MANAGING EDUCATION DURING THE CORONAVIRUS EMERGENCY: THE CASE OF A POLISH HIGHER EDUCATION INSTITUTION

Gilberto Marzano,[1,2]**Aleksandra Zając**[1]
[1] Społeczna Akademia Nauk, Poland
[1,2] Rezekne Academy of Technologies, Latvia

Abstract. *Due to the threat posed by COVID-19, most higher education institutions in Europe have opted to switch to online remote courses and smart working with a view to keeping their students and university staff safe during the current pandemic emergency.*
Face-to-face classes, including labs and workshops, have been canceled and substituted with online activities wherever possible, and new administrative procedures have even been established to support these radical changes.
This article will analyze these changes in the light of a case study research conducted at the University of Social Sciences in Poland.
The primary objective was to conduct an exploratory examination of the learning management issues that have emerged from the forced distance learning activities adopted to minimize the effects of the COVID-19 pandemic.
The secondary objective was to gather testimonies regarding the impact that the imposition of smart working has had on the university staff.
From the research activity, some significant elements emerged that have stimulated a deeper reflection on the use of digital technology in higher education.
Keywords: *coronavirus COVID-19 pandemic, e-leaning, distance learning, higher education institutions, online courses, smart working.*

To cite this article:
Marzano, G. & Zając, A. (2020). Managing Education during the Coronavirus Emergency: the Case of a Polish Higher Education Institution. *Education. Innovation. Diversity, 1(1),* 38-48.
DOI: http://dx.doi.org/10.17770/eid2020.1.5324

Introduction

The University of Social Sciences in Lodz (SAN = Społeczna Akademia Nauk) is the largest private university in Poland, and is one of the most accredited. According to the Polish Ministry of Science and Higher Education, it holds the third top-ranking position amongst the non-public higher educational institutions in the country. Established in 1994, the University offers a wide range of Bachelor's and Master's programs in the major Polish cities (such as Warsaw, Lodz, and Krakow) with a branch campus in London. At present, some 16,000 students are enrolled at the university, with around 60,000 graduates. The programs on offer include MBA and Ph.D. studies, as well as an American Master's degree program that operates in cooperation with Clark University in Massachusetts. The primary focus of SAN is to provide students with the knowledge and the skills that will be required in the labor market of the future.

The advent of the fourth industrial revolution is radically transforming society and the labor market (Larsson & Teigland, 2020; Noyelle, 2019). Indeed, the Education Commission (2017) predicted that, by 2030, more than half of the world's nearly 2 billion youth will lack the necessary skills and qualifications that will be essential to function in the emerging global workforce. In this light, SAN has implemented various activities aimed at expanding its internationalization and investment in applied research involving researchers and experts from

abroad, improving the student exchange within the Erasmus+ program, and establishing bilateral agreements with prestigious foreign universities.

Recently, from March 2020, the COVID-19 pandemic has forced SAN, like other European higher education institutions, to adopt online teaching-learning methods. According to the International Association of Universities:

> […] more than 1.5 billion students and youth across the planet are affected by school and university closures due to the COVID-19 outbreak. (International Association of Universities, 2020, https://www.iau-aiu.net/Covid-19-Higher-Education-challenges-and-responses).

However, the speed with which this move had to be implemented was unprecedented and often left both students and teachers utterly bewildered. Indeed, many online teaching-learning activities had to be hurriedly improvised and, consequently, their standards of quality differed greatly from the well-planned components of previously existing online courses. Moreover, the organization of remote classes and virtual exams, as well as of the various bureaucratic activities proved very challenging.

In this article, some aspects that emerged in the learning management experience at the SAN are illustrated and discussed.

In the following paragraphs, we present the research objectives and methodology contextualizing our exploratory investigation within the measures adopted by the Polish government for higher education institutions during the COVID-19 pandemic. Then, we expose a preliminary analysis of the interviews conducted with a selected group of academic staff, students, and foreign participants in the Erasmus plus program.

Research objectives and methodology

The primary research objective was to explore the effects, both positive and negative, of the forced adoption of remote teaching-learning and smart working at the University of Social Sciences. Agile working and electronic collaboration facilities such as video conferencing, text messaging, email, a version control repository, and Google Docs, were already in use at the university, primarily to support the activities of the international projects. At the same time, a blended learning approach had been widely adopted in various educational activities.

Nevertheless, the massive use of remote teaching-learning and working was an unprecedented experience, and the university was obliged to improvise quick solutions in less-than-ideal circumstances.

The secondary objective was to collect the first impressions and reactions to smart working from the university staff. It is well known that working in multiple locations can create organizational issues, especially if the division of tasks and the assignment of roles is not well-defined (Bednar & Welch, 2019; McEwan, 2016). As Amstrong reports (2020, p. 219), the UK Civil Service suggested the following ten top tips in this regard in 2016:

- let others know where and when you are working;
- make sure the reporting structure is clear;
- share calendars and schedules;
- use electronic document management systems rigorously to ensure work is easily accessible to everyone;
- be flexible about flexible working, so that no one is disadvantaged by the choices of others;
- develop an etiquette for online communications and virtual meetings;
- sign-post availability for phone contact or online discussion;
- be fair and considerate about using space in the office;

- support each other to succeed together.

In this research, the case study methodology has been adopted. This is a qualitative methodology commonly employed in the social sciences to investigate a phenomenon in a real-life context (Atchan, Davis, & Foureur, 2016). According to Yin (2003), a case study design is appropriate when the boundaries between the phenomenon and its context are not immediately clear. As such, different methods can be combined to illuminate a case from different angles (Johansson, 2007).

Case studies are often used in exploratory research since they can help to pinpoint elements of particular interest that might then be investigated through other methods. A case study research can be considered as a prelude to further analysis since it may enable a researcher to emphasize certain aspects of a more complex phenomenon in order to stimulate reflections that can then be transformed into a structured research hypothesis.

In carrying out this research, we adopted a three-step methodology:

1. Case study design – definition of objectives.
2. Data collection – gathering of data and opinions.
3. Analysis – reflection and discussion.

We carried out our research through interviews that included academic teachers (Latvian case study), academic teachers and students (Polish case study), and academic teachers and administrative staff (Italian case study).

We also collected and analyzed the documents produced by the three universities to face the emergency. These documents included official administrative papers, institutional communications, official website content, staff emails, social network posts, and other relevant documents.

We interviewed by telephone 20 academic teachers and 20 students from the Warsaw campus of SAN. We also interviewed 12 international students participating in the Erasmus plus program.

All interviewed had been asked about their experience during the lockdown and the emergency remote teaching (ERT). In particular, we asked them to express their opinions about:

- efficacy of learning and collaborating in an online environment;
- access to the ERT information;
- access to the SAN Information Technology infrastructure;
- satisfaction with the ERT environment and tools used by SAN;
- satisfaction with the solution adopted by SAN for taking exams from home.

We selected the interviewed considering their interest in online learning, full participation in the ERT courses, participation in the bachelor's and master's exams.

We aimed to explore two primary research questions:

1. What were the factors that influenced the overall satisfaction in the ERT experience?
2. Did the ERT experience influence the opinion of students and teaching staff on digital learning?

We also collected and analyzed the documents produced by the university to face the emergency. These documents included official administrative papers, institutional communications, official website content, staff emails, social network posts, and other relevant documents.

Higher education institutions in Poland during the COVID-19 pandemic

Following the outbreak of the coronavirus pandemic in March 2020, all higher education institutions (HEIs) in Poland were obliged to either suspend classes entirely or switch to a remote mode of teaching.

On March 3, the Polish Minister of Science and Higher Education (MSHE) issued a recommendation outlining strict preventive measures to apply in order to significantly reduce the risk of the infection spreading.

In particular, the MSHE recommended the suspension of all study trips by students, Ph.D. students, academic teachers, and researchers either to or from areas threatened with outbreaks of coronavirus COVID-19.

Normal classes and seminars for undergraduates, postgraduates, and doctoral students conducted in a traditional form remained frozen until May 24.

Most universities also published guidelines on what to do in the event of being infected, or on how to behave when staying in dormitory accommodation, and so on.

The activities of HEIs in Poland are regulated by the following authorities:

1. Government of Poland: www.gov.pl/web/coronavirus
2. Chief Sanitary Inspectorate: https://gis.gov.pl/
3. Ministry of Science and Higher Education: https://www.gov.pl/web/nauka/rekomendacja-ministra-nauki-i-szkolnictwa-wyzszego-w-zwiazku-z-sytuacja-zagrozenia-epidemiologicznego-w-kontekscie-pracownikow-uczelni
4. Polish National Agency for Academic Exchange: https://nawa.gov.pl/en/

On March 16, the MSUI announced a series of detailed recommendations to tackle the COVID-19 threat in the university context. These recommendations included the introduction of new modalities of working designed to protect the academic community, urging institutions as much as possible to consider the adoption of remote working. Access restrictions to buildings and premises were introduced for those who were unable to work remotely.

The MSUI recommendations also applied to undergraduates and doctoral students, outlining measures to be taken for courses to be taught remotely. To mitigate some of the disruption, a temporary flexibility was proposed in regards to various administrative procedures, such as for the acceptance of papers or documentation by university departments, as well as the extension of deadlines for submitting applications and sitting exams.

The MSUI recommendations were not binding, however, and rectors were given the final responsibility for making decisions regarding the implementation of specific measures.

Anti COVID-19 measures at SAN

In Poland, lockdown restrictions began to be implemented in March 2020. Fortunately, the situation remained largely under control in the majority of Polish regions, with the exception, for a brief period, of the southern province of Silesia.

In common with other Polish HEIs, then, SAN faced the COVID-19 pandemic emergency by following the MSUI recommendations, and completed the third academic semester by adopting distance teaching-learning solutions.

At the beginning, it was not easy to make decisions concerning the safety of students and the academic staff since the general situation was very unclear owing to the spread of inaccurate and deceptive information (Parmet & Paul, 2020; Qi, Du, Liu, Zhao, & Dong, 2020).

It seemed, at first, that the infection would last only a short time. Initially, therefore, the lockdown was imposed for two weeks, but it soon became clear that it would need to be prolonged. Despite the uncertainty, however, the university decided to immediately adopt remote teaching-learning and smart working practices, whilst measures were taken to minimize the disturbance for students and academic staff. It was necessary, for example, to define reliable procedures to ensure the continuation of regular lectures and the exchange of information, and to organize end-of-course and graduation exams.

The Rector of SAN made a series of decisions following the MSHE recommendations.

On March 14, the administrative offices were closed, and all employees were urged to work from home using Microsoft Teams.

All didactic activities were switched to distance learning, selecting, also for this, the Microsoft Teams platform to organize and conduct online lessons.

On March 28, the procedures for sitting bachelor's and master's exams were established.

Teaching staff experience

At the beginning of June, 20 academic teachers from the Warsaw campus of SAN were interviewed by telephone regarding their experiences of remote working.1 The interviews were based largely on multiple-choice questions with a few open questions.

Respondents were aged between 30-60 years old, and were mostly female (80%). They were encouraged to comment on their experience, focusing on the perceived advantages and disadvantages. Furthermore, they were asked to give their suggestions in the event that the university has to continue holding lectures online for the next academic year.

All respondents asserted that, in the beginning, it was difficult for them to switch to online teaching. Most (80%) complained that they had had little time to organize their teaching activities. Many also decried their own scant technical knowledge (40%) and their personal difficulties in using the online learning platform (35%). Overall, 70% expressed) opinion that the online platform was not appropriate for hosting large groups of students (more than 15). Table 1 shows the main issues encountered by teaching staff in their remote teaching activity.

Table 1. ***Teaching staff difficulties in ERT*** *(own source)*

Issues	High	Moderate	Low	None
Lack of technical knowledge	10%	30%	40%	20%
Initial lack of preparation in using the online learning platform (Microsoft Teams)	20%	50%	20%	10%
Difficulties in using the oline learning platform (Microsoft Teams)	10%	25%	30	35%
Little time to organize lectures	50%	30%	10%	10%
Suitability of the platform for many students (more than 15)	10%	20%	20%	50%

The majority of respondents (90%) reported that they experienced problems with the internet. Most respondents (80%) found online teaching to be more time-consuming compared to traditional teaching, with many claiming that an online lesson requires twice the amount of time a traditional one does.

Most of respondents (75%) were satisfied with the learning outcomes of their students and 90% of them claimed that would like to improve their own competence in online teaching-learning, and declared themselves willing to participate in initiatives organized by the university for this purpose. They also recognized that online teaching-learning could enhance learning flexibility and support individual learning according to an individual student's capabilities and availability.

[1] During the period 1st to 10th June, 20 academic teachers from the Warsaw campus of the University of Social Sciences were contacted by telephone to comment on their experience of compulsory online teaching.

Respondents (90%) pointed out that the primary disadvantage was the difficulty of interacting with students. They said that students were passive, and often they switched off the webcam claiming it slowed down the internet speed.

Many of the respondents (70%) decried their initial lack of preparation in using online learning platforms. In fact, Microsoft Teams was completely unknown to 80% of respondents.

All respondents complained about the amount of time needed to implement and conduct lessons via the online teaching-learning platforms. They also had problems with the procedures established for the exams, and were convinced that many students cheated (65%). Many respondents (80%) suggested improving the exam procedures in the event that remote teaching-learning continues in the next academic year. They were ready to participate in the analysis for the design of the new online teaching-learning procedures (75%).

Interestingly, some teachers (30%) expressed the desire to continue their theoretical lectures online regardless of the outcome of the pandemic emergency.

Students' experience

From the 1st to 6th of June, 20 students studying in Warsaw were interviewed via telephone, using a structured questionnaire. Respondents were aged 18-22 years old, and were equally divided with 50% males and 50% females.

They were asked to comment on the advantages and disadvantages of online learning during the suspension of face-to-face classes.

Moreover, they were also urged to express their opinion about the extension of remote teaching-learning to the next academic year.

Many students (45%) responded that remote learning allowed them to save money on lodgings.

Most of respondents (80%) appreciated teachers' flexibility and their availability for additional online meetings, and stated that they were satisfied with the level of engagement of teachers (90%). All expressed their appreciation for the work of administrative staff. In fact, they noted that they had had no problems during the closure of the administrative offices. Table 2 shows how students evaluated the availability/engagement of teaching and administrative staff.

On the other hand, all the students felt that the main disadvantage was the interruption of social relationships. All the students missed their group mates and the contact with their teachers, whilst 45% complained of frequent problems with their internet connection and the resulting difficulty of participating in classes. They claimed that sometimes the internet connection broke down or was too slow.

Table 2. ***Evaluation of availability/engagement of teaching and administrative staff during the ERT*** *(own source)*

Availability/Engagement	**Very good**	**Good**	**Fair**	**Poor**	**Very poor**
Teaching staff availability	35%	45%	15%	5%	-
Teaching staff engagement	40%	60%	-	-	-
Administrative staff availability	70%	30%	-	-	-
Administrative staff engagement	70%	30%	-	-	-

Moreover, 45% of students had encountered technical problems in using old computers and smartphones. They encountered some problems in using Microsoft Teams. The most common difficulties had been:

- The program didn't allow desktop sharing with their contacts;
- It was impossible seeing the latest messages or threads;
- The webcam or audio didn't work properly;
- The program didn't respond.

Overall, all the students responded that they had had to spend much more time studying online compared to traditional learning. They also claimed that they had received much more individual homework, and felt tired after the academic semester.

All the respondents confirmed that they would be open to continuing online didactic activity in the future, however, they would like more consideration to be given to their needs, above all in regards to the amount of homework, which should be less. Moreover, all of the students interviewed agreed that the university should provide them with laptops if online learning is to be introduced in the longer term. They also suggested that the university organize seminars on the use of the educational platforms.

Erasmus students' experience

Twelve students participating in the Erasmus+ program at the Warsaw campus of SAN were asked to comment on their online learning experience through a questionnaire administered by telephone. They were aged 18-22 years old, with 58% coming from Spain and the others from Turkey.

Naturally, all of the students felt hugely disappointed since they had come to Poland to learn about the Polish culture, meet new people, and visit other European countries while staying in Warsaw. Unfortunately, the COVID-19 emergency had started just after their arrival in Warsaw, and the lockdown had left them locked in the university dormitory.

All of the students reported missing their families and worrying about them. They said that it was tough to have to spend all of their time in a dormitory in a foreign country.

All of them noted that they had received a great deal of support from the university, which ensured that they were provided with information, administrative help, and didactic activities. Their coordinator was regularly in contact with them, checking how they were dealing with the situation every day.

All of the students attended regular classes via Microsoft Teams, and communicated with teachers by email. They hoped that the situation would be over soon, and that they could get a new Erasmus experience in the near future.

Some reflections

In Poland, the adoption of massive online teaching-learning during the lockdown was an unheard-of experience. Although all higher education institutions had installed Learning Management Systems (LMS), such as Blackboard, Moodle, and Coursera, online learning had not previously been widely followed.

According to research by Statistica, in 2019, only about 5% of the Polish population as a whole had participated in an online course, and 10% had used some form of online training materials (Figure 1). The situation is a little different if we take students into account. About 15% of students had attended an online course. Slightly more than 30% of them had used online training materials, while 23% had had contact with the teacher/instructor through educational websites and portals. Figures 2, 3, and 4 show how the students into account used the online resources before the ERT.

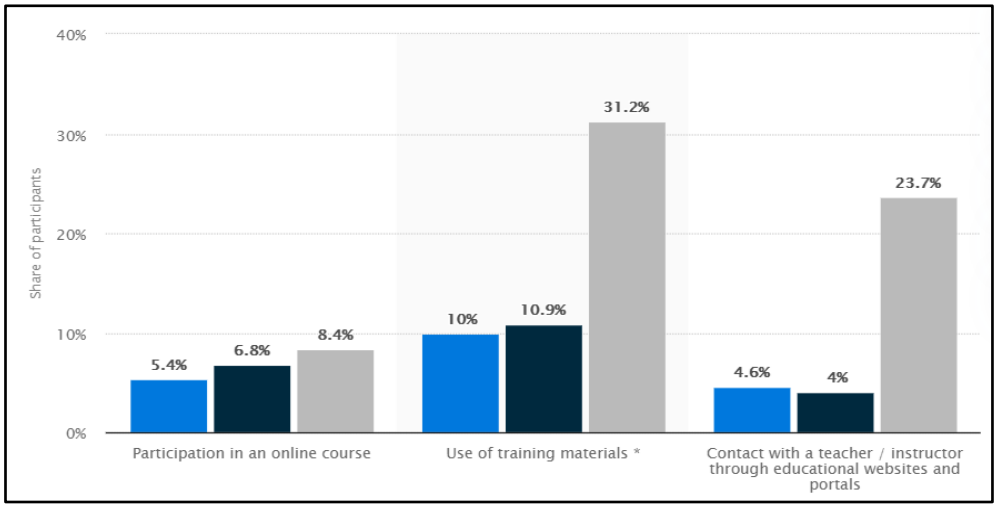

Figure 1 ***Online education in Poland in 2019*** *(source: https://www.statista.com/statistics/1121976/poland-online-education/).*

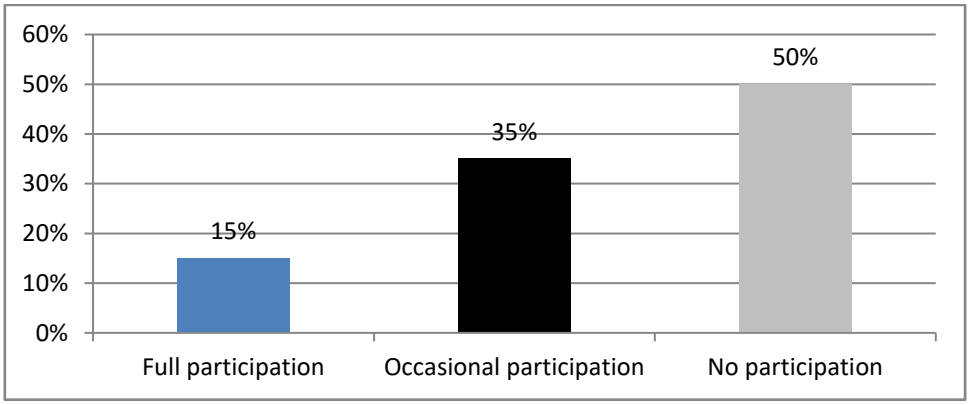

Figure 2. ***Participation in an online course before the ERT*** *(own source)*

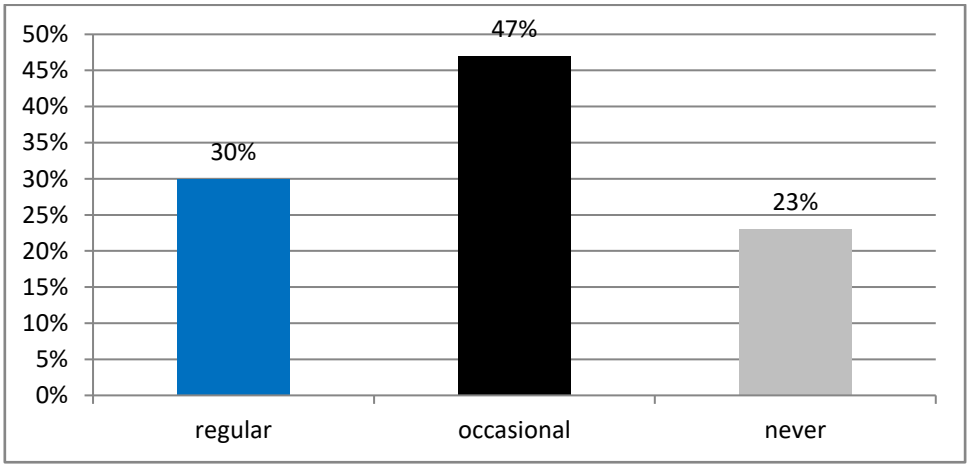

Figure 3. ***Use of online training materials before the ERT*** *(own source)*

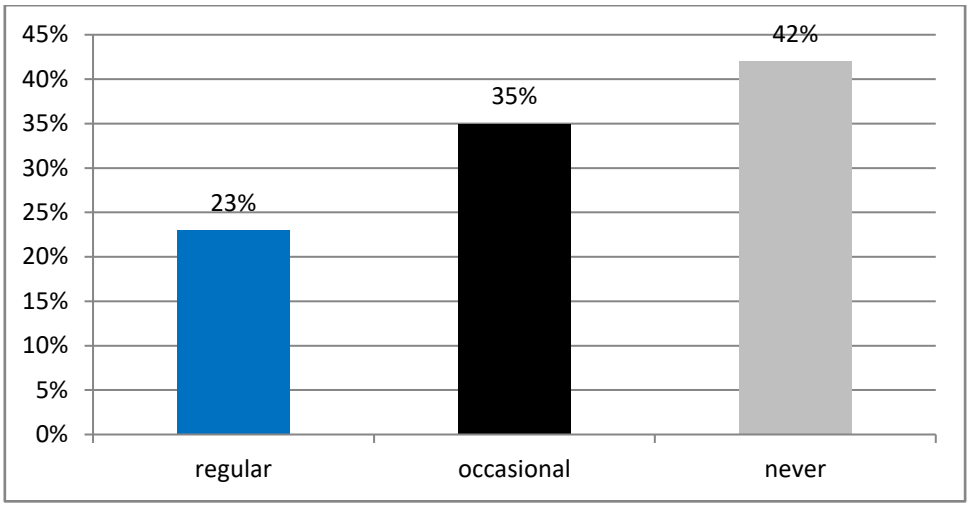

Figure 4. ***Contact with a teacher/instructor through educational websites and portals before the ERT*** *(own source)*

However, LMSs have often been used far below their potential to supplement traditional teaching, e.g., to share course materials, post announcements, and submit assignments. In fact, LMSs have only recently begun to be used to provide effective interactive functionalities. The forced distance-learning has induced experimentation with the use of virtual communication, such as video conferencing and virtual meetings. LMSs are now increasingly being integrated with various platforms for distance teaching-learning activities, such as Microsoft Teams, Zoom, GoToMeeting, and Skype.

From our research, it emerges that most teachers adopted the same modality they use in normal face-to-face teaching to the emergency remote teaching. Many of them ignored the fact that online learning has been investigated over the years, with results that have clearly distinguished between distance learning, distributed learning, blended learning, online learning, mobile learning, and other learning approaches.

In fact, these studies into online education over the last decades have resulted in numerous theories, models, standards, and evaluation criteria being developed, primarily focused on the design and quality of online courses (Arghode, Brieger, & McLean, 2017; Cook & Grant-Davis, 2020; Lee, 2017; Nortvig, Petersen, & Balle, 2018). In short, after a semester of remote teaching-learning and smart working, the SAN experience has confirmed what we already knew from previous research. Effective results for online learning programs depend on their careful design and planning.

Effective online education also requires investment. Teachers need to be taught how to design and deliver online learning modules, and a robust online learning environment should be implemented. Delivering traditional lessons online can be quick and low cost, but it is not the right way. On the contrary, becoming an expert in online teaching and learning requires application and time.

Indeed, although the students and teachers interviewed generally agreed to continue with remote teaching-learning, they all clearly underlined the need to be trained in the effective use of the educational platforms. They expect that the university will organize educational events to fill this gap.

Another, final, aspect concerns the need to provide psychological support to students to help them to overcome the lack of socialization in order that they stay mentally and emotionally healthy.

Conclusion

The threat of COVID-19 has presented higher education institutions with an opportunity to experiment with remote teaching-learning on a large scale.

In this regard, one ought not to forget that the primary objective has not been to create a robust educational infrastructure but, rather, to provide a temporary solution that would allow normal didactic activities to continue.

From our research, some key questions have emerged which need to be analyzed if we are to avoid the potential pitfalls that may arise with online learning:

- Is the technological infrastructure in place sufficient to handle the needs of remote teaching-learning?
- What is the capacity of support staff to handle the needs of remote teaching-learning?
- How can the capacity of teaching staff to design and run online courses be developed?
- How can the current didactic procedures, e.g., end-of-course and graduation exams, be adapted to respond to the challenges of an online environment?

We have to underline that the question "What were the factors that influenced the overall satisfaction in the ERT experience?" did find an answer. The limited number of responses didn't allow to build significant conclusions.

However, our research shows teaching staff and students gave a positive evaluation of the ERT experience and, accordingly, we can argue that this experience will influence their opinion on online learning.

Hopefully, the COVID-19 threat will soon be only a memory. Nevertheless, it would indeed be a lost opportunity if we return to traditional teaching and learning practices as they were before the virus, and forget all about the experience, and the clear potential benefits, of remote teaching-learning. In this regard, we agree with Sun, Tang and Zuo:

> Though COVID-19 has had a severe impact on normal educational progress, universities may take this unforeseen opportunity to detect deficiencies and speed up reform of online education through innovative course content, state-of-the-art technology and efficient management. We have to turn this emergency into an occasion to further promote international collaboration and share experiences, knowledge and resources to build global online education network. (Sun, Tang, & Zuo, 2020, p. 687).

References

Arghode, V., Brieger, E. W., & McLean, G. N. (2017). Adult learning theories: implications for online instruction. *European Journal of Training and Development*. Available at: https://dl1.cuni.cz/pluginfile.php/850493/mod_resource/content/1/Arghode%20et%20al.%20-%202017%20-%20Adult%20learning%20theories%20-Constructivism.pdf; last accessed 07.09.2020.

Atchan, M., Davis, D., & Foureur, M. (2016). A methodological review of qualitative case study methodology in midwifery research. *Journal of Advanced Nursing*, *72*(10), 2259-2271.

Armstrong, M. & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.

Bednar, P.M. & Welch, C. (2019). Socio-technical perspectives on smart working: Creating meaningful and sustainable systems. *Information Systems Frontiers*, 1-18.

Cook, K. C., & Grant-Davis, K. (2020). *Online education: Global questions, local answers*. Routledge.

Education Commission (2017). A Proposal to Create the International Finance Facility for Education. *New York, The International Commission on Financing Global Education Opportunity*. Available at: https://report.educationcommission.org/wp-content/uploads/2016/09/Learning_Generation_Full_Report.pdf; last accessed on 06.21.2020.

International Association of Universities (2020). *Covid-19: Higher Education Challenges and Responses*. Available at: https://www.iau-aiu.net/Covid-19-Higher-Education-challenges-and-responses; last accessed on 06.21.2020.

Johansson, R. (2007). On case study methodology. *Open house international*, *32*(3), p. 48. Available at: http://www.psyking.net/HTMLobj-3839/Case_Study_Methodology-_Rolf_Johansson_ver_2.pdf; last accessed on 05.30.2020.

Larsson, A. & Teigland, R. (2020). *The Digital Transformation of Labor* (p. 372). Taylor & Francis. Available at: https://library.oapen.org/handle/20.500.12657/23634; last accessed on 06.21.2020.

Lee, K. (2017). Rethinking the accessibility of online higher education: A historical review. *The Internet and Higher Education*, *33*, 15-23.

Nortvig, A. M., Petersen, A. K., & Balle, S. H. (2018). A Literature Review of the Factors Influencing E-Learning and Blended Learning in Relation to Learning Outcome, Student Satisfaction and Engagement. *Electronic Journal of e-Learning*, *16*(1), 46-55.

Noyelle, T.J. (2019). *Beyond industrial dualism: Market and job segmentation in the new economy*. Routledge.

Qi, Y., Du, C.D., Liu, T., Zhao, X., & Dong, C. (2020). Experts' conservative judgment and containment of COVID-19 in early outbreak. *Journal of Chinese Governance*, pp. 1-20. Available at: https://www.researchgate.net/profile/Xiaofan_Zhao2/publication/340113425_Experts%27_conservative_judgment_and_containment_of_COVID-19_in_early_outbreak/links/5e79a400299bf1b2b9ac1335/Experts-conservative-judgment-and-containment-of-COVID-19-in-early-outbreak.pdf; last accessed on 06.22.2020.

Yin, R.K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks.

Parmet, W.E. & Paul, J. (2020). COVID-19: The First Posttruth Pandemic. Available at: https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2020.305721; last accessed on 06.22.2020.

Sun, L., Tang, Y., & Zuo, W. (2020). Coronavirus pushes education online. *Nature Materials*, *19*(6), p. 687-687. Available at: https://www.nature.com/articles/s41563-020-0678-8; last accessed 07.09.2020.