, given the evidence" (p. 532). We have also presented the verbatim participants' responses without any reviewing polishing to keep the originality of the materials.

## **Results**

### **Educational Weaknesses and Strengths**

#### ***Online Platforms***

It is really interesting to note that academic staff and students in Uzbekistan also emphasized similar technical problems faced by schools and universities in many contexts during the off-campus teaching period. Poor access to high-speed internet was a major threat to the teachers' teaching practice. Active participation in online sessions/ classes need well-developed and –organized virtual infrastructure to handle the maximum number of participants on a specific platform. Teachers were supposed to share different materials as video, audio, and documents. How much time sharing these files might take is an important concern, but the students' access to high-speed Wi-Fi is another threat. If students fail to receive the materials on time, they cannot work on their assignments. Teachers might be able to handle their own technical problems, but the reality is that teaching-learning was happening at home and no one is available to handle the urgent cases if the students confront technical difficulties. Even some teachers were reluctant to teach online due to lack of technological knowledge and experience. This paradigm shift, a shift from face-to-face education to online education as Hassani (2021) states was not easy for many teachers.

Our review of the research concerning the same issues throughout the world during 2020-2022 ensured us that no access to high quality PCs and Laptops led to numerous family challenges and crises. In this case, students preferred not to participate in online classes and this was prevalent within the first year of COVID-19 lockdown.

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If access to high-speed Wi-Fi was provided for teachers and students, the next major concern was if our academic staff and students were able to successfully handle the teaching practice and class participation as well as working on the assignments through online platforms. The following quotations are some challenges and concerns pointed out by teachers and students.

The biggest obstacle for students learning from home, especially those who are poor and live in remote areas, is lack of internet access and electronic devices. **(academic staff participant #18)**

Some students who are living in remote areas had faced several problems which is related to internet connection and lack of affordability. **(academic participant #30)**

It would be better if authorities improve the condition at college. If they reconstruct that place it would be the best place to study with high facilities. **(academic staff participant #20)**

I had a lot of problems at the time. The first was the poor quality of the internet, and the quality of the study was declining. **(student participant # 123)**

... the lack of internet was a major problem in online classes. Because during the online lessons teachers sent a variety of materials: video, audio and complexes, and this, of course, requires Internet traffic. **(student participant #160)**

As I lived in a village, I had some problem with internet speed and connectivity. In addition, I felt sad, because it was better to study together with groupmates in a single room. **(student participant #81)**

Having online classes for the first time for me was hard, because not only I had some problems with adaptation, but university also needed some time to organize online platforms and enough materials. For this reason, it took two or three weeks at the start of pandemic. **(student participant #43)**

We have also received some promising feedback concerning the availability and feasibility of universities' online platform as soon as national lockdown was announced. This indicates the potential capabilities of the universities when facing with emergency situations like Covid-19 pandemic period. It might be an attestation to HE leaders and the authorities of the universities to give much priority in terms of funding for virtual infrastructures at their universities.

At the beginning I was totally unaware how to use the internet. Since Pandemic I have started using the net and now I am quite good at it. **(student participant #13)**

our university was ready to teach students online platform it was named Moodle. It had all subject we needed and it was very perfectly structured to use, there was also calendar, task reminder and so on. **(student participant #10)**

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At first our university came across difficulties, since they hadn't expected that. However, soon after they created a new online platform, which had nearly anything we need to study. **(student participant #101)**

Many teachers who were reluctant to use technology to conduct their lessons online, changed their attitude toward application of technology in their teaching practice after they got familiar with and learned how to use it effectively. Researchers (Mirzaeian et al., 2021) also found that instructors' attitudes to e-learning improved significantly from the pre-Corona to the Post-Corona period. The following quotes are ideas expressed by some of these teachers.

In the beginning I was a bit confused how to organise online teaching and conduct lessons in a new way. But after I learned how to work with technology, I found out that online teaching is very flexible and effective way of teaching. **(teacher participant # 23)**

At first, I thought it would be very difficult for me, as I was not very experienced in using online platforms, but after some time it became more and more clear until I had no problem. **(teacher participant # 16)**

First two weeks I had difficulties with understanding the usage of the online teaching platform but then I got used to it. **(teacher participant #7)**

Unfortunately, I didn't have the experience to conduct online classes before Covid 19 however university organized a couple of workshops seminars and tutorials on how to use the teaching platform effectively. **(teacher participant #25)**

### ***Shallow Learning instead of Deep Learning***

The other threat manifested in our participants' responses to the interview questions was that many students didn't take online lessons seriously. Cheating on exams and procrastination in the learning practice were inevitable. Like all other contexts, our participating academic staff illuminated critical concerns each based on their own views. Increasing the chance of cheating among students due to free access to the textbooks, pamphlets, and other online materials makes it difficult for the teachers to identify if the students are learning the materials based on their teaching practice.

What happened in online classes during the COVID-19 lockdown was mere participation in the classes. The emphasis was on logging into the portal, receiving the materials from the teachers, and listening to the teacher. There was little or no interaction between students and the teacher as mentioned by most participants.

... because we were used to learning with teacher and always tutor tell us and give motivation how we learn. Online teaching was not satisfied us. **(student participant #32)**

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... addiction to social media and others, If I take an example from my own experience during lockdown, I was easily distracted by notifications on the phone. **(student participant #103)**

I like to study at the university with my classmates under the guidance of my teachers. Distance learning has reduced learning levels, resulting in irresponsibility and neglect of lessons. **(student participant #84)**

I felt reluctant during the online classes. I was sure that the materials will be available online soon as podcast or recording of the session. There is no such pressure as on-campus classes to take note and meticulously check what the instructor says, rather, I was feeling demotivated and exhausted with the online teaching. Interestingly, it was also true about most of my friends. **(student participant #168)**

### **Psychological Problems: Study at Home and Depression**

Our students are not robots or Unmanned Aerial Vehicles (UAVs) to be easily controlled remotely. The road to success in life has numerous speed bumps; hence, it might be true that most university students feel distressed in their journey when they fail to create a friendly academic dialogic-based environment with the members of their college (friends, academic staff, head of departments, dean of faculties, and employees). COVID-19 was the last sword to the heart of their journey as they did not meet their team (in their offices and on-campus). There are numerous concerns which must be resolved if we are to obtain optimum success in our teaching practice. COVID-19 led to the emergence of a list of challenges which are extensively discussed in the webinars worldwide. However, the one crisis which most students have experienced is lack of tolerance.

Living in the dorms helps students confront different challenges and problems on their own. One of the immediate results of living with their peers in dorms is learning how to argue, criticize and persuade which are not taught in the textbooks. There are real-life techniques which can be learned in the real contexts. In such cases, students try to be patient and listen to the competing views, respect their friends, and share their own feedback. The pivotal role of dialogue and communication among peers in decreasing the students' psychological pressures cannot be neglected as Tohidian (2022) portrays a dilemma within the K-12 educational cycle which, for sure, is true about higher education sector and students' life in the colleges and universities.

Educational policies, school principals, teachers, and unbelievably parents believe that we live to learn! In this case, everything is organized and prepared for the sake of learning. In this sense, students' enjoyment of their life as a student is taken for granted. Students experience much pressure as teaching-learning continuum will be overwhelmed with numerous phobias – quizzes, mid-term and final exams, high-stakes tests, and failing a course. (Tohidian, 2022)

Students are overwhelmed with lots of assignments as well as mid- and final-term exams; hence, they must meet the deadlines set by their teachers and the university. All these types of assignments, assessments, and deadlines impose psychological stress and

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pressure on the students. However, in our on-campus teaching-learning activities students have the time to talk to their peers, consults with the academic staff, and share their weaknesses with others to avoid failure in the courses and improve their abilities and competencies. COVID-19 was an emergency case and students had to work full-time behind their PCs or on their phones and tablets. Working with these devices takes much more time and energy than daily routine activities in the classes on-campus. These conditions put our students under enormous psychological pressure during the lockdown era as indicated in their responses.

At first, I did not believe and I thought that it was for only two weeks, but later I realized it was something serious. I was completely sad and depressed as everything moved into online system. **(student participant #2)**

The only problem was that I had to spend my whole day with computer and phone which made me angry. Actually I felt stuck and unmotivated. **(student participant #98)**

I like to study with my groupmates and talk with them. Online lessons are not interesting and we can't meet and talk and chat like before in the class. **(student participant #143)**

I was really worried about the virus and how I could continue my education during quarantine as I had never studied online before. **(student participant #96)**

Additionally, Isolation is the biggest concern ever which everyone faces when they stay at home all day without interaction with others like friends and relatives. As for students, they can't communicate face to face with their groupmates and teachers. **(teacher participant #21)**

As a teacher I can talk to my students if I found that some of them are not satisfied with my teaching style in the class or they have problems with the materials. It is not that much easy to receive such feedback during online teaching-learning practice as our maximum effort was to present the materials which we were supposed to teach in each session. Technical problems and low connection speed were also distracting students to follow their teachers and, to be honest, we as teachers and students both feel unsatisfied with the online experience especially during the early months of lockdown and online classes. **(academic staff participant #26)**

### **University Authorities' Comments at UrSU & TSUE**

The researchers also asked the authorities (at UrSU and TSUE) in charge of running online classes during COVID-19 lockdown to provide their viewpoints as well as the challenges they faced and their suggestions for improving the situation. The following section presents their perspective on this matter.

### **UrSU Leadership Experience during COVID-19 Lockdown**

As the pandemic period was something never faced by the universities of our country before, there were some issues and difficulties that UrSU had to overcome. A survey was conducted to identify opinions, problems, and difficulties the staff and students of the university has faced. So, we realized that online teaching has posed several problems to both students and teachers. Teachers mostly complained that it was extremely hard to keep students engaged during online classes. Students often did not attend an online lesson and they blamed either unstable internet connection or no access to it at all. Teachers worked only with a limited number of students who, despite the tough times COVID-19 had brought, showed initiative in studies. Since teachers could not converse with students face to face, they did not take the lessons seriously and sometimes ignored teacher's instructions. Decline in the quality of education may occur due to the loss of live communication between students and teachers, which in turn leads to the formalization and depersonalization of the educational process. The decline in the quality of education can also be influenced by factors such as limited control over student performance compared to face-to-face classes.

Another problem mentioned by a big number of respondents was the quality of the internet connection. According to the results of the survey, centralized practical assistance was provided by the administration to students with socio-economic problems identified in the survey regarding their online study. Computer-equipped rooms were also organized in the university campus. Besides that, partnership was established with internet companies located in places where students live, so that they have access to the internet. Based on the topographic analysis of the survey results, in collaboration with the administrators of Uztelecom, UCell and other mobile networks, we also managed to solve the problem of Internet access for students living in remote villages.

In order to organize distance learning due to the pandemic in the 2020/2021 academic year, resources were created on a regular basis for the autumn semester. Resources were provided and were placed on the university's distance learning platform at dl.urdu.uz. Different information and communication technologies were used in distance learning. In addition to electronic copies of traditional textbooks and manuals, technologies such as audio and video materials, video conferencing, social networking were widely used. These resources were implemented through the MOODLE system, a world-famous distance learning system. All the necessary elements have been created on the platform. In particular, lectures, video lessons, tests, assignments, chatrooms, forums, surveys, glossaries, feedback and webinars are among them. The ZOOM was also used effectively to provide training via distance video communication.

A working group of professors and staff with rich experience in information technology and distance pedagogical technologies was formed and methodological assistance was developed for teachers and students. Video seminars were also organized for professors and teachers of higher education institutions.

Video lectures on subjects that are common to all in the curriculum were posted. To this end, the @ursuofficial channel was launched on the Telegram social network, which hosts video lectures created by teachers. In order to create open educational resources for all professors and teachers, video lessons were posted on the network portal, <https://tube.edu.uz> and on the YouTube, and are being updated regularly. Available at the university's information resource center, textbooks have been digitized and posted on the

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portal by teachers. However, despite the available resources on the platform, there were some shortcomings. The heads of the departments were instructed to eliminate these shortcomings. At the same time, appropriate measures have been taken every day to monitor the quality of this situation.

### **How to Improve the Quality of Higher Education at UrSU and Uzbekistan?**

To improve the quality of higher education at UrSU and other universities and HEIs we have a few suggestions. Primarily, the systems that enable plagiarism check should be implemented. This will allow eliminating copying the research materials by students when they are writing their papers and will help to increase the level of local science in the eyes of the world.

Another important point is the teaching skills of the university professors. First, they should always be given a chance to work over their knowledge related to delivering information to students. As nowadays methodology changes day by day, attracting foreign specialists in the sphere of pedagogy seems to be a right decision. Apart from that, the number of foreign teaching staff of the universities should be increased. However, foreign specialists are not the only possible solution. Home teacher exchange programs, that allow teachers of the universities inside Uzbekistan exchange their expertise and experience, should be organized.

As the pandemic period showed, computer literacy skills is a must, not a bonus for teachers who work at universities. Therefore, the IT skills of the professors as well as the IT sphere itself should be paid more attention to. In particular, RFID technology should be adopted by the universities. Radio-frequency identification (RFID) uses electromagnetic fields to automatically identify and track tags attached to objects. An RFID system consists of a tiny radio transponder, a radio receiver and transmitter. When triggered by an electromagnetic interrogation pulse from a nearby RFID reader device, the tag transmits digital data, usually an identifying inventory number, back to the reader. This number can be used to track inventory goods. RFID devices can transmit the number of students attending each class and track the various schedules students might have. This can quickly identify clashes in school schedules (both for teachers and for students), make it easier to switch around timetables and identify classes which are getting low attendance.

Finally, recruiting process should be revised. Complete transparency of staff recruitment should be organized. While hiring, using digital platforms for the process of data collection should be implemented. All candidates must go through a deep and detailed job interview before being offered a position. highly knowledgeable and skillful academic staff who are familiar with cutting edge technology will be a precious assist for UrSU and other universities in Uzbekistan.

### **TSUE Leadership Experience and Advice**

With the outbreak of COVID-19 pandemic and the announcement of national lockdown we faced a situation that we had never experienced. This was an unexpected situation and we were not prepared for that. It took some time for us to get prepared to conduct online classes as we did not have the required modern technologies. We did not have materials such as video lessons or e-books to be used in online classes. We also had problem with

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internet coverage and many students did not have access to internet or modern technological devices.

In a very short time we worked hard to overcome these obstacles. All necessary technologies for online lessons were bought. We also received useful advice and guidelines for implementing and improving online teaching and working mode from International Universities. Online teaching platforms were established and online teaching materials were prepared. Instructional videos were prepared and sent to teachers to train them how to conduct their classes online. Instructional videos on how to use zoom to attend their online classes were also sent to students.

To improve the quality of online teaching/learning process in Higher Education, the university needs to build up its online infrastructure. It should provide facilities to support underprivileged students. Expert inter/national teachers should be invited. Training course should be conducted to increase teachers' skills in using modern technologies in their teaching practice.

### **Concluding Thought**

Uzbekistan like all other countries experienced challenges during the COVID-19 era and its HE sector was not an exception. Now schools and universities have come back to their daily on-campus activities and quarantine rules and regulations are lifted worldwide, but COVID-19 was an opportunity that changed our view of online education from something as good-to-have alternative to a should-be-integrated part of education system.

Universities and HEIs are parts of the larger society and are considered as organizations. In this regard, they must move in alignment with the governments' rules and regulations. So, all health policies announced by the WHO and authorities of the Uzbekistan are considered by the university officials in terms of policies regarding quarantine, international visits, and resuming in-person classes. Funding for online education is an important issue which needs much attention than what it received prior to COVID-19. Training new generation happens from schools (K-12) up to HE. Therefore, what is paid for successful teaching-learning experience is an asset for future and Uzbekistan have a large pool of talents and competent future members who will join the society as soon as they are graduated from college/university. There is no doubt that almost all HEIs in Uzbekistan now have developed strategic plans for their 5 to 10 years ahead with a focus on improving the quality of online teaching. Academic staff and students are the main stakeholders of the HE and they experienced the most challenges during the lockdown era.

Thus, if the success of HE is the optimum goal and mission of the ministries and the government, there would be no other way than empowering teachers and students by creating opportunities to gain knowledge of applying new technologies in the teaching/learning practice and by meeting their academic expectation.

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All ethical guidelines are observed in accordance with the rules and regulations of the universities in terms of the participants of the current research and further considerations based on the Declaration of Helsinki.

## References

- Agasisti, T., & Soncin, M. (2021). Higher education in troubled times: On the impact of Covid-19 in Italy. *Studies in Higher Education, 46*(1), 86-95.  
<https://doi.org/10.1080/03075079.2020.1859689>
- Almazova, N., Krylova, E., Rubtsova, A., & Odinkaya, M. (2020). Challenges and opportunities for Russian higher education amid COVID-19: Teachers' perspective. *Education Sciences, 10*(12), 368. <https://doi.org/10.3390/educsci10120368>
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability, 12*(20), 8438. <https://doi.org/10.3390/su12208438>
- Ary, D., Jacobs, L. C., Sorenson, C., & Walker, D. A. (2014). *Introduction to research education* (9th Ed.). Wadsworth.
- Burki, T. K. (2020). COVID-19: Consequences for higher education. *The Lancet Oncology, 21*(6), p758. [https://doi.org/10.1016/S1470-2045\(20\)30287-4](https://doi.org/10.1016/S1470-2045(20)30287-4)
- Crawford, J., & Cifuentes-Faura, J. (2022). Sustainability in higher education during the COVID-19 pandemic: A systematic review. *Sustainability, 14*(3), 1879.  
<https://doi.org/10.3390/su14031879>
- de Boer, H. (2021). COVID-19 in Dutch higher education. *Studies in Higher Education, 46*(1), 96-106.  
<https://doi.org/10.1080/03075079.2020.1859684>
- Egielewa, P., Idogho, P. O., Iyalomhe, F. O., & Cirella, G. T. (2022). COVID-19 and digitized education: Analysis of online learning in Nigerian higher education. *E-Learning and Digital Media, 19*(1), 19-35. <https://doi.org/10.1177/20427530211022808>

## COVID-19 and HE in Uzbekistan

- Eringfeld, S. (2021). Higher education and its post-coronial future: Utopian hopes and dystopian fears at Cambridge University during Covid-19. *Studies in Higher Education*, 46(1), 146-157. <https://doi.org/10.1080/03075079.2020.1859681>
- Flores, M. A., Barros, A., Simão, A. M. V., Pereira, D., Flores, P., Fernandes, E., Costa, L., & Costa Ferreira, P. (2022). Portuguese higher education students' adaptation to online teaching and learning in times of the COVID-19 pandemic: Personal and contextual factors. *Higher Education*, 83(6), 1389-1408. <https://doi.org/10.1007/s10734-021-00748-x>
- Gautam, D. K., & Gautam, P. K. (2021). Transition to online higher education during COVID-19 pandemic: Turmoil and way forward to developing country of South Asia-Nepal. *Journal of Research in Innovative Teaching & Learning*, 14(1), 93-111. <https://doi.org/10.1108/JRIT-10-2020-0051>
- Gonzalez, T., de la Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats, L., Fort, S., & Sacha, G. M. (2020). Influence of COVID-19 confinement on students' performance in higher education. *PLOS ONE* 15(10): e0239490. <https://doi.org/10.1371/journal.pone.0239490>
- Gurukkal, R. (2020). Will COVID 19 turn higher education into another mode? *Higher Education for the Future*, 7(2), 89-96. <https://doi.org/10.1177/2347631120931606>
- Hadjisolomou, A., Mitsakis, F., & Gary, S. (2022). Too scared to go sick: Precarious academic work and 'presenteeism culture' in the UK higher education sector during the Covid-19 pandemic. *Work, Employment and Society*, 36(3), 569-579. <https://doi.org/10.1177/09500170211050501>
- Hassani, V. (2021). The impacts of COVID-19 pandemic on English language teacher education in Iran: Challenges and opportunities. *Journal of Teaching Language Skills (JTLS)*, 40(3), 83-116. <https://dx.doi.org/10.22099/jtls.2021.39716.2941>
- Holzer, J., Lüftenegger, M., Korlat, S., Pelikan, E., Salmela-Aro, K., Spiel, C., & Schober, B. (2021). Higher education in times of COVID-19: University students' basic need satisfaction, self-regulated learning, and well-being. *AERA Open*. <https://doi.org/10.1177/23328584211003164>
- Iglesias-Pradas, S., Hernández-García, Á, Chaparro-Peláez, J., Luis Prieto, J. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study. *Computers in Human Behavior*, 119, 106713. <https://doi.org/10.1016/j.chb.2021.106713>
- Jiang, H., Islam, A. Y. M. A., Gu, X., & Spector, J. M. (2021). Online learning satisfaction in higher education during the COVID-19 pandemic: A regional comparison between Eastern and Western Chinese universities. *Education and Information Technologies*, 26(6), 6747-6769. <https://doi.org/10.1007/s10639-021-10519-x>
- Jung, J., Horta, H., & Postiglione, G. A. (2021). Living in uncertainty: The COVID-19 pandemic and higher education in Hong Kong. *Studies in Higher Education*, 46(1), 107-120. <https://doi.org/10.1080/03075079.2020.1859685>
- Kazemian, S., & Grant, S. B. (2022). The impact of the COVID-19 pandemic on knowledge sharing in UK higher education. *VINE Journal of Information and Knowledge Management Systems*. <https://doi.org/10.1108/VJIKMS-06-2021-0096>
- Khaydarova, U. (2020). The use of interactive technologies and methods in online practical lessons in Uzbekistan during Covid-19 pandemic. *European Journal of Molecular & Clinical Medicine*, 7(3), 3941-3947.
- Mahmood, S. (2021). Instructional strategies for online teaching in COVID-19 pandemic. *Human Behavior and Emerging Technologies*, 3(1), 199-203. <https://doi.org/10.1002/hbe2.218>
- Marinoni, G., van't Land, H., & Jensen, T. (2020). The impact of COVID-19 on higher education around the world: IAU global survey report. *International Association of Universities (IAU)*. [https://www.iau-aiu.net/IMG/pdf/iau\\_covid19\\_and\\_he\\_survey\\_report\\_final\\_may\\_2020.pdf](https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf)

**Zarrati, Z., Ermetova, J., & Rakhimova Azadovna, S.**

- Mirzaeian, V., Talebi, S. H., & Amjadi, A. (2021). Evaluating university instructors' attitude and challenges towards online English language teaching before and after Corona crisis. *Journal of Foreign Language Research*, 11(3), 473-490. <https://dx.doi.org/10.22059/jflr.2020.313124.773>
- 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>
- Montenegro-Rueda, M., Luque-de la Rosa, A., Sarasola Sánchez-Serrano, J. L., & Fernández-Cerero, J. (2021). Assessment in higher education during the COVID-19 pandemic: A systematic review. *Sustainability*, 13(19), 10509. <https://doi.org/10.3390/su131910509>
- Moussa, N. M., & Ali, W. F. (2022). Exploring the relationship between students' academic success and happiness levels in the higher education settings during the lockdown period of COVID-19. *Psychological Reports*, 125(2), 986-1010. <https://doi.org/10.1177/0033294121994568>
- Nandy, M., Lodh, S., & Tang, A. (2021). Lessons from Covid-19 and a resilience model for higher education. *Industry and Higher Education*, 35(1), 3-9. <https://doi.org/10.1177/0950422220962696>
- Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141-156. <https://doi.org/10.1177/1477971420947738>
- Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141-156. <https://doi.org/10.1177/1477971420947738>
- Noori, A. Q. (2021). The impact of COVID-19 pandemic on students' learning in higher education in Afghanistan. *Heliyon*, 7(10), e08113. <https://doi.org/10.1016/j.heliyon.2021.e08113>
- Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19 pandemic. *British Journal of Educational Technology*, 52(4), 1357-1376. <https://doi.org/10.1111/bjet.13112>
- Pham, H. H., & Ho, T. T. H. (2020). Toward a 'new normal' with e-learning in Vietnamese higher education during the post COVID-19 pandemic. *Higher Education Research & Development*, 39(7), 1327-1331. <https://doi.org/10.1080/07294360.2020.1823945>
- Rakhimov, O., Ehev, S., Latipov, S., & Rakhimov, J. (2022). Positive and negative aspects of digitalization of higher education in Uzbekistan. *AIP Conference Proceedings*, 2432(1). <https://doi.org/10.1063/5.0089690>
- 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>
- Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review. *British Journal of Educational Technology*, 53(3), 593-619. <https://doi.org/10.1111/bjet.13190>
- Shahzad, A., Hassan, R., Aremu, A. Y., Hussain, A., & Lodhi, R. N. (2021). Effects of COVID-19 in e-learning on higher education institution students: The group comparison between male and female. *Quality & Quantity*, 55(3), 805-826. <https://doi.org/10.1007/s11135-020-01028-z>
- Stevanović, A., Božić, R., & Radović, S. (2021). Higher education students' experiences and opinion about distance learning during the Covid-19 pandemic. *Journal of Computer Assisted Learning*, 37(6), 1682-1693. <https://doi.org/10.1111/jcal.12613>
- St-Onge, C., Ouellet, K., Lakhal, S., Dubé, T., & Marceau, M. (2022). COVID-19 as the tipping point for integrating e-assessment in higher education practices. *British Journal of Educational Technology*, 53(2), 349-366. <https://doi.org/10.1111/bjet.13169>

## **COVID-19 and HE in Uzbekistan**

- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.
- Tohidian, I. (2022). Thrive beyond the schools: Three real-life skills to succeed in the society. *School Rubric*. <https://www.schoolrubric.org/thrive-beyond-the-schools-three-real-life-skills-to-succeed-in-the-society/>
- Tohidian, I., Abbaspour, A., Khorsandi Taskoh, A. (2022). Has COVID-19 nullified agreements on global collaboration? *University World News*. <https://www.universityworldnews.com/post.php?story=20220419152210685>
- 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>
- Turnbull, D., Chugh, R., & Luck, J. (2021). Transitioning to E-Learning during the COVID-19 pandemic: How have higher education institutions responded to the challenge?. *Education and Information Technologies*, 26, 6401-6419. <https://doi.org/10.1007/s10639-021-10633-w>
- Yau, A. H. Y., Yeung, M. W. L., & Lee, C. Y. P. (2022). A co-orientation analysis of teachers' and students' perceptions of online teaching and learning in Hong Kong higher education during the COVID-19 pandemic. *Studies in Educational Evaluation*, 72, 101128. <https://doi.org/10.1016/j.stueduc.2022.101128>
- Zawacki-Richter, O. (2021). The current state and impact of Covid-19 on digital higher education in Germany. *Human Behavior and Emerging Technologies*, 3(1), 218-226. <https://doi.org/10.1002/hbe2.238>
- Zhang, L., Carter Jr., R. A., Qian, X., Yang, S., Rujimora, J., & Wen, S. (2022). Academia's responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19. *British Journal of Educational Technology*, 53(3), 620-646. <https://doi.org/10.1111/bjet.13191>

## **Appendix**

### **# Interview Questions for Students**

Please answer the following questions regarding online learning during COVID-19 lockdown.

Thank you for your cooperation.

1. How was your feeling as soon as the university officials announced university lockdown due to an unknown infectious disease?
2. How long did it take to commence online teaching practice at the UrSU/ TSUE? Did the university provide you with training on using specific online platforms?
3. Can you explain the teaching/ learning/ assessment practice during the online classes?
4. What challenges did you face in your online classes (internet connectivity, family or pet intrusion, lack of motivation, etc.)? did you have full access to internet in your area of residency? If not, did your teachers or the university help you in this regard?
5. How did your parents or other family members react to your online classes?
6. How did your teachers/professors look at technology and its application in teaching and learning before Covid-19 and how do they see it now?
7. What are some merits and demerits of learning/teaching online during Covid-19 lockdown?
8. How long did it take to commence on-campus teaching practice? Did you experience merged classes (Online & On-Campus)? If Yes, do you think it was a success or a failure?
9. How did you feel about technology and online classes at the beginning and how do you feel now?
10. Please discuss any further feedback which you think can help us illuminate the conditions of students at the UrSU/ TSUE (during COVID-19 period).

### **# Interview Questions for Academic Staff**

Please answer the following questions regarding online teaching during COVID-19 lockdown.

Thank you for your cooperation.

1. How was your earlier feedback about university lockdown since the emergence of COVID-19? (Your teaching materials, teaching syllabi, students' assessment, etc.).
2. What feedback and expectations did you receive from the UrSU/ TSUE officials during the university lockdown and as soon as online teaching practice commenced?
3. Did the university provide you with training on specific online teaching platforms and how to implement your teaching online?
4. Which modality did you use to teach during lockdown (synchronous, asynchronous, or both)? How was your experience during the online teaching/ assessment practice?
5. Which tools have you been using in conducting your classes during Covid-19 (video conferencing, audio conferencing, instant messaging, audio and video streaming, learning platform, and email)?
6. Did students in remote towns/villages get a good quality of internet connectivity during online learning? If not, what was your decision as a teacher to help them? what facilities did the university provide to help them?
7. What challenges did you face in your online teaching (internet connectivity, family or pet intrusion, workload, students' lack of motivation, etc.)?
8. What do you suggest to deal with the situations like Covid-19 crisis?
9. Did technology and online classes bring about creativity and innovation on the part of teachers and students?
10. Please discuss further feedback about your experience about success/ failure of online teaching practice in general and at the UrSU/ TSUE specifically.

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