

**Gordana Đigić<sup>20</sup>**

PhD, Associate Professor

University of Niš, Serbia, Faculty of Philosophy, Department of Psychology

ĆirilaiMetodija 2, 18000 Niš, Serbia; PhD, Assistant Professor

**Dragana Jovanović<sup>21</sup>**

PhD, Associate Professor

University of Niš, Serbia, Faculty of Philosophy, Department of Psychology

ĆirilaiMetodija 2, 18000 Niš, Serbia; PhD, Assistant Professor

## STUDENTS' ASSESSMENT OF ONLINE TEACHING AND DISTANCE LEARNING<sup>22</sup>

### Abstract

Due to the coronavirus pandemic beginning in March 2020, educational work at the Faculty of Philosophy in Niš was completely rearranged to online. Two months after the implementation of distance learning and teaching, a survey was conducted to show how students assess its quality. The questionnaire was completed by 829 students. Students were quite satisfied with online teaching ( $M=3.08$ ,  $SD=.771$ , scale ranged from 1 to 4). As the best, students rated classes organized via Google Meet (60.8%), Google Classroom (16.4%) and combined applications (13.8%). The most favorable grades were given by PhD students ( $M=4.00$ ,  $SD=.00$ ), and by fourth-year BA students ( $M=3.25$ ,  $SD=.666$ ). Although all relatively high, average grades given by students of particular departments differ as well ( $F(11, 817) = 3.674$ ,  $p<.001$ ). Regression analysis ( $R=.760$ ;  $F(4, 824)=282.368$ ;  $p<.001$ ) showed that 57.8% of the variance of students' satisfaction with the organization of distance learning could be predicted by a set of variables (online realization of pre-exam obligations; availability of teachers and associates for communication with students; whole work organization at the Faculty of Philosophy during the emergency state; representation of online teaching that enables students to learn), one of which is the most significant predictor: perception of the overall work organization at the Faculty during the lockdown ( $\beta=.532$ ,  $p<.001$ ). Although it cannot be a complete substitute for face-to-face teaching, our results, based on students' statements about online teaching, indicate that online teaching and distance learning might have the capacity to enable process of knowledge and skills construction and acquiring educational outcomes.

**Keywords:** distance learning, online teaching, quality assessment, students

<sup>20</sup> gordana.djigic@filfak.ni.ac.rs

<sup>21</sup> dragana.jovanovic@filfak.ni.ac.rs

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## Introduction

Distance learning, which literature also often refers to as *distance education*, *e-learning* and *online learning* is a form of education characterized by the physical separation of main participants in the learning process, and application of different technologies, i.e. available tools to ensure and support proper teacher-student communication, and student-student communication (AACSB International, 1999). Historically speaking, distance learning has been primarily targeted at various affinity groups such as non-traditional students, individuals with full-time jobs, military personnel, foreign nationals or individuals who live and work quite remotely and are therefore prevented from attending face-to-face lectures. However, in modern times, especially with the progress of modern information and communication technology, this type of learning, although specific in regard to its characteristics, has become generally acknowledged and widely accepted in education with a tendency of continuous growth in both intensity and extent. Although there has been an increase in the number of educational institutions that adopt, practice and invest in the application of educational technology to support teaching and learning worldwide, as well as various proposals in the online education market, online teaching and learning started to reach its full potential for all categories of participants in the education process and at all levels of education in spring of 2020, due to the coronavirus pandemic. This is especially evident at the higher education level.

The Faculty of Philosophy in Niš was also faced with the seemingly impossible mission of organizing learning activities in such extraordinary circumstances. Therefore, traditional learning in a classroom setting involving the conventional student-teacher-content relationship has been transformed into online learning. This type of learning encompasses much more complex relationships due to the radically increased application of technology and various digital platforms. Learning took place by using various Internet tools, including conference systems, navigation and communication tools, time-limited colloquiums and exams, e-mail, content search, as well as applications used for student progress monitoring, evaluation and self-evaluation, assessment and distribution of grades and learning material.

The typical teacher-student-content interaction that takes place in a usual classroom setting has changed its form in the online environment and it has divided into two types of interaction styles. The first type refers to teachers, students and learning content, while the second type includes technology, software and communication methods. These styles represent the synergy that makes online teaching and learning a unique learning experience for both university teachers and students.

Since the Faculty of Philosophy has accepted the duties and taken responsibility for providing, monitoring, developing and improving quality in various fields, another priority has been added to this list due to these specific

circumstances, and that is the concern for quality and sustainability of online teaching that was due to last for several months. The quality of response to the educational challenges faced by teachers, associates and students during the implementation of distance learning understandably imposed accompanying questions such as: (1) Which segment of distance learning should be improved and in what way? (2) Which platforms and available applications used are proving to be efficient and effective? (3) How (dis)satisfied students are with the organization of online teaching, i.e. teaching via various applications? (4) What are the advantages and disadvantages of distance teaching and learning? (5) How burdened students are with new requirements, learning materials and how they cope with this? (6) Which are the most suitable digital platforms that enable this type of learning? (7) In which segments were students provided with support and in which was it lacking? Since students are direct users of educational services, and the best critics of teaching, and as the value of feedback that can be obtained from them is significant, it would be meaningless to talk about the quality of online instruction without taking into account the assessment by immediate participants. Students' evaluation data are important for creating a plan and activities to improve the quality of online instruction, overcome and remove certain obstacles, as well as implement corrective measures in segments where inconsistencies and deficiencies have been identified.

### **Distance teaching and learning in the light of constructivism**

A detailed review of literature could provide several theoretical approaches that experts in the field of education are guided by, especially in regard to the modern concept of distance teaching and learning. Namely, popularity, innovation, inevitability and development are just some of the descriptors that guide the authors towards the necessity to theoretically support and shed light on this concept of the modern age as precisely as possible. Without diminishing the value and significance of any theoretical orientation and tendency, but rather by considering their valuable contribution to the field of education, primarily in the field of teaching and learning, this paper singles out constructivism (Seifert & Sutton, 2009) as the leading paradigm of learning.

Constructivism also gives an important contribution considering teachers' styles of professional behavior. Namely, teacher's classroom management style is a significant factor of effectiveness of the teaching process (Marzano, Marzano & Pickering, 2003; Wang, Haertel & Wallberg, 1993) because it enables the process of knowledge construction in students. Empirical data point out interactionist style as the most effective (Đigić, 2017) and it could be said that this style represents teacher's behavior expected from the point of view of constructivist theory (Glickman & Tamashiro, 1980).

As the extraordinary circumstances caused by the current coronavirus pandemic made a radically rapid shift from traditional teaching to online teaching, there were also pedagogic and psychological changes to teaching and learning that happened at the same pace. Simply stated, the standard top-down approach in teaching and partial student passivity have changed in their form and essence towards a more interactive, much more collaborative learning environment in which teachers and students together master the learning process, and learn from each other online. The role of the teacher has changed significantly, from the main and central participant to the one who leads and guides on the side. From the point of view of the constructivist theory, this would mean that all participants in the learning process actively construct their knowledge during the interaction with their environment. Therefore, according to this student-centered approach (Wright, 2011), students are those who co-create their learning experience. The essence of constructivism is reflected in the adequate empowerment, support and encouragement of students by teachers to become active constructors of their knowledge, as well as researchers, and engaged participants in teaching and learning instead of passive absorbers of information. Regarding this, teachers shift their focus to experiences that would result in constructive learning rather than to traditional lessons and evaluation of the level of information acquired by students that they deem necessary for students to know. Teachers' focus is on functional and applicable knowledge derived from construction and reconstruction. Every student should be provided with opportunities and support to be both the instructor (teacher) and the instructed (student) in the online environment. The job, i.e. professional roles, activities and tasks of the teacher are changed. From a single source of knowledge, teacher becomes a leader of his/her students' learning (co)construction process. Teacher becomes closer to students by addressing their learning needs, by opening and moderating discussions, creating problem situations for students to think about, investigating information and finding solutions. Such learning situations lead students to ever higher learning goals. It may be worth mentioning that this progressive approach arose from the idea of progressive education whose main advocate was the American philosopher and pedagogue John Dewey (Džui, 1966). This author emphasized that the education of a child in totality implies the achievement of intellectual, physical and emotional growth and development, and learning is best achieved when tasks are performed and not with mere memorization of facts. Jean Piaget (Pijaže, 1983) also made a valuable contribution to this concept, claiming that learning derives from constructing mental models based on experience.

From this perspective, constructivism could not be understood as a philosophy of learning but rather as a "knowledge model" that is both pedagogically and psychologically applicable and justified, and in the language of education, it is a model that advocates and supports multiple teaching strategies and approaches. Authors such as Yilmaz (2011) and Ćirić and Jovanović (2018) point to Piaget's understanding of the process of intellectual and cognitive development, which

is reminiscent of the biological act that requires adaptation to the requirements of the environment, which is confirmed by the online environment, teaching and learning.

### **Advantages and disadvantages of distance teaching and learning**

Even though distance teaching and learning offer countless advantages from the aspect of technical, social and economic criteria, certain disadvantages are also inevitable, i.e. limitations contained within them that need to be pointed out (Oliveira, Penedo & Pereira, 2018). The pedagogical benefit of distance learning methods triggers different ways of understanding knowledge creation and acquisition, especially among students (Fincham, 2013). This type of learning significantly increases the following possibilities: learning and teaching, updating information, improving and advancing personally and professionally, cost-effectiveness of educational resources, availability of Internet platforms and tools for teaching and learning (especially free ones), improving the quality and diversity of existing educational structures, improvements and consolidation of all capacities. In addition to the fact that technology can be used at home without interruption, many forms of learning are characterized by flexibility in terms of student participation and organization according to their own wishes or individual needs, at minimal cost. The multisensory nature of distance teaching and learning (Kock, 2005) is also reflected in the availability of a wide range of learning materials that can support the desire for learning of each student. For example, while some students prefer visual stimuli, others prefer to learn by listening or communicating directly with the teacher through different educational software, platforms and tools, video conference calls and meetings, etc. Moreover, it seems that in the online environment, unlike traditional teaching in the classroom setting, there is more interaction and more freedom to communicate (Correia, Liu & Xu, 2020), even among the shy, introverted students, because they can use e-mail or other individualized tools to clarify any dilemmas and doubts. Also, all mentioned characteristics of distance learning are very close to the concept of active teaching and learning (Ivić, Pešikan & Antić, 2001) which represents much more favorable approach than traditional teaching. The main advantage of such conception is higher level of students' activity that is necessary condition for successful learning and high-quality educational achievement.

We should not disregard the fact that there are various shortcomings of distance learning, which students, teachers and institutions themselves should be aware of before launching any distance learning plan and program. Universities and faculties need to have the capacity not only to adapt and implement new work methodologies and procedures, but also to transform their teaching and learning culture (Rehn, Maor & McConney, 2016). Therefore, one should keep in mind both

technical, as well as organizational and pedagogical aspects. Online teaching (and learning) requires planning in advance. Also, one should keep in mind possible hidden costs, limitations and overburdening of online learning platforms, which makes it very difficult for these to function and deliver, which further impedes teachers from working properly as they use them to teach. Furthermore, teachers are expected to invest a disproportionate amount of effort because, in addition to learning material preparation and the actual lesson teaching, it is necessary to dedicate part of their time to additionally support and advise students.

Oliveira and associates (2018) presented a research conducted with the aim of identifying the main advantages and disadvantages of distance education for both students and educational institutions. These authors conducted an exploratory case study in Brazil with the aim of analyzing the effectiveness of this modality compared to traditional forms of teaching. The obtained results were divided into 4 categories: (1) advantages for students; (2) disadvantages for students; (3) advantages for the institution; (4) disadvantages for the institution. Among the numerous advantages of distance education for students, these authors particularly emphasize the following: flexibility, availability of content, low cost, learning from home. According to the findings of this study, the disadvantages or shortcomings of distance education for students are insufficient student discipline and lack of direct feedback to student questions. Speaking about the benefits of distance education for educational institutions, the authors highlight low cost, availability of educational services to a large number of students, less need for physical space, as well as using a video lesson several times (one video lesson can be used for several groups). Disadvantages of distance education for educational institutions which the authors particularly highlight are: decrease in the quality of the higher institution (students do not engage as much as they did during traditional lessons), students wait longer for feedback compared to traditional learning, difficulties in teaching online lessons (teachers are accustomed to regular classroom lessons), cultural aspect (prejudice regarding distance learning and genuine belief that distance learning courses are inefficient and ineffective compared to those in the classroom).

Authors such as Barr and Miller (2013) suggest that one of the essential limitations of the learning medium (the Internet) is isolation, which can result in the alienation of students from a social perspective. Social interaction in the online environment is influenced by communication approaches designed within online programs, as suggested by McInerney and Roberts (2004). These authors refer to various studies which have shown that in online programs and learning platforms students spend significantly more time developing cognitive and critical thinking skills and significantly less time in social growth and development. Isolation occurs when students are unable to communicate with their peers, when they lack basic IT skills, or have technical difficulties or other barriers. Also, students often suffer from academic struggles leading to negative experiences online.

It is clear that online learning and face-to-face learning are very different and therefore it is not valid to equalize the benefits of online instruction and

the benefits of direct instruction in the classroom, because online instruction does not necessarily have to be as good as traditional. We need to be aware of differences between these two without assuming that they are the same, as this would disregard the fact that education is heterogeneous in nature, with highly variable and different values. Online teaching and learning may be effective, but not equally effective for all students and all subjects.

## Method

Due to the coronavirus pandemic, during the spring semester of the 2019/2020 academic year, educational work at the Faculty of Philosophy in Niš was transformed to online teaching using available digital platforms. After two months of online teaching, a survey was conducted with the aim to find out how students assessed the quality of implemented online teaching and distance learning. The goals of the study were: (1) to explore how students evaluated various aspects of online teaching conducted during the spring semester at the Faculty of Philosophy in Niš (covering study courses by online teaching; provision of learning materials; quality of instruction via different applications; teachers' support to students; advantages and disadvantages of online teaching recognized by students; students' satisfaction with the organization of distance learning); and (2) to test the model predicting students' satisfaction with the organization of distance learning.

The online questionnaire was designed for purposes of this study. It covered many aspects of the new way of teaching and its effectiveness: covering study courses by online teaching; the possibility to finish pre-exam obligations via online applications; availability of teachers and associates for communication with students; teachers' support to students; provision of learning materials; students' statements about the capacity of online teaching via different applications to enable continuous learning; students' satisfaction with the organization of distance learning; students' satisfaction with the whole organization of work at the Faculty during the emergency state; their statement about availability of information for students; students' estimation of representation of online teaching that enables continuous learning. There were 10 items concerned with mentioned topics, which required answering in ranges or on the scale. The reliability of this part of the questionnaire was quite satisfactory ( $\alpha=.857$ ). There were also a few questions concerning with advantages and disadvantages of online teaching recognized by students. Also, students were asked to give additional explanation related to some assessments, for example to describe appropriate support obtained by their teachers and associates. This paper will address only the key issues examined in this survey.

The questionnaire was sent to students via their e-index accounts. Participation in this research was on a voluntary basis while ensuring complete



anonymity of the respondents. The research sample consisted of 829 students from all departments, all study levels and all study years (Table 1). Representation of students from different departments was in accordance with the total number of students enrolled to particular study programs.

Table 1  
*Number of students from different departments and study years*

<b>Department</b>	<b>Frequency</b>	<b>Percent</b>	<b>Study year</b>	<b>Frequency</b>	<b>Percent</b>
English language and literature	118	14.2	first year BA	204	24.6
Philosophy	19	2.3	second year BA	213	25.7
French language and literature	50	6.0	third year BA	174	21.0
History	32	3.9	fourth year BA	189	22.8
Communicology and journalism	117	14.1	final (graduate) year BA	23	2.8
German language and literature	22	2.7	first year MA	14	1.7
Pedagogy	91	11.0	first year PhD	7	.8
Psychology	158	19.1	second year PhD	4	.5
Russian language and literature	21	2.5	third year PhD	1	.1
Social politics and social work	75	9.0			
Sociology	52	6.3			
Serbian language and literature	74	8.9			
<b>Total</b>	<b>829</b>	<b>100.0</b>	<b>Total</b>	<b>829</b>	<b>100.0</b>

## Results and discussion

First of all, students were asked about the coverage of study courses by online teaching. Data showed that 93.9% of them answered that all (51.9%) or the majority of courses (42.0%) were covered by online teaching, while 5.4% answered that online teaching is organized for the minority of courses and 0.7% of students said that there was no online teaching for any course. Furthermore, 76.9% of students answered that they were required and provided with support to perform pre-exam tasks via online applications: for all courses (39.7%) or for the majority of courses (37.2%). More than 90% of participants answered that teachers provided learning materials for all or most of courses. Having in mind that teaching staff was suddenly faced with requirement to transform teaching process into online form, these estimations are quite satisfactory. The aforementioned lower percentage of those teachers who did not respond to the demands of online teaching might be justified by insufficient knowledge of modern ICT such as older teachers or some



other factors such as the lack of adequate technical devices or other technical issues.

At the beginning of the lockdown due to the pandemic, the main mission of the Faculty was to enable the continuity of students' learning. With the aim to find out if this mission was accomplished, students were asked to estimate if the distance learning does enable their learning. More than 75% of examinees answered that online teaching enables learning completely (21.1%), or to a greater extent (54.3%), while only 2.5% answered that it does not enable learning at all. Perhaps the reasons for the percentage of those who believe that such organized teaching does not enable learning could be found in the habits and advantages of face-to-face teaching and conventional teaching methods. Moreover, the lack of direct social interaction can impair students' motivation for active distance learning and adequate engagement in online teaching.

When it comes to the quality of instruction via different applications, students assessed that the most favorable application that enables learning is Google Meet (64%), followed by Google Classroom (16.1%), and also combined applications (11.6%) – students pointed out that the combination of these two applications was the best option. Such assessment is in line with many learning-related features of videoconferencing systems (Correia et al., 2020). Students also expressed the highest satisfaction with the instruction performed using these applications: 60.8% of students is the most satisfied with teaching via Google Meet, 16.4% with Google Classroom and 13.8% with combined applications, mostly mentioning combination of Meet and Classroom. Some teachers also used other applications like: Zoom, Edmodo, Viber, Skype, as well as Facebook and e-mail, but these applications were not recognized by greater number of students as satisfying and effective. A possible reason could be seen in the fact that almost all teachers used Google Meet and Google Classroom applications. At the end of March 2020, G-suite report for the Faculty as the user showed 1497 Google Meet sessions and 887 Google Classrooms opened during the previous two weeks. This report confirmed the estimation that almost all courses were covered via these applications.

It should be said that transformation of instruction from face-to-face mode into online teaching and distance learning was the great challenge for teaching staff of the Faculty. It was performed thanks to high enthusiasm and team work. Those who had higher ICT skills supported other colleagues making detailed guidelines for using these applications and encouraging them to try them out. Also, continuous support of Faculty IT Center was very important. By transferring learning process to online forms, teachers learned as well, and their learning process could be described in terms of Kolb's model of experiential learning that represents a process of constructing knowledge (Correia et al., 2020). The use and improvement of combined applications gives space for teachers to make work easier for students and themselves so that by managing them they can more easily monitor and evaluate student activities and include them in an adequate way

in the process of active learning and thus develop students' independence and autonomy. Furthermore, students are given the opportunity to use online tools that are familiar to them and with the use of which they feel more comfortable.

It seems especially important that 68% of students stated that teachers and associates were fully available for them, 28% estimated that teachers were mostly available, and only 4% told that teachers were insufficiently available. Availability of teachers and associates for students is very important under normal and usual circumstances for the co-construction of knowledge and skills, but during the emergency state it was essential. The initial months of the pandemic were characterized with strong fear and concern about health and, on the other hand, discomfort caused by the lockdown (Aristovnik, Keržič, Ravšelj, Tomažević & Umek, 2020). In such situation, learning and studying had healing effect on young people and open communication with teachers and associates supported this "piece of normal life".

More than 90% of students answered that teachers and associates supported them in appropriate way. As the appropriate support, they listed: teaching according to the regular schedule; teachers are ready for all types of consultations and are there to provide any clarification; teachers send learning materials and assignments that make exam preparation easier; teachers create different pre-examination obligations including more possibilities and various tasks taking into account students' proposals; teachers are professional, responsible and always available; teachers give all the necessary information and tend to offer the necessary explanations. Describing teachers' behavior experienced as inappropriate or missing support, students listed: delay in answering e-mails, informing students or in giving feedback on student work; too many pre-examination obligations and insufficient explanation; insufficient encouragement for interaction among students and discussions regarding the topics covered by teaching; lack of digital literature and textbooks; disregarding the fact that some students do not have adequate technical equipment and conditions for full participation in online educational activities. This is a clear sign that teachers also need support and more instruction on the importance of communicating with students in difficult circumstances. The absence of two-way and multi-way communication creates aversion towards online teaching on a global level and not just on the individual one.

Keeping in mind advantages and disadvantages of online teaching and distance learning (Barr & Miller, 2013; Oliveira et al., 2018) we asked students if they enjoyed distance learning and why. Around two third of students answered positively and explained their experience with following reasons: flexible and economical organization of time; continuous work, learning on time, no procrastination; participating in classes from the comfort of your home; possibility to watch the lecture again; new, different and more interesting approach; for some students it was easier to engage in discussion than in live lectures; real-time communication; there is no distraction by others in the background; less

pressure to deal with subjects that do not interest me; professors provide the material needed for learning; a way to pass the time during the isolation period. On the other hand, one third mostly did not enjoy distance learning and their reasons are the following: the lack of face-to-face interaction; unnatural situation does not encourage students to be active; despite more effort than usual, it seems that achievements are lower; some subjects are not taught online (because it is not possible); spending a lot of time in front of the computer; more pre-exam obligations than in usual conditions; weaker motivation to learn than in normal conditions, learning capacities are reduced due to stress because of coronavirus pandemic; problems with technology, mainly internet speed; high tension during the online colloquium; no exams (many exams were postponed).

Students expressed their satisfaction with the whole organization of distance learning on the scale ranging from 1 (not satisfied at all) to 4 (completely satisfied). The total average grade was 3.08 (Table 2).

Table 2  
Average grades expressing students' satisfaction with the organization of distance learning (by departments)

Department	N	M	SD	Min.	Max.
English language and literature	118	3.06	.743	1	4
Philosophy	19	3.11	.658	2	4
French language and literature	50	3.32	.653	2	4
History	32	3.00	.984	1	4
Communicology and journalism	117	3.13	.749	1	4
German language and literature	22	3.00	.690	2	4
Pedagogy	91	3.24	.779	1	4
Psychology	158	2.84	.781	1	4
Russian language and literature	21	<b>2.71</b>	.845	1	4
Social politics and social work	75	3.11	.815	1	4
Sociology	52	3.08	.682	1	4
Serbian language and literature	74	<b>3.34</b>	.668	2	4
<b>Total</b>	<b>829</b>	<b>3.08</b>	<b>.771</b>	<b>1</b>	<b>4</b>

It could be seen that the level of students' satisfaction with the organization of distance learning differs among Faculty's departments ( $F(11, 817)=3.674, p<.001$ ). The most satisfied were students from Serbian language, French language, and Pedagogy department. Least satisfied were students from Russian language and Psychology department. Anyhow, it should be highlighted that the distance between the lowest and the highest average grade is only 0.63. Obtained differences could be explained by the actual differences in the quality of online teaching at different departments, but students' expectations and criteria (that could be various, but there are not data concerning these variables) should be taken into account as well. Finally, it could be concluded that the average level of

students' satisfaction with new form of instruction is quite favorable – it belongs to the upper part of the scale – between the median and the highest value. However, a deeper analysis of the elements of the quality of online teaching is needed, especially the one which students from Psychology and Russian language and literature department are not satisfied with. Therefore, in the future we should work on overcoming them and defining measures to improve certain areas of teaching process quality.

When students' satisfaction with the organization of distance learning is seen in relation to the study level and the study year (Table 3), there were perceived differences as well ( $F(8, 820)=5.008, p<.001$ ).

Table 3  
*Average grades expressing students' satisfaction with the organization of distance learning (by the study year)*

<b>Study year</b>	<b>N</b>	<b>M</b>	<b>SD</b>	<b>Min.</b>	<b>Max.</b>
first year BA	204	3.07	.749	1	4
second year BA	213	3.05	.794	1	4
third year BA	174	2.89	.808	1	4
fourth year BA	189	<b>3.25</b>	.666	1	4
final (graduating) year BA	23	3.17	.937	1	4
first year MA	14	2.86	.663	1	4
first year PhD	7	<b>4.00</b>	.000	4	4
second year PhD	4	<b>4.00</b>	.000	4	4
third year PhD	1	<b>4.00</b>	.000	4	4
<b>Total</b>	<b>829</b>	<b>3.08</b>	<b>.771</b>	<b>1</b>	<b>4</b>

Based on these average grades, it could be said that older students are more satisfied with online teaching than younger ones. However, it is important to point out that the representation of PhD and especially MA students in the sample is lower than the representation of BA students. When it comes to MA students, most MA study programs do not have subjects in the spring semester – this semester is dedicated mainly to professional practice and work on MA thesis. Therefore, very small number of master's students had lessons during this semester and their grades could not be taken as representative. PhD students expressed the highest level of satisfaction with distance learning, but their instruction is anyway organized in a different way when compared to the first and the second level studies. The work with PhD students is usually organized in a very small groups and often individual, mainly through discussions focused on particular topic or problem. It seems that the new organization of teaching was more appropriate for PhD studies than for lower study levels. When it comes to differences among BA students from different study years, fourth year students expressed the highest satisfaction with distance learning. This finding is in accordance with the statement that distance learning requires more autonomy,

higher motivation, more learning skills and more previous knowledge in the field (Aristovnik et al., 2020).

The aim of the study was also to investigate the possibility of predicting students' satisfaction with the organization of distance learning. Before regression analysis, correlations between students' satisfaction with the organization of distance learning and its possible predictors were checked (Table 4).

Table 4  
*Correlations between students' satisfaction with the organization of distance learning and variables recognized as its possible predictors*

	Students' satisfaction with the organization of distance learning	Students' satisfaction with the overall work organization at the Faculty during the lockdown	Students' estimation of representation of online teaching that enables continuous learning	The availability of teachers and associates for communication with students
Students' satisfaction with the overall work organization at the Faculty during the lockdown	.723**			
Students' estimation of representation of online teaching that enables continuous learning	.579**	.558**		
The availability of teachers and associates for communication with students	.481**	.529**	.454**	
The amount of completion of pre-exam obligations via online applications	.312**	.287**	.264**	.224**

\*\* Correlation is significant at the 0.01 level

It could be seen that four variables represented in Table 4 significantly correlate with students' satisfaction with distance learning. The strongest correlation is achieved by students' satisfaction with the overall work organization at the Faculty during the lockdown. Also, analysis indicated that there were significant correlations between the examined variables.

Finally, having in mind previous correlation analysis, hierarchical regression analysis was performed to investigate the possibility of predicting students' satisfaction with the organization of distance learning (Table 5). First model involved students' satisfaction with the overall work organization at the Faculty

of Philosophy in Niš during the lockdown as the predictor. The second one involved mentioned predictor and students' estimation of representation of online teaching that enables continuous learning. Third model involved these two predictors and the availability of teachers and associates for communication with students. Finally, the last model involved all four predictors: (1) students' satisfaction with the overall work organization at the Faculty of Philosophy in Niš during the lockdown; (2) students' estimation of representation of online teaching that enables continuous learning; (3) the availability of teachers and associates for communication with students; and (4) the amount of completion of pre-exam obligations via online applications.

Table 5  
*Predicting students' satisfaction with the organization of distance learning by the set of variables – hierarchical regression analysis, models' summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.	Change Statistics				
							R Square Change	F Change	df1	df2	Sig. F Change
1	.723a	.522	.522	.533	903.911	.000 <sup>b</sup>	.522	903.911	1	827	.000
2	.753b	.567	.566	.508	541.268	.000 <sup>c</sup>	.045	85.867	1	826	.000
3	.756c	.572	.571	.505	367.790	.000 <sup>d</sup>	.005	9.583	1	825	.002
4	.760d	.578	.576	.502	282.368	.000 <sup>e</sup>	.006	11.739	1	824	.001

The last model involving all four predictors explained 57.8% of variance in students' satisfaction with distance teaching and learning. Although the addition of each subsequent predictor significantly increased the percentage of explained variance of the criterion variable, these changes were small. First tested model shows that students' satisfaction with the overall work organization at the Faculty explain the great amount of variance (52.2%) in students' satisfaction with the online teaching. The greatest increase of explained variance (up to 56.7%) followed the addition of students' estimation of representation of online teaching that enables continuous learning as the predictor. Further addition of predictors into the model increased the percentage of explained variance by only 1%.

Particular contribution of each predicting variable to the prediction of students' satisfaction with organized distance learning could be seen in Table 6.

Table 6  
*Particular contribution of examined variables to predicting students' satisfaction with the organization of distance learning – four models tested through hierarchical regression analysis*

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	

1	Students' satisfaction with the overall work organization at the Faculty during the lockdown	.637	.021	.723	30.065	.000
2	Students' satisfaction with the overall work organization at the Faculty during the lockdown	.511	.024	.580	21.029	.000
	Students' estimation of representation of online teaching that enables continuous learning	.174	.019	.256	9.266	.000
3	Students' satisfaction with the overall work organization at the Faculty during the lockdown	.481	.026	.546	18.458	.000
	Students' estimation of representation of online teaching that enables continuous learning	.161	.019	.236	8.374	.000
	The availability of teachers and associates for communication with students	.118	.038	.085	3.096	.002
4	Students' satisfaction with the overall work organization at the Faculty during the lockdown	.468	.026	.532	17.915	.000
	Students' estimation of representation of online teaching that enables continuous learning	.153	.019	.225	7.981	.000
	The availability of teachers and associates for communication with students	.110	.038	.079	2.898	.004
	The amount of completion of pre-exam obligations via online applications	.076	.022	.082	3.426	.001

The most powerful predictor was students' perception of the overall organization of work at the Faculty ( $\beta=.723, p<.001$ ). This finding has confirmed that the overall organization of the work at the Faculty level represented a framework that influences all areas of work. First of all, Faculty management strongly supported online teaching from the very beginning of the lockdown. The other priority during the lockdown was to obtain reliable information for students and employees. The Faculty's official website and student portal were the main sources of information for students. Also, student vice-dean and representatives of students' organizations were in regular communication with Faculty management members and they also shared information with students via social networks. Faculty of Philosophy is a very complex organization with 32 study programs at all three levels and it was very important to find the way for Faculty bodies (scientific, teaching and managing) to be able to make important decisions. Their work was organized online as well, via Google Meet and other applications, and this was another way to encourage teachers to use online applications. Also, all departments had intensive online activities which included working with students, but also the activities directed to the community (online and phone psychological support, pedagogical assistance to pupils and their parents, professional services for local crisis headquarters, educative blog posts etc.). Finally, preparatory classes for entrance exams were organized online for around a thousand participants and with the contribution of the most of teaching



staff working at all thirteen departments. All described and other activities performed at the Faculty level ensured an organized and reliable environment for teaching activities, whereby everything was transferred to online form.

The second powerful particular predictor was the representation of online teaching that enables students to learn ( $\beta=.256, p<.001$ ). This is quite understandable relation. If the students' main goal is to obtain planned educational achievement, it is expected for them to be satisfied when teaching process enables the realization of this goal. Such relation could be recognized also in students' answers concerning the effectiveness of particular online applications and their satisfaction with the instruction realized via different applications (mentioned at the beginning of the results presentation).

The availability of teachers and associates and the possibility of online completion of pre-exam obligations contributed significantly to increasing the amount of explained variance of students' satisfaction with distance learning, but this increase was low (only about 1%). It could be said that these variables represent mainly the aspects of the other two predictors: quality of the overall work organization implies the availability of teaching staff to students, and realizing effective teaching implies the realization of pre-exam tasks. Earlier presented mutual correlations between predicting variables confirm this statement as well. After all, it could be concluded that the quality of overall work organization at the Faculty is shown as the most important predictor of students' satisfaction with organized distance learning.

## Conclusion

This survey offers a few important findings. First of all, in general, it could be said that students were satisfied with the online teaching organized at the Faculty of Philosophy in Niš during the lockdown caused by the coronavirus pandemic. Students rated classes organized via Google Meet application as those of the best quality, which enabled communication in real time, making it seem like face-to-face teaching. The second favored application was Google Classroom that requires students' individual work and teachers' feedback. Such learning activities contribute to building knowledge and skills in a way explained by constructivist approach. Students were most satisfied with the instruction realized through some combination of online applications, that is, the combination of Google Meet and Google Classroom. It could be concluded that these two applications obtained two main criteria of teaching process' effectiveness: communication in real time and knowledge construction by working on given tasks. Although online teaching and distance learning have their own specifics, these two aspects are important aspects of teaching in general. PhD students expressed the highest satisfaction with online teaching and distance learning and among BA students, fourth year students were most satisfied. This finding could indicate that higher

learner's autonomy and greater closeness with the discipline contribute to easy and successful distance learning. This also indicates that older students have more experience and more mature understanding of the benefits of distance learning and its inevitability in risky circumstances, and it can be expected that they will be more willing to access later trainings that are organized in different ways, including necessity of online schooling. For younger students, this way of working is probably less known and less close due to their lack of experience, so it is logical and necessary for them to develop a habit to learn in an online environment. This would mean that in the future much more time and support need to be invested in preparing and introducing younger students to online activities. The sudden transition from face-to-face to online teaching for younger generations can be difficult, but overcoming these requires a certain period of adapting and developing a basis for new skills.

The results showed that students' satisfaction with the organization of distance learning could be predicted by students' perception of the overall organization of the Faculty during the lockdown, by the representation of online teaching that students assess as efficient, by the availability of teachers and assistants for communication with students, and by the possibility of online completion of pre-exam obligations. The first mentioned variable was proven to be the most powerful predictor of students' satisfaction of distance learning.

It is worth mentioning that a significant number of students commented that online teaching cannot completely adequately replace face-to-face teaching. So, despite favorable students' assessment of online teaching implemented during the lockdown, the most preferred way of teaching is still via direct face-to-face communication.

The presented study has provided important feedback concerning the way of organizing teaching process under conditions that were altered due to the corona virus pandemic. The results were the starting point in finding the best solution, designing and implementing certain measures to improve the quality of online teaching for the next academic year. Finally, it could be expected that experiences with online teaching and distance learning will bring significant changes in the future even when the pandemic becomes the past (Veletsianos, 2020). Therefore, some of the identified disadvantages can serve as a good basis for the implementation and enforcement of new measures in order to improve online teaching. This would create adequate opportunities for Faculty of Philosophy in Niš to be able to work properly in the event of unforeseen or risky circumstances, but also to improve teaching process in regular conditions supplementing traditional teaching with classes that will be realized online from time to time.

## References

- AACSB International. (1999). *Quality Issues in Distance Learning*. Retrieved from <https://web.archive.org/web/20120601203911/http://www.aacsb.edu/publications/whitepapers/quality-issues-distance-learning.pdf>
- 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), 8438-8472.
- Barr, B., & Miller, S. (2013). *Higher Education: The Online Teaching and Learning Experience*. Phoenix, AZ: University of Phoenix Faculty School of Advanced Studies.
- Correia, A.P., Liu, C., & Xu, F. (2020). Evaluating videoconferencing systems for the quality of the educational experience. *Distance Education*, 41(4), 429-452.
- Ćirić, M., & Jovanović, D. (2018). Konstruktivizam u pedagogiji: karakteristike, dometi i ograničenja [Constructivism in pedagogy: characteristics, ranges and limitations]. *Godišnjak za pedagogiju*, 3(2), 57-71.
- Djui, Dž. (1966). *Vaspitanje i demokratija: Uvod u filozofiju vaspitanja [Education and Democracy: Introduction to Philosophy of Education]*. Cetinje: Obod.
- Đigić, G. (2017). *Upravljanje razredom: savremeni pristup psihologiji nastavnika [Classroom Management: Contemporary Approach to Teachers' Psychology]*. Niš: Filozofski fakultet.
- Fincham, D. (2013). Introducing Online Learning in Higher Education: An Evaluation, *Creative Education*, (4)9, 540-548.
- Glickman, C.D. & Tamashiro, R.T. (1980). Clarifying teachers' beliefs about discipline. *Educational Leadership*, 37(6), 459-464.
- Ivić, I., Pešikan, A., & Antić, S. (2001). *Aktivno učenje [Active Learning]*. Beograd: Institut za psihologiju, Ministarstvo prosvete i sporta Republike Srbije, Ministarstvo za prosvjetu i nauku Crne Gore.
- Kock, N. (2005). Media richness or media naturalness? The evolution of our biological communication apparatus and its influence on our behavior toward e-communication tools. *IEEE Transactions on Professional Communication*, 48(2), 117-130.
- Seifert, K. & Sutton, R. (2009). *Educational Psychology (Second Edition)*. Zurich: Global Text Project.
- Marzano, R.J., Marzano, J.C., & Pickering, D.J. (2003). *Classroom management that works – research-based strategies for every teacher*. Alexandria: Association for Supervision and Curriculum Development.
- McInerney, J.M., & Roberts, T. (2004). Online Learning: Social Interaction and the Creation of a Sense of Community. *Educational Technology & Society*, 7(3), 73-81.
- Oliveira, M., Penedo, A., & Pereira, V. (2018). Distance education: advantages and disadvantages of the point of view of education and society. *Dialogia*, 29, 139-152.
- Pijaže, Ž. (1983). *Poreklo saznanja. Studije iz genetičke epistemologije [The origin of knowledge. Studies in genetic epistemology]*. Beograd: Nolit.
- Rehn, N., Maor, D., & McConney, A. (2016). Investigating teacher presence in courses using synchronous videoconferencing. *Distance Education*, 37(3), 302-316.

- Veletsianos, G. (2020). How should we respond to the life-altering crises that education is facing? *Distance Education*, 41(4), 604-607.
- Wang, M.C., Haertel, G.D., & Wallberg, H.J. (1993). Toward a knowledge base for school learning. *Review of Educational Research*, 63(3), 249-294.
- Wright, G.B. (2011). Student-Centered Learning in Higher Education. *International Journal of Teaching and Learning in Higher Education*, 23(3), 93-94.
- Yilmaz, K. (2011). Constructivism: Its Theoretical Underpinnings, Variations, and Implications for Classroom Instruction. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(5), 204-212

### **Gordana Đigić<sup>23</sup>**

PhD, Vanredni profesor,  
Univerzitet u Nišu, Srbija, Filozofsku fakultet, Departman za Psihologiju  
Ćirila I Metodija 2, 18000 Niš

### **Dragana Jovanović<sup>24</sup>**

PhD, Vanredni profesor,  
Univerzitet u Nišu, Srbija, Filozofsku fakultet, Departman za Pedagogiju  
Ćirila I Metodija 2, 18000 Niš

## **OCENE STUDENATA O NASTAVI I UČENJU NA DALJINU**

### **Rezime**

Usled pandemije korona virusa, u martu 2020. godine, obrazovni rad na Filozofskom fakultetu u Nišu potpuno je transformisan u rad na daljinu. Nakon dva meseca realizacije onlajn nastave, sprovedeno je istraživanje sa ciljem da pokaže kako studenti ocenjuju njen kvalitet. Upitnik je popunilo 829 studenata. Studenti su uglavnom bili zadovoljni nastavom na daljinu ( $M=3.08$  na skali od 1 do 4,  $SD=.771$ ). Kao najbolju, student su ocenili nastavu organizovanu primenom aplikacije Google Meet (60.8%), Google Classroom (16.4%) i kombinacijom aplikacija (13.8%). Najpovoljnije su onlajn nastavu ocenili studenti doktorskih studija ( $M=4.00$ ,  $SD=.00$ ), a među studentima osnovnih studija, najpovoljnije ocene su dali studenti četvrte godine ( $M=3.25$ ,  $SD=.666$ ). Mada su sve relativno visoke, prosečne ocene koje su dali studenti sa različitih departmana se takođe razlikuju ( $F(11, 817)=3.674$ ,  $p<.001$ ). Regresiona analiza ( $R=.760$ ;  $F(4, 824)=282.368$ ;  $p<.001$ ) pokazuje da se 57.8% varijanse zadovoljstva studenata organizacijom učenja na daljinu može predvideti setom varijabli (onlajn realizacija predispitnih obaveza; dostupnost nastavnika i saradnika za komunikaciju sa studentima; ukupna organizacija rada Filozofskog fakulteta tokom vanrednog stanja; zastupljenost onlajn nastave koja omogućava učenje), od kojih se kao najznačajniji prediktor izdvojila percepcija ukupne organizacije rada na Fakultetu za vreme vanrednog stanja ( $\beta=.532$ ,  $p<.001$ ).

23 gordana.djigic@filfak.ni.ac.rs

24 dragana.jovanovic@filfak.ni.ac.rs

Iako ne može u potpunosti da zameni nastavu licem u lice, rezultati ove studije, zasnovani na stavovima studenata, ukazuju na to da bi nastava na daljinu mogla imati kapaciteta da omogući proces konstrukcije znanja i veština i ostvarivanje obrazovnih ishoda.

**Ključne reči:** učenje na daljinu, onlajn nastava, ocenjivanje kvaliteta, student