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## CHAPTER 29

### EXPERIENCES AND LESSONS LEARNED: ONLINE CLASSES AT UNIVERSITIES IN SERBIA DURING THE COVID-19 PANDEMIC<sup>3</sup>

**Abstract:** In accordance with the epidemiological instructions during the COVID-19 pandemic, most university courses in Serbia were taught online or through blended learning, by means of different platforms and implementation of different models for organising testing. This study, conducted on a convenience sample of 48 university teachers and teaching assistants employed at Serbian state universities, examines their experiences with online class teaching. The study was conducted using the semi-structured interview method during February and March 2023. The results indicate that the teaching staff mostly had sporadic experience using different platforms suitable for online learning and that institutional support for using such tools varied, with no systematic training organised for teachers. Their experience revealed a certain uniformity in how the staff perceived the benefits and difficulties of online teaching. In fact, it is possible to isolate several categories of

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<sup>3</sup> This study was financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia, according to Agreements No. 451-03-47/2023-01/ 200165 and 451-03-47/2023-01/ 200148.

advantages and disadvantages belonging to different domains: pedagogical, organisational, economic, and social. The teachers' experiences during online classes and the accompanying activities of motivating and testing their students could benefit all higher education institutions whenever classes need to be organised during a crisis. Such experiences can also be used as a basis for the implementation of positive aspects while teaching under normal circumstances.

Keywords: *COVID-19, university, faculty, teachers and teaching assistants, online classes*

## INTRODUCTION

There is no doubt that the COVID-19 pandemic, in addition to putting immense pressure on healthcare systems, has had a significant impact on the economic, social, and emotional well-being of society (Jensen, Marinoni & van't Land 2022: 2). As a result, there were numerous global consequences of the pandemic (Pavlović, Petrović 2020). The extremely rapid spread of the disease, a large number of fatalities, and initially the lack of a medical solution for rapid containment of the unknown illness necessitated the implementation of proven effective general epidemiological measures against the spread of infectious diseases. The basis of these measures was physical distancing, which often entailed a cessation of direct interpersonal communication (Petrović, Miltojević 2023) and negatively impacted the quality of life (Miltojević 2006). Such circumstances forced the use of various tools for remote communication through the World Wide Web. Mirroring other areas of social life, educational systems had to quickly adapt their activities to epidemiological measures aimed at protecting people's health. The abrupt shift to online work involved online communication that almost fully replaced the traditional form of teaching and face-to-face interpersonal communication. Such circumstances presented numerous challenges in organising educational activities: from managing educational institutions, through organising teaching and related activities, to scientific research and educational cooperation and exchange (Jensen, Marinoni & van't Land 2022; UNESCO 2022). Each of these aspects of educational systems underwent a change during the pandemic and now requires careful examination of the challenges and experiences since some of them will permanently impact educational activities.

It is also worth noting that the transition to online work in education “has raised many issues regarding the quality of education – especially the quality of teaching and learning” (Stankovska, Dimitrovski, Ibraimi et al. 2021: 182). Of course, other important questions have also arisen concerning the adaptation of educational systems to work in the virtual space. Therefore, the pandemic has decidedly further complicated the functioning of educational activities, which, even

in regular circumstances, grapple with contradictory demands from the community in which they are organised (Petrović 2012).

This paper discusses only one aspect of educational activities, namely the results of an investigation of online classes at universities in Serbia with the aim of summarising the experiences of university teachers and associates.

## METHODOLOGY

The research was conducted with the aim of determining the following: prior knowledge of teachers and associates regarding the tools used for online teaching; quality and type of support they received from the educational institutions in which they work; perception of the advantages and disadvantages of online classes and related activities; details regarding the experience of online classes (grading problems and experiences, etc.); and their perceptions regarding the continued use of the teaching platforms beyond the pandemic.

The research was carried out during February and March 2023 with a convenience sample of 48 university teachers and associates employed at 16 higher education institutions in state universities in Serbia, in four university centres: Belgrade, Novi Sad, Niš, and Kosovska Mitrovica. In an effort to include employees from faculties in all scientific-research fields, the highest response was obtained from teachers and associates in the field of social sciences and humanities and the technical and technological field, indicating that the members of academia from these fields are professionally interested in analytically assessing and communicating their own experience.

The technique applied was the asynchronous semi-structured interview. Data collection continued until data saturation (Ritchie, Lewis & Elam 2003: 80) – the research was concluded when we practically stopped receiving new information and different insights regarding the main research topic.

After the reduction of the collected material through qualitative coding in two steps, the codes were summarised, and the results of the analysis were presented in thematically rounded sections that follow the basic structure of the data collection instrument.

## RESULTS AND DISCUSSION

A significant portion of the research respondents from most higher education institutions had no prior experience with the use of online teaching platforms. Consequently, their previous knowledge and skill acquisition can be well summarised through the following answer by a respondent: “I had no prior experience working with the programs I used during online classes. I learned to use Microsoft Teams,

Zoom, and Google Meet through a ‘crash course’ and then learned some options during use” (DHNS4). Some respondents emphasised their own resistance to using online communication tools and noted that, owing to their persistence, they successfully acquired the necessary skills for their use: “I had no experience using tools, and, moreover, I put up resistance due to a lack of digital skills. However, attending numerous online webinars encouraged me to explore them, contributing to the quality of my classes” (DHNI11).

Sporadic experience with using online platforms among teachers and associates originated from networks in the academic community, such as conferences, collaboration with foreign academic peers, experience of working in the NGO sector, and similar, as well as from personal communication, for instance, via Skype or similar applications. Only a negligible number of respondents had the opportunity to become acquainted with platforms suitable for teaching, either because the institutions employing them had accredited distance learning programs or because those respondents had the opportunity to learn about the platforms through personal development and nonformal learning: “We used to use the Moodle platform for accredited distance learning, but it was minimal because we had pre-recorded the lectures and merely repeated them for years” (DHiTTBG26); “To my advantage, when the period of online classes began, I was attending an online course, which was taught using the same platform (Zoom), so I gained the experience of working with it more quickly” (DHKM9).

Educational institutions in Serbia made an effort to provide stronger or weaker support to their employees for learning to use different online teaching platforms. The support came in the form of sending detailed instructions, providing technical services and experts to offer direct assistance to teachers, or in the form of short courses demonstrating the platforms’ capabilities. Some faculties also created opportunities for exchanging experiences with using different tools. However, at the beginning of the pandemic, a significant portion of employees only mastered basic skills for using the required web tools, gradually upgrading their knowledge ‘on the go’. An interesting experience was shared by a respondent from an institution that made efforts to provide various forms of support to its employees, vividly illustrating the state of teacher competencies at the beginning of the pandemic and the stress they experienced due to the rapid transition to online teaching: “We received a quick guide with elementary information. An online training was also organised. It was given in about ten one-hour lectures where new information was provided in succession so quickly that it was challenging to keep up with everything. It felt like learning to swim from a book instead of going into the water. A website was also created through which we could exchange experiences” (DHiTTBG26). Overall, although it is generally accepted that full mastery of ICT is essential and inevitable in higher education, it became evident during the pandemic that this was not the case, as only a negligible portion of employees had experience with platforms suitable for online classes.

Even though the majority of respondents highlighted at least one advantage of online classes, some expressed the attitude that online classes have no advantage or that their “sole advantage [...] is that it allowed classes to be taught while social contact was prohibited, which is, of course, better than no classes at all” (TTNI29), while some perceived them solely as “a forced substitute” or even as “a necessary evil” in pandemic circumstances.

Viewed through the lens of the experience of university teachers and associates, the key benefits of online classes are similar to those documented by other researchers examining the views of students in Serbia (see, for example, Šuvaković, Nikolić & Petrović 2022) and could be summarised as follows:

a) *Online classes save resources: time* – it does not require time for commuting to and from the faculty; *financial* – it does not involve travel expenses, and in the case of students, it also reduces costs related to accommodation, meals outside the family home, etc., because it offers “the possibility for students from different places (from Futog to Jakarta) to participate” (DHNS5). Regarding the latter, it is significant that some teachers recognised that organising online classes can help reduce social inequalities in education: “Children outside university centres who cannot afford to pay for accommodation in the city where the faculty is located would also be able to study” (DHNS19). Some respondents emphasised that time savings are particularly meaningful for those early in their careers because “this means a lot to young associates and researchers when they work on their own research and papers” (DHBG18). Additionally, some respondents believe that time savings enable students to better organise their time for work and study.

b) *Online classes surmount some organisational difficulties in implementing classes* because they do not require space for conducting classes with large groups of students, for which suitable space is often difficult to provide in some higher education institutions. Another prominent benefit is the easier correction and adjustment of class schedules and changes in lecture schedules. The flexibility of class schedules has also facilitated the organisation of classes in situations “when individuals (teachers or students) or groups, due to certain circumstances, are unable to directly participate in classes,” or “the possibility of conducting classes at any time from any location is an advantage” (DH Bor11); “The possibility for students who, for objective reasons, cannot attend traditionally organised lectures in person, to attend classes. This pertains to various reasons for absence, for example, illness, simultaneous job, etc.” (TT Bor12). In other words, one of the listed advantages of online classes is the reduction of absenteeism for both students and teachers in situations where they are prevented from physically attending classes in the higher education institution according to the planned schedule. Another specific advantage of online classes that we included in organisational benefits is the reduction of teachers’ administrative duties, because “student attendance is automatically recorded”,

“tests are automatically graded”, and the like. Another organisational advantage that we included refer to the responses from respondents who highlighted that having online classes meant working in the “comfort zone”, “which meant staying at home (for students) and a comfortable environment in the office or at home (for teachers)” (DHNI8). The respondents also stated that teachers were more readily available during the implementation of online classes. We believe that this advantage is actually a consequence of the fact that, due to movement restrictions and limitations on various daily activities, teachers spent more time at their computers and were thus able to promptly respond to all kinds of student queries.

c) *Online classes enabled the improvement of digital competencies among university staff and students.* On the one hand, this has been explicitly emphasised as a significant advantage of online classes. On the other hand, it has revealed sporadic use of various available ICT tools to increase the accessibility of exam materials or auxiliary learning aids useful for mastering the curriculum, which is not necessarily connected to the mode of delivering classes (online or in-person). Therefore, responses such as “students received more detailed materials”, “access to literature”, “easier distribution of learning materials”, “easier sharing of materials with students through platforms – homework, lecture/exercise materials, exercise tasks, and the like”, “the ability to present teaching materials to everyone in the group”, and “the ability to use audio and video examples” cannot be considered advantages of conducting online classes in the true sense. Experiences communicated in this way suggest that part of the university teaching staff actually became acquainted with the benefits of using ICT as teaching aids only during the pandemic. Consequently, the experience gained during the pandemic can be considered as valuable and as having the potential to not only permanently improve teachers’ competences but also facilitate learning support for students.

d) According to the respondents, *pedagogical and especially didactic advantages of online classes* were manifested in the ability to combine various audio and visual media and content for class implementation and knowledge assessment (films, clips, quizzes), to develop students’ independence in acquiring knowledge, and to have them more actively engaged in the teaching process: “during the class, students were allowed some time to search for data on a specific topic available on the Internet, followed by a discussion, or to search specific websites for the information they need to completed the assigned tasks” (TTNI7). The “ease of drawing using relevant programs instead of drawing on the board” was highlighted as a very specific didactic advantage (TTNI21). Several respondents emphasised the asynchronous access to study materials and lectures as an advantage. Specifically, students have the opportunity to revisit those parts of the lecture that are more challenging for them to understand, allowing them to gain knowledge that is more difficult to acquire in traditional lectures.

e) One of the highlighted advantages of online classes is that *it allows deeper involvement of specific students* “who are prone to social anxiety” (DHNI16).

f) *Online classes during the COVID-19 pandemic provided a safe working environment for university staff.* This positive aspect of online classes during the pandemic, although particularly important, was mentioned by only one teacher (DHBG18).

With regard to the deficiencies of online classes, summarised responses indicate that the respondents had much more to say about the disadvantages of online classes than about the advantages. A series of problems concerning the implementation of classes were highlighted and they may be outlined as follows:

a) Almost uniformly, *a key drawback stated by the respondents was the disrupted communication with students and particularly the lack of two-way communication*, which manifests itself in several ways and has multiple causes and various effects on teaching quality. The ‘noise’ in communication arises from slowed and disrupted communication, lack of spontaneity, absence of immediate interaction, inability to utilise group dynamics for quality class delivery, and the teachers’ inability to observe their audience and receive feedback on the comprehension of the taught material. The disrupted and slower communication with students during classes is caused not only by technical issues such as broken Internet connection, delayed responses from students to the posed questions, distractions during classes, and similar factors. In fact, since live interaction, which stems from direct communication, was missing, the group dynamics established during class were also missing. This resulted in a lack of spontaneity and the inability to reinforce interaction non-verbally and encourage student engagement (“Like any social group, a group of students has its ‘energy’ that needs to be understood to enhance the quality of teaching. It is almost impossible to achieve this in online teaching conditions” [DHKM4]; “A teacher in the classroom is capable of controlling that dynamic in a much more direct way. By a glance or a gesture, they can engage a student in conversation or recognise when someone wants to ask a question. All conversations flow faster and more directly. The so-called ‘interrupting’, which is quite common and healthy in a class discussion, is not possible when using platforms. Any conversation at the same time creates noise and interrupts communication. The teacher cannot monitor the students and their reactions. Usually, they can see them in smaller ‘windows’, which often leads to the failure to recognise when they want to ask a question or say something. This is especially due to the fact that students often do not turn on the camera and, because of external noises, they also have to mute the microphone. Therefore, I believe that the platforms we use for online teaching are not a good enough solution for the two-way active communication that teaching often requires” [DHKM3]). This circumstance has led to the “inability to carry out activities that involve interactive forms, methods, and work techniques” (DHNI2). The inability of instructors to

see the audience and receive feedback on whether the students are following and understanding the material being taught creates a strong sense of alienation in teachers, to the extent that some respondents felt like they were communicating with themselves: “The biggest problem is the absence of students. You do not feel like anyone is listening to you. You feel like you are talking to yourself. This makes you resort to reading parts from textbooks [...]” (TTiDHBG26); “The primary issue is feeling like you are speaking to an empty room. Without students in front of you, it sometimes feels like you are giving a lecture to yourself” (TTNI28).

b) The *passivity of students in the teaching process* is often cited as a key issue. Despite their virtual presence, a significant portion of students are often not mentally engaged during class since they are simultaneously involved in other activities that divert their attention from what is happening in class.<sup>4</sup> Moreover, we received responses from some teachers and associates indicating significant absenteeism among students, regardless of the comfort of attending classes from their homes or any other location (“They are muted, the video is off, maybe they are not even present, and often, when they do join, they are outside, on a bus, in a car [...] This is evident by the number of students who remain online even after the lectures or exercises have ended” [TTNI21]).

c) The decreased activity of students during classes, their absenteeism, and the work methods stemming from limited interaction have led to *limited educational outcomes*. In addition to the low participation of students who were taught specific subject areas, the respondents highlighted the lack of systematic knowledge acquisition and the inability to develop various skills and abilities (teamwork, leadership skills, etc.). In certain fields, the respondents identified complete pedagogical inefficiency in online classes (for example, in music academies, in practical instruction within technical sciences, in the field of physical education, etc.). Some respondents also emphasised a decreased motivation for learning: “Less frequent asking of questions regarding any uncertainties and unclear aspects related to the material” (DHKM3). As a result, students tend to acquire knowledge less effectively: “This was confirmed by the results obtained after returning to the standard mode of conducting classes” (TTNS3).

d) *Difficulties with knowledge assessment* were particularly highlighted, as it “is challenging under online conditions” (DHNS1). Proper knowledge assessment is questionable because of the “reduced possibility for an objective assessment of students’ knowledge” (DHNI 4); “During knowledge assessments and the defense of term papers, students could use various aids, which raises doubts about the objectivity of evaluating these pre-examination obligations” (TTNI6). In this regard,

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<sup>4</sup> There were interesting anecdotes shared by the respondents. For instance, while the class was fully in session, a student was studying and reviewing the material aloud, forgetting to mute their microphone, etc.

the potential irregularity of grading has been emphasised. Some respondents believe that assessments such as quizzes or exams are not feasible online, while others think that under certain conditions, it is possible to organise these forms of testing.

e) In the realm of socialisation, a significant issue emphasised by the respondents is that during online classes, *there is a complete absence or very limited interaction among the students themselves*. Consequently, they lack the opportunity to experience “direct human contact, pleasant and enjoyable teamwork”, which, in addition to pedagogical effects, also brings social benefits (“These are the generations that have lost ‘college friends’, which is detrimental to their socialisation” [DHBG18]). The findings obtained from the respondents complement the previously noted problem with socialisation related to this type of teaching, because students “never see their fellow students in person, so sharing ideas, knowledge, and information in real-time is partially lacking in the world of digital learning” (Britt 2006, cited in Adnan, Anwar 2020: 46).

f) In the realm of socialisation, a significant issue highlighted is the *depersonalisation in the student-teacher relationship*, as the possibilities to recognise authentic reactions, temperaments, specific teaching capacities, or ad hoc student reactions to a lesson-related problem are mostly limited in virtual communication. (“The main disadvantages pertain to depersonalisation. Teachers find it difficult to remember students and vice versa. Impressions we form about each other are based on other sources and are somewhat limited” [DHITTBG25]).

g) *Teacher and student fatigue occurs much faster during online classes*, considering that activities are conducted via computers, tablets, or other mobile devices. (“Teacher and student fatigue after the same number of classes is incomparably higher because it is significantly more challenging to speak into a screen instead of having normal human communication in an auditorium” [DHBG19]). Additionally, both teachers and students experience poor concentration.

h) The respondents emphasised the *inadequacy of online teaching in certain scientific fields and artistic disciplines* (chemistry, engineering, physical education, music and visual arts, etc.). Consequently, some forms of teaching, such as laboratory work and various practical lessons, were not organised online at all.

i) *Inequality regarding access to resources and conditions for online classes to proceed uninterrupted* is sporadically addressed as a problem, although it could have significantly influenced the quality of the classes. It is noteworthy that a negligible number of respondents pointed out the mistaken assumption that every student can take part in online classes and do so without interruption, as some students lack the necessary “technical equipment (a laptop, a stable internet connection, headphones) and sometimes they lack the opportunity to isolate themselves during classes” (DHNS19). In fact, most respondents did not mention that online learning could have further disadvantaged students from socio-economically deprived segments of society

due to worsened learning conditions, and that the much-needed coordinated and targeted support for these students was lacking during the pandemic (OECD 2021: 4).

j) Some respondents highlighted *significantly more time spent preparing teaching materials and monitoring student activities than usual*: “[...] the best way of working, and the only guarantee that students will actively, or at all, learn, was to give and regularly check various tasks. The tasks had to be individualised, at least for a while, to prevent cheating, which was easily achievable and enticing under such circumstances. In such conditions, time expenditure was significant, although the tools used considerably facilitated the creation and checking of the tasks. Slightly better organisation and time savings would be possible with premium paid tools that provide more options” [TTNS4]). Interestingly, few respondents pointed out this issue, suggesting that considerably less attention from university teachers was given to the actual quality of learning during the pandemic compared to ensuring learning continuity.

The responses regarding what disrupted online classes the most serve as a kind of supplement and, to an extent, a validation of the previous considerations regarding the key disadvantages of online education. The answers provided are diverse, revolving around technical issues, disruptive environmental factors, as well as the lack of direct communication and interaction with students. There were also mentions of a lack of experience and competencies in using online teaching platforms, especially in the initial period. Additionally, the following points were emphasised: generally reduced student activity and decreased attention paid to classes, student absenteeism, fatigue, decreased concentration and attention, reduced motivation among both teachers and students, and poor adaptation of some students and even a number of teachers to this work regime. Some respondents were particularly bothered by the lack of clear guidelines regarding the conditions under which this type of classes is conducted, the inability to conduct specific activities that are essential parts of practical training, or the complete absence of practical demonstrations in teaching. Problems related to knowledge assessment and the considerable time spent on individualising teaching were also highlighted. Despite the longer list of factors that disrupted online classes the most, it is worth noting the opinion that “nothing in particular disrupted the classes except student inactivity” (DHITTBG28) or that “there were no problems in their implementation” (TTNI28).

One of the questions posed to the respondents concerned the methods they employed to ensure the completion of pre-exam obligations during online classes. The provided responses indicate several models for organising pre-exam obligations. One group of respondents stated that pre-exam obligations were either suspended or reduced to very basic versions.

The second model involved maintaining and completing all pre-exam obligations, the execution of which was not significantly disrupted by the fact that classes

were conducted in a virtual space. Therefore, teachers and associates retained the tasks such as term papers, presentations, and class attendance as forms of pre-exam obligations, since these could be completed in a more or less traditional manner, regardless of the pandemic circumstances. For instance, term papers were reviewed and whenever the strict epidemiological restrictions were loosened, they were orally defended in person on the faculty premises.

The third model of fulfilling pre-exam obligations involved innovations in knowledge assessment adapted to online classes, completely replacing the pre-exam obligations planned in the curricula designed for traditional teaching methods. Few teachers and associates stated that they had entirely replaced pre-exam obligations with new methods of working with students (e.g. assigning individual tasks or organising quizzes and online tests designed to provide students with problem-solving tasks that prevent potential cheating, etc.). There were few didactic adaptations of this kind, which leads to the conclusion that teachers mostly adapted traditional pre-exam activities to the virtual environment to some extent, prioritising the continuity of teaching and assigning less importance to pre-exam obligations.

With regard to the support given to students to facilitate learning during online classes, according to the respondents, it primarily involved teaching materials and textbooks in a digital format, as well as significantly increased availability of teachers for office hours online or via email.

Knowledge assessment during the pandemic was usually conducted in the traditional manner, on the faculty premises, because the university staff in Serbia did not sufficiently trust the objectivity of assessing students' acquired knowledge online. The only exception were knowledge assessments through pre-exam quizzes, which were less frequently organised online and were less valued as proof of acquired knowledge.

The summary of the experience gained with online teaching by employees at universities in Serbia is evident from their responses regarding whether they would advocate for the introduction of full-time distance learning. A significant majority of respondents maintain that in-person teaching is an ideal standard model of education that yields the best teaching effects. However, it is interesting to note that a smaller portion of the teaching staff advocates for a hybrid teaching model, especially at higher levels of education. They justify this position by stating that hybrid teaching could provide access to higher levels of education for employed students and those from remote areas. According to their opinion, the experience gained by teachers and students, the technical conditions established to support this form of teaching, and good-quality study materials available digitally are the positive outcomes of the pandemic that could assist in implementing this teaching model. Additionally, respondents sporadically expressed the opinion that this direction represents a future development of education and that this flexible mode of teaching will be established at all study levels (PMNI31).

## CONCLUSION

The emergency epidemiological measures during the COVID-19 pandemic generated numerous changes in the core activities of universities in Serbia, including conducting classes. Online education was organised at all universities, which was an entirely new experience for the majority of the teaching staff. Higher education institutions provided a series of initial support measures for implementing this type of education, which were far from sufficient for complete mastery of online teaching platforms. Nevertheless, teachers, associates, and students gradually acquired proficiency in the selected platforms by using them frequently, although not without difficulties and stress. A portion of the teaching staff exhibited very low adaptability to this mode of work. Overall, the experiences of the respondents lead to the conclusion that although it is generally accepted that a high level of ICT competence is essential in higher education, due to limited ICT initiatives and investments in the education sector, the pandemic uncovered not only the inaccessibility of tools (mostly limited, free versions of the platforms) but also a relatively low level of competence among teaching staff in using them.

From the perspective of the teaching staff employed at universities in Serbia, online classes offered numerous advantages over in-person classes, not only in terms of saving time and economic resources but also in terms of easier organisation of classes, enhancing the level of pedagogical and didactic competence of teachers, as well as increasing the digital skills of teachers and students. It reduced absenteeism among students to whom regular education was inaccessible for various reasons (economic, social, health-related, etc.) and work absenteeism among university employees. Online classes created a safe and comfortable environment for work amid health-threatening circumstances.

However, in general, the teaching staff at universities in Serbia highlighted significantly more disadvantages than advantages of online classes. The most significant consensus concerns the lack of two-way communication between the participants in the teaching process and the passivity of students, which degraded the overall quality of education and led to limited teaching effects. Reduced interaction between teachers and students, and among students themselves, resulted in the depersonalisation of relationships and the absence of the socialising role of education. The respondents were fairly certain that it is impossible to conclusively assess students' acquired knowledge online. They also emphasised the unsuitability of online teaching for specific scientific fields, especially for giving practical lessons.

From the perspective of the teaching staff in Serbia, some advantages of online teaching showed their opposite sides. For instance, while online teaching enabled savings in time and other resources on one hand, it demanded additional time expenditure for individualising tasks to achieve their full pedagogical effect and to

avoid irregularities in assessing the teaching outcome. This opinion was particularly expressed by teachers and associates who made efforts to adapt their own teaching methods to online instruction. Additionally, a contradiction was observed regarding the accessibility of education to students. The fact that students could attend classes from their comfort zone, regardless of their location, was an improvement, yet they were often only formally present, engaging in parallel activities or attending without paying sufficient attention, while some students did not even consider class attendance mandatory. Moreover, the lack of technical and other conditions for fully engaging in online classes increased the inequalities and social selection among parts of the student population.

Support activities for students during the implementation of online classes were mostly manifested in the provision of study materials and increased availability of teachers and associates for office hours, while the completion of pre-exam obligations mostly remained in its traditional form, with minimal adjustments to the new form of teaching. Exceptions were rare.

Despite the experiences gained from implementing online classes, a significant portion of the teaching staff does not advocate this type of education in the future. However, a part of the academic community is aware of the change affecting this segment of education and advocates the introduction of a hybrid teaching model, predominantly at higher levels of university education.

Online classes at universities in Serbia revealed many weak points in higher education and at the same time provided valuable experiences not only regarding the organisation of education in emergency circumstances but also regarding their contribution to raising the awareness of many aspects of the teaching process and the roles of its various participants. The experiences gained will indeed contribute to a more thorough analysis of the current competences and capacities and the need for their improvement and adaptation. Although the priority during the pandemic was to maintain the continuity of education, university teachers are aware that the conditions under which they worked during the pandemic and the long-standing inertia in conducting classes have now raised the issue of improving the quality of university education.

## REFERENCES

- Adnan, M. & Anwar, K. (2020). "Online learning amid the COVID-19 pandemic: Students' perspectives". *Journal of Pedagogical Sociology and Psychology* 2(1), 45-51. <http://www.doi.org/10.33902/JPSP.2020261309>
- Jensen, T., Marinoni, G. & van't Land, H. (2022). *Higher Education One Year into the COVID-19 Pandemic: Second IAU Global Survey Report*. Paris: International

- Association of Universities. [https://www.iau-aiu.net/IMG/pdf/2022\\_iau\\_global\\_survey\\_report.pdf](https://www.iau-aiu.net/IMG/pdf/2022_iau_global_survey_report.pdf)
- Miltojević, V. (2006). “Sustainable Development and Quality of Life”. *Teme* 30(3), 427-440. Available at: <https://teme2.junis.ni.ac.rs/public/journals/1/previous-issues/teme3-2006/teme3-2006-05.pdf> [In Serbian]
- OECD (2021). *The State of Global Education: 18 Months into the Pandemic*. OECD Paris: OECD Publishing. <https://doi.org/10.1787/1a23bb23-en>.
- Pavlović, N. & Petrović, J. (2020). “Trust and Subjective Well-Being in Serbia during the pandemic: research result”. *Sociološki pregled* 54(3), 560-582. DOI: 10.5937/socpreg54-27816
- Petrović, J. (2012). *Experiments on Education in Serbia: A look at sidelined issues*. Kosovska Mitrovica: Faculty of Philosophy [In Serbian]
- Petrović, J. & Miltojević, V. (2023). “Life in the Time of Coronavirus: Contribution to the Study of Specific Socio-ecological Attitudes and Practices during the Covid-19 Pandemic. In: *In Honor of Professor Đorđe Tasić: life, works and echoes*. Eds. Miladinović, S., Vuković, A. Belgrade: Serbian Sociological Association, 288-304. [https://doi.org/10.18485/ssd\\_tasic.2023.ch20](https://doi.org/10.18485/ssd_tasic.2023.ch20)
- Ritchie, J., Lewis, J. & Elam, G. (2003). “Designing and Selecting Samples”. In: *Qualitative research practice: A guide for social science students and researchers*. Eds. Ritchie, J., Lewis, J. London: SAGE Publications, 77-108.
- Stankovska, G., Dimitrovski, D., Ibraimi, Z. & Memedi, Z. (2021), “Online Learning, Social Presence and Satisfaction among University Students during the COVID-19 Pandemic”. In: *New Challenges to Education: Lessons from Around the World BCES*, Conference Books, Volume 19. Sofia: Bulgarian Comparative Education Society, 181-188.
- Šuvaković, U., Nikolić, I. & Petrović, J. (2022). “University Classes During the State of Emergency in Serbia Introduced After the Outbreak of the COVID–19 Pandemic Crisis: Students’ Attitudes”. *Zbornik Instituta za pedagoška istraživanja* 54(2), 241-278. <https://doi.org/10.2298/ZIPI2202241S>
- UNESCO (2022). *Resuming or Reforming? Tracking the global impact of the COVID-19 pandemic on higher education after two years of disruption*. Paris–Caracas: UNESCO– IESALC. <https://unesdoc.unesco.org/ark:/48223/pf0000381749>