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ELECTRONIC JOURNAL

Emotional Intelligence and ICT Based Study of Online Teaching at the University of Gjakova

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Abstract

The use of ICT in education is another way to motivate, assess and be able to have an easier approach to education and learning. Different courses can be taught online that would have a practical background, those being directly and indirectly related to engineering, education or even social sciences.

We have analysed multidimensional psychological and practical factors associated with online teaching, where emotional intelligence was at the center of our focus. Based on the questionnaire we selected, a designed pie chart statistical analysis is applied. Emotional problems for implementation, emotional challenges including monotony during the online learning process are analysed. Interactivity student-teacher, effectiveness and reliability of online teaching is statistically analysed and a quantitative conclusion is derived for the future application of this mode of teaching. The experience derived during the period of the epidemic Covid 19 and the development of IT technology made online teaching complementary to the conventional mode of education and learning, as shown in our study as well. It would be very logical to emphasize that students must have the chance to get associated with online learning and this is for many several reasons to come at hand. The next generation of teachers should be able to write code assess code and perform short term flow charts.

Keywords: online teaching, emotional intelligence, pie chart, statistical analysis.

1. Introduction

Distance education and online teaching has been applied in the past, however the epidemic Covid 19 has imposed the need as a necessity application of this way of teaching.

The way we attain our educational skills depends on the different sources we use. Different models of teaching have been used at different times. Distance teaching is and has been known to be very useful and successful. A typical example would be where teachers would not have to travel

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from one nation to another in order to teach and that would refer to students, they would not be required to travel instead teaching would be done online. The new reforms in education including at many universities around the world, have enabled us to have different scales and teaching sessions. The new forms of teaching would be seminars and interactive working modes. The online effects of teaching have changed this and have brought something much easier into the field of education. Online teaching has also brought more of the idea that concerns “learn by doing”. This is one of the best modes of teaching that was used and is being used by different institutions. The idea of “Learn by Doing” effects creativity and the way students think during their studies. Traditional so called old or conventional style of teaching is of the past, and this has been made more possible to us due to the fact that technology has started to impose on us the use of online teaching.

Figure 1 shows how online e learning will soon overtake the education system completely. This study was created from a University in the United States. According to figure 1 we understand that for seven consecutive years we will have an increase that would be almost double the amount we had in 2019.

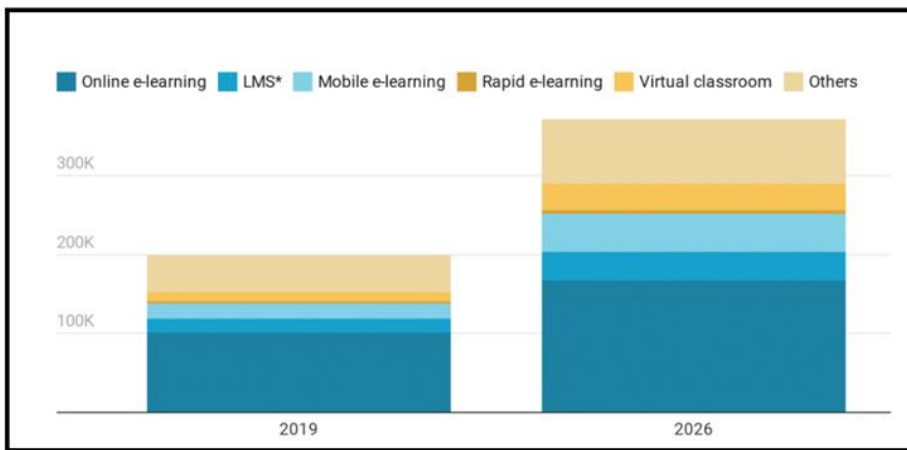


Fig. 1. Learning Management Systems (Bau Bay..., 2014)

This would mean that many institutions are willing to convert their courses fully online. It would be very thoughtful to argue with the fact the online teaching is overtaking the hearts and minds of many university professors around the globe.

Online teaching was more highly introduced in the state of Kosova during Covid 19. The online courses that were taught did have different effects in the grading systems as well as the willingness to study online. At the University of Gjakove, the online courses brought to us a very different mode of study that many individuals benefited from it, as to some whom did not (Kokaj, Maloku, 2021).

Different studies have shown that the effect of Covid 19 has enforced the idea that teaching online has become more and more important to universities around the world and it has made us depended on online teaching.



Fig. 2. The increased effect of Online Teaching (University of Birmingham, 2023)

Figure 2 shows the study results from the University of Birmingham in the UK, of how the dependency on online has increased.

Online courses that were conducted during COVID 19, made the stage of teaching very different. Courses that were taught at the Faculty of Social sciences managed to have a very different approach as to the courses that were taught online from the Faculty of Education. This is to take into account the fact that some courses taught online would be more difficult to teach due to several different reasons.

Online education is very much connected with converting everything that we do in terms of teaching, modelling and testing to online. There happened to be different forms of teaching in the field of pedagogy. A typical example of teaching online would be one to one, and this was used in the middle ages. This however sometimes maybe more effective as the student would have the opportunity to cut into the lecture whilst the professor is explaining things in person to him. Another model of teaching is one to many which intern is being used today in the present day world (Kokaj, Maloku, 2021a).

Collaborating online has become the future out of everything. Online marketing, online teaching and online shopping is one of the key success to the twenty first century. Even though education online is to the level where we consider it to be crucial, online working had not changed our status in the society but it has changed the way we do work and the way we try to perform our everyday data skills.

Different institutions around the world have done different analysis tests on the effect of converting our lives to online, and it happened to be that there were many advantages and disadvantages to online teaching and working (Advancing Technology for Humanity, 2016).

The Impact of Critical Thinking on How Learning Outcomes are Evaluated in Primary Schools is also important (Kadrija et al., 2023) associated to online learning is part of our interest in this study.

The purpose and objectives of the research and study:

The purpose of this research is to analyze the possibility of partial or periodic implementation of online learning at the University of Gjakova "Fehmi Agani" even after the pandemic period. The main specific objectives of this paper, beside others are:

- To analyze how effective and interactive is online learning in general at any possible university, and what are some of the challenges in regard to our technological requirements and standards.

- To identify and justify the needs that are directly related to the social and economic advantages of the online lectures at our university.

The goal of the study is to figure out ICT and emotional intellegency play a relevant role in teching process, particularly in case of online teaching.

Research questions and how research effected education:

In regard to the research questions of this paper we have considered the following:

- How effective and challenging are online lectures at the University?

- Is it in the interest of students and academic staff that so the lectures to be held online?

The the main method and technique is based on the statistical analysis of the numerical output obtained from the questunares we introduced.

Analysis used at our research: The research that we did for this paper was focused on a statistical-numerical analysis. Analysis plays a key role in science of education in many different forms. The questionnaires that were implemented online, were sent to several different individuals. The responders that had to complete the questionnaire were from different university personal. Singificant cases, mainly students, were selected from the representative departments. Some of the responders were selected from the staff, Professor/s and Teaching Assistents.

The questionnaire scheme was based on a set of several different questions that we had set up. The questions where focused on the idea of online teaching. The effectiveness of the questionnaire was based on the preliminary results and the number of pupils whom had taken the questionnaire. More than 100 different university individuals took the questionnaire.

2. Methodology

The current study was conducted at Fehmi Agani University in Gjakova. The geographical, sociocultural, pedagogical and economic features of this university are very similar to the universities in Kosova and similar to many features of the universities of the Western Balkans.

Therefore, this study can be a representative and applicable elsewhere. The University has 4 Faculties and each faculty has three to four departments.

The main phases of the methodology applies at this research are: a) preparation of the tests. b) performing the tests and c) Obtaining the results from the responders and analysis.

Preparation of the tests is coherent with our purposes and goals to be reached by this research. Therefore the phase of the test preparation was a long and detailed process, based on theory and experiences of previous research performed by us or other research, accessible in the existing literature.

The tests were performed at all departments and faculties of University Fehmi Agani. Professional technical procedure was applied during the collection of data. The collected data were processed and analysed using statistical – numerical approach.

We have analysed the detailed results of students of all departments after the Covid 19 epidemic, when online teaching was applied. Statistical comparison of the results of students achieved during the conventional and online teaching mode, have shown a small difference. It was indicated that a small difference or advantage for this case when lectures were conducted with the physical presence of the students. Therefore, online teaching have shown to have very little effect on the average students performance.

Tests

The order in which we performed the tests was according to a statistical approach that we determined. The model of questioning was short and concise. The test questionnaire had 7 consecutive questions.

The first question (1) was “Is online learning emotionally and practically difficult to be implemented?”. This question was designed as a general question, in order to confirm that all individuals are able to properly use the computer to answer the questions. At the same time responders can express their opinion in regard to the implementation of the online learning.

The second question (2) was “Is online learning challenging emotionally or practically?”. This question was designed to find out how the responders perceive and experience online learning. Since this way of learning was known to be conventional in the past, dilemma for possible emotional and cognitive problems on practical and the logistic of online learning occurs. The lack of computers, elementary knowledge of digital technology, the stress or the fear for the unknown challenges and similar problems of the emotional nature, could the students face with online teaching.

The third question (3) was focused on “Is online learning boring emotionally?”. It can get boring just like any other lecture, this is due to the fact that some lectures and nonstop power point slides can be irritating. The same routine and the loss of interest of students to be focused and concentrated during the online learning and teaching, is another possible emotional problem.

The fourth question (4) was focused on the effectiveness of interaction (Q & A), where Q & A means a Question and Answer Session. “Are there interactive features in online learning?” The students are used to the physical mode of learning where interactivity is easy and a natural way of communication because the optical or physical distance is small, the student and the teacher are at the same place. On the other hand, communication during the online process of teaching is not trivial. Here, the teacher is in front of a camera and does not have optical and emotional contact with the students. On the other side, the students are in front of a computer or a screen where the moving images are projected. The students do not observe natural 3Dimensional, conventional or actual physical event. Instead, the images they see are coming from a 2Dimensional plane of the screen. Due to the lack of 3D projection, parallax motion and other similar problems, introduce some emotional and cognitive psychological nature.

This question was based on the interactivity of online learning, this is due to the fact that, students that prefer lectures to be held physically rather than online, tend to be concentrated ([Kokaj, Maloku, 2021](#)).

The fifth (5) question is: “How effective is online learning?” It was a general question in order to give us a glimpse of where we are in terms of the willingness to work online, motivated by effectiveness of this kind of work. The effectiveness is defined as a ratio of the new kind of the work and conventional way of teaching. Numerical ratio of the features of the two ways or modes of teaching should be calculated. However, the purpose of this question, is to find out the estimated qualitative feeling of the responder regarding the effectiveness.

The last two questions of the survey questionnaire are the most important ones to us, because it helped us identify the most relevant factors associated with online teaching.

The sixth (6) question was, “Is Online learning the future of education?”. Emotional attitude toward the online teaching, psychological inclinability and optimism of students and teachers for application of online teaching is the aim of this question. This question enabled us to understand the other aspect as to how easy we can impliment this mode of teaching into different institutions or teaching envirements, like high school and primary school.

The final question (7) was “Your assessment of online learning”? This question was a question that helped us to conclude the overall effectiveness to online teaching and how easily can we move from physical teaching to online. The test question was focused on the technical, educative as well as the psychological aspect of learning.

The questions have different quantified levels of answers starting from 1 all the way up to 6. **Figure 3** shows the numbers along with the colour code answers.



Fig. 3. The answers from 1 to 6 and their colour code

1 is considered to be as a 0 % where he/she does not agree at all. 2 would be considered to be 16.67 % of the agreement. 3 is 33.34 % meaning that the individual agrees on 40 %. 4 is 60 % of the overall undertaken agreement. 5 is 80 %, meaning that the individual who’s selected the number 5 he/she agrees 80 %. 6 means that he/she fully agrees with the question, that is to say that they fully approve and that they agree 100 % to that.

3. Results

The results of each question that was answered was expressed or presented on a pie chart percentage diagram. The pie chart percentage diagram illustrated the selective count out of the 100 different personal whom have answered the questionnaire.

(1)

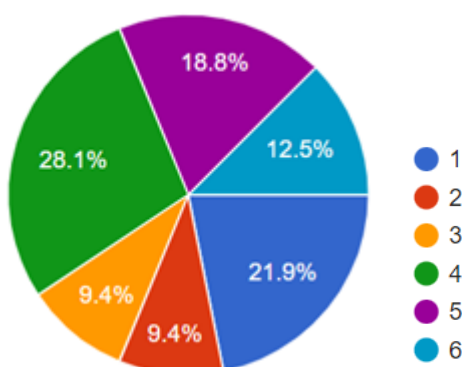


Fig. 4. Is Online Learning Difficult?

Figure 4 shows the output result on how difficult is online learning. 21.9 % totally disagree with the fact that online learning is difficult, however 12.5 % agree that online learning is 100 % difficult. The green area shows to us that a large portion consider that online learning is difficult. 28.1 % of whom have taken the questionnaire consider that they 60 % agree that online teaching is difficult.

(2)

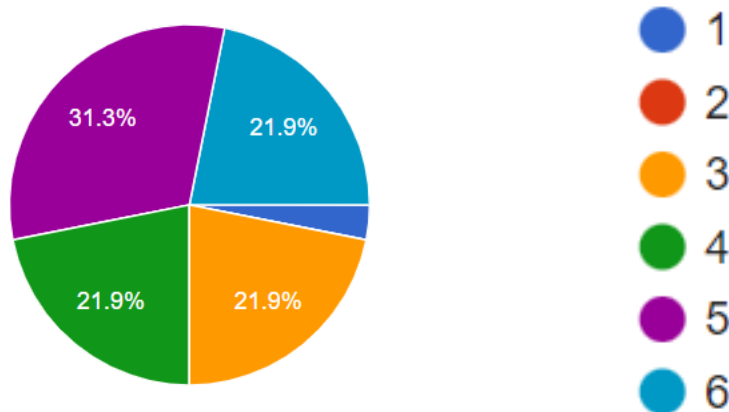


Fig. 5. Is Online Teaching Challenging?

According to [Figure 5](#), the predominant answer happened to be 5, the purple colour, meaning that many do agree that online teaching is difficult. Eventhough a significant number of them consider that online teaching is mildly difficult. Some pupils consider that they fairly agree or they barely agree that online teaching is challenging.

(3)

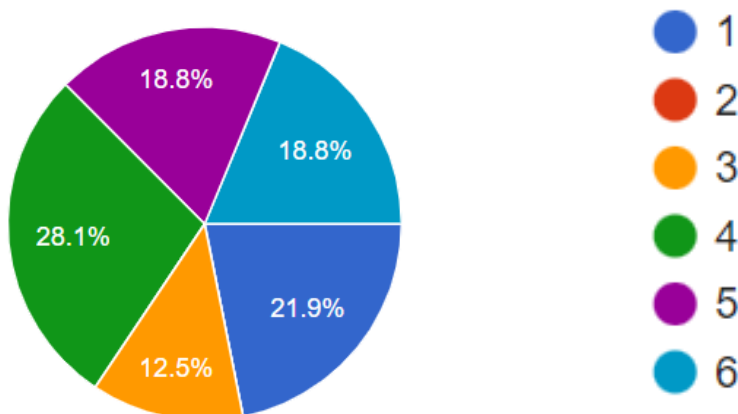


Fig. 6. Is Online Learning boaring?

[Figure 6](#) shows to us that half of the pupils whom have answered this consider that online learning can be boaring. The majority of them consider that Online learning is boaring and this is observed from the fact that 28.1 %,the green area code, out of all of them consider that online learning can be boaring. A very small number of them consider that it is not boaring and this is the 12.5 % of them.

[Figure 7](#) is an indication to us that a large amount consider that online learning is not very interactive. 28.1 % is high as it gets in regard to the fact that almost 30 % of them consider that it is not interactive. A very tiny portion of them consider online learning to be interactive. This could be a very bad sign to us in regard to online learning.

(4)

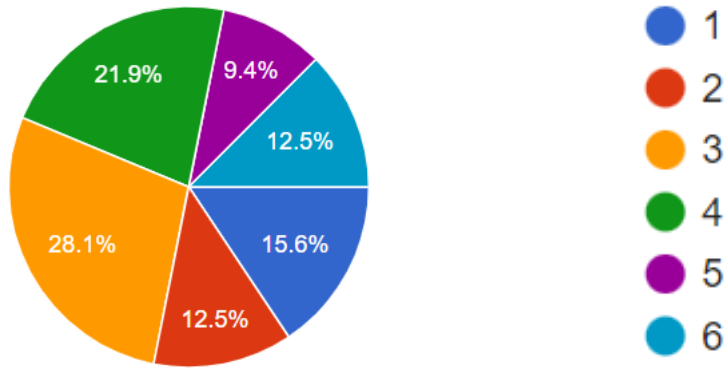


Fig. 7. Can Online Learning be interactive?

(5)

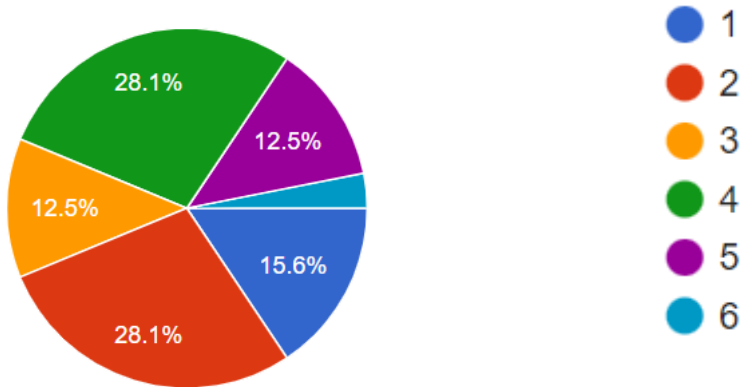


Fig. 8. How Effective is Online learning?

Two large portions of whom have taken the questionnaire consider that online learning is not very effective and at the same time the second portion consider it to be partially effective. Majority of the pupils consider that online learning is not effective and an extremely small amount of them consider that online learning can be effective. 15.6 % is a very small number of them whom consider that online learning to be effective.

(6)

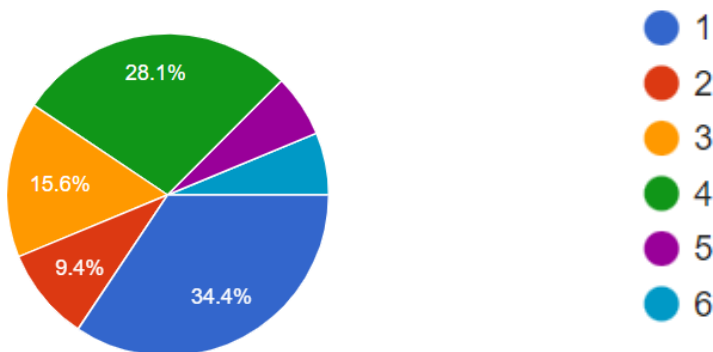


Fig. 9. Is Online Learning the future of education?

According to Figure 9, the majority 34.4 % consider that there is no future for online education. The second in line partially think that there happens to be a future for online education. The majority consider that online learning is not the future of education. For some reason this is very shocking, however we do have that big gap in between the 28.1 % whom do consider that online learning can be the future to our education.

(7)

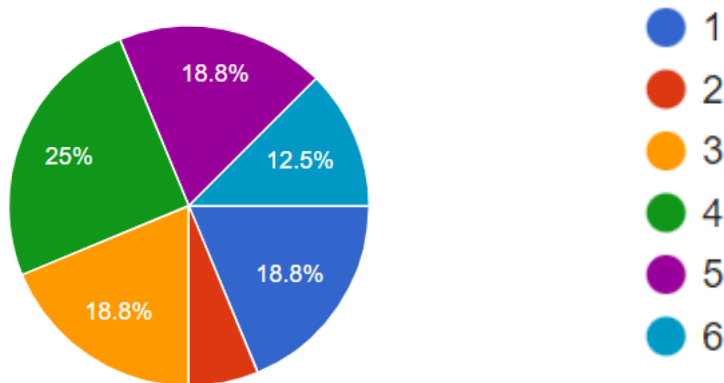


Fig. 10. Your rating for online learning?

Most of whom have answered this question have thought about the fact that where he/she sees themselves in accordance to online learning. According to the figure not many consider that they see themselves into online learning, eventhough some of them are not quite sure and this is because figures like 18.8 % are very shocking.

Statistics Analysis

Table 1. The mean and the standard deviation

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Is Online Learning Difficult?	3.00000	33	1.369306	.238366
	Is Online Teaching Challenging?	3.81818	33	1.014105	.176533
Pair 2	Is Online Learning boaring?	3.12121	33	1.340652	.233378
	Can Online Learning be interactive?	2.90909	33	1.128152	.196386
Pair 3	How Effective is Online learning?	2.69697	33	1.158794	.201720
	Is Online Learning the future of education?	2.3939	33	1.24848	.21733
Pair 4	Your rating for online learning	4.0000	33	1.78536	.31079

Table 1 shows the number of people that have taken part in the quationnaire along with the standard deviation. We can see clearly here how the values vary along with the number of different optional outcome results.

Table 2. The Correlation values for each Question of the Questionnaire with the correlated values

		N	Correlation	Sig.
Pair 1	Is Online learning difficult?	33	-.083	.648
Pair 2	Is Online Learning Challenging?	33	.247	.167
Pair 3	Are there interactives in online learning?	33	.456	.008
Pair 4	Is online learning the future of education?	33	-.014	.938

Table 2 represents the number of iterations along with the correlation value. We can clearly understand that the number the correlation value is a statistical representation of the overall percentage outcome of each questionnaire. We could argue that the negative representation of the correlation values is an upgrade quantitative representation of the portion selected from the individual selection.

The correlated values for each paired question indicated to us that, interactive online learning can be very effective, if we do take into consideration the fact that we use a high value technique and module of teaching. Another important opinion that can be made, from the correlated values is that, online learning can not always be the future method to our education.

Table 3. P test values for each question of the questionnaire

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95 % Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Is Online learning difficult?	14.00000	9.877373	1.719430	10.497636	17.502364	8.142	32	.000
Pair 2	Is Online Learning Challenging?	.696970	1.468095	.255563	.176406	1.217534	2.727	32	.010
Pair 3	How effective is online learning	.212121	1.192623	.207609	-.210764	.635007	1.022	32	.315
Pair 4	Is online learning the future of education ?	-1.60606	2.19288	.38173	-2.38362	-.82850	-4.207	32	.000

Table 3 shows the P test values that we performed in SPSS. We can clearly see here that the values are relatively low and that they seem to be convincing according to our expected outcome. We could also emphasize the fact that online teaching is relatively good and that more than half of the personal that have taken the questionnaire do consider it to be a very serious aspect into our every day lives that could change the way we work and teach. This was a paired test of the values and it enabled us to understand the fundamental aspect on how easily we can impliment the online teaching. This was just one of the 6 tests that where carried out. The values of paris 1 to 4 respectively indicate the lableing of each test of the questionnaire.

4. Discussion

Technological developments have enabled social welfare and higher standards in many aspects of work and human life. Frequent technological updates have imposed the need for changes in the organization of teaching and in the educating of students in research habits. Twenty-first

century learners need to be prepared for the global knowledge society (Labonté et al., 2022). Technology has eliminated physical distances between students and their teachers. It gives them easier access to multiple sources of information. However, the organization of teaching and research work in the period of technological development also has its own specifics and challenges. These organizational features are discussed among teachers at all levels of educational institutions. Phones, laptops and various tablets are being used today and a large number of children today have in their hands from early childhood. In doing so, their excessive use nowadays has become a concern for their parents and teachers. Therefore, in schools, in families, in academic circles and in various publications, there is a fierce debate about the advantages and disadvantages of using information technology. In this paper we examine the possibilities of organizing online learning at our university as an alternative to learning with the physical presence of students in the classroom. Much has been written about this topic in recent years during and after the pandemic. In these publications and in our school and university environments, the debate takes place about the economic reasons and the methodological aspects in regard to this. To meet the needs of a changing higher education landscape, it is critical for educators to explore and apply effective online pedagogical practices that support learning and transfer (Galoyan et al., 2021). Students from a wide geographical area with difficult travel options gravitate to our university. Many of our students are employed and some of them are also parents. For these and other reasons, they do not have the opportunity to continue the lectures with all their will to be taking place at regular lectures at the faculty. On the other hand, faculty rules penalize students who are absent from lectures by reducing points in their final evaluation. From this position, the academic staff at the university are discussing the possibility of organizing some of our lectures through online learning. This method of organizing lectures would save time and money for our students. Multimodality opens to us different possibilities that offer learning experiences more adapted to students' needs and wishes (Rof et al., 2022). They would use the four-hour round-trip travel time to the university in their homes for study or other academic engagements. Online learning is cheaper in economic terms and can be organized in flexible schedules according to the agreement of the academic staff with their students. The main debate we have about online learning is about its effects on students' academic development.

We still have dilemmas and conjectures about this mode of learning for these reasons:

- In our socio-economic circumstances, all students are not equipped with suitable personal phones or laptops to follow the lectures from home;
- Many students do not have separate rooms from where they would follow their lectures and in these cases they are not comfortable enough during online learning;
- In our country, the electricity or the connection to the Internet is often interrupted, and in this way the disconnection from the discussions about the topic that is treated in certain lectures is created;
- Some of the academic staff and some of our students still do not know enough about the functioning of information technology, and they have problems in elaborating and presenting online learning with graphs, formulas and other forms of presentation on screen.
- There are modules or teaching subjects that cannot be organized in a methodical aspect and at the quality level as they were when they were organized in the classroom with the physical presence of students.

These are some of the challenges of organizing online learning that are discussed in our school and university environments. In the Kosovar society, we faced online learning for the first time during the Covid 19 Pandemic. Our impression is that we quickly learned and adapted to this unknown professional innovation, imposed by the circumstances of the pandemic. At the same time, the consolidation of the digital society, and the recent consequences and responses to the Covid-19 pandemic have reduced the distance between traditional face-to-face education and online education (Rivera-Vargas et al., 2021). As a higher educational institution, we have mobilized and learned a lot from each other. So despite the disasters that the pandemic has brought, during this period of isolation we have also gained positive experiences in holding lectures.

When we read the publications of recent years about the organization of online learning, we noticed discussions of the organizational and methodological aspects. There are concerns that during online learning students are not sufficiently engaged. They are sometimes passive during the lectures or they tend to completely leave their laptop or phone, and start to falsely give the impression that they are present in the lecture. We also faced this phenomenon at the beginning, during online lectures. When the students so called "take the floor" during discussions or whilst answering different questions, they can even have the books in front of them and their answers are

from pure reading. Another important point of discussion between teachers is interactivity and the organization of constructive debate between students in online learning. We have often discussed and analyzed these methodical and technical aspects of teaching organization in our meetings.

The common conclusion from these professional discussions is that the methodological elements of the organization of distance teaching are almost the same as the methodological elements of teaching with the physical presence of students in the classroom. The negative and problematic aspects of online learning can be improved and eliminated quite easily with increased care and attention from teachers. In these cases, teachers and their students must first set academic rules and standards, which they then must meet. One practical implication is that learning institutions should explore initiatives to foster greater levels of online learning self-efficacy (Jun Rong Nigel Lim et al., 2021). During online lectures, teachers, depending on the occasion, call out the names of the students and ask them for their opinions and other contributions on the specific topic being addressed. Teachers playing the role of the instructor in the classroom initiate educational debates on environmental and social topics which are addressed through arguments and scientific analysis (Kadrija et al., 2022). In order to avoid mechanical learning and answers taken straight from the book, teachers within the established academic standards inform students that their critical and independent thinking is more valued in their answers. Taken in general, the debate in scientific publications and in our school and academic environments treat online learning as a good opportunity to save students time.

According to these opinions, this opportunity and mode of learning should be organized during the academic year in addition to regular learning in order to facilitate the continuation of lectures for the group of students whom travel, and those whom happened to be parents as well as those who are employed.

Online learning can have many undertaken limitations to our way of teaching. These can apparently effect us in different forms and we can come to a point that we can make different modifications and assumptions that allow an easy access to different regions around the globe. An excellent session that would be provided online would concern us with an excellent running internet speed along with a very good streaming of the signal. The major limitation here, that is required to be underlined, would concern the fact the better the cable of transmission of signals the better is the online image and the voice recognition during the teaching online session.

5. Conclusion

As conclusions of this scientific research we have drawn out the following:

Online learning today in universities is a fantastic alternative and opportunity for organizing lectures and academic presentations without the need for students to waste time and spend their money on daily trips. Today's achievements in the field of telecommunications have clearly diminished the importance and necessity of the physical presence of students in classrooms. The new form of online education in the context of higher education can create a novel context of opportunities by offering the possibility of combining face-to-face and online education throughout students in their academic careers (Sánchez Gelabert, Elias, 2023). Different universities and scientific institutes today offer university studies and professional training to their students and clients regardless of the geographical distance. The theoretical treatment and the research support our assumption that with a good methodical and professional preparation, distance learning can be effective and attractive for students, as well as learning held in the clto oercome chalenges in the real lifeasroom with the physical presence.

Emotionally or physically based research of online teaching, applying statistical technique, has shown optimistic results and conclusions. The results of our research have led to the conclusion that effectiveness and sustainability, along with technical and logistical problems, characterize online teaching.

The main purpose of education and learning based on competencies applied in our curricula and education system at our university and generally elsewhere, is the cognitive and emotional preparation and formation of students to obtain knowledge, attitude and skills to overcome problems and challenges in real life. Based on such promises, the emotional-psychological components of the learning process, especially in the online mode, were the objects of our study.

The opinions of students and academic staff regarding the organization of online learning presented here as research findings are interesting and meaningful. Those expressed in percentages indicates the future of online learning in our university environments. For us as

researchers, these concerns are real and serious when organizing lessons without the physical presence of students. The organization of online learning has its own specifics and challenges that must be taken into account by the academic staff and the university as a higher educational institution. The preparation of online lectures requires methodological knowledge and the same academic standards as the classroom with the physical presence of students. The devices with which students log in to online learning, the Internet connection and the work rooms from which they follow the teachers lectures are some of the problematic elements of this learning modality.

In [Figure 7](#) we have presented the opinions of the subjects given in our question: Is there interactivity in online learning? And as you can see, 50 % of them (28.1 % + 21.9 %) gave average ratings. This proves how important it is to plan and organize lectures as professionally as possible. During online teaching, we have to point out problems and create learning situations that engage students in discussions and choose tasks by allowing them to interact with each other. This constructivistic philosophical approach where students are active during lectures carried out online is more effective and attractive. Students adapted to this mentality should be active during the lecture by analyzing, and choosing the completed tasks in their individual and group projects.

The effect of online teaching is acceptable for several different reasons. However some of the problems should be brought to the focus. The main important focus to us is that online teaching can be sometimes difficult to imply at our university. We do experience different such is the difficulty of having full student attention during the online lecture.

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