DISTANCE LEARNING AND THE ATTITUDE OF SERBIAN STUDENTS

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Abstract

Distance learning is an approach to education that has exhibited a significant demand in the last years. The need for distance education, either undergraduate or graduate programs, has emerged due to several circumstances. It was the COVID pandemic, busy everyday schedules, economic issues and the geographical distribution of students and universities that boosted the distance education approach. In this new era for teaching and learning opportunities, it was necessary to record the attributes, distance education opinions, teaching and learning preferences of the students. This investigation focused not only on the students but also on the fellow students and their instructors. In order to succeed in recording all these data, a structured questionnaire survey has been designed and implemented. Fifty-one students from Serbian Universities responded and their answers were statistically analyzed. Female participants were the majority with almost 55% of the sample, and the age of most of the participants ranged among 20 to 22 years old. Almost all the participants are single and at the moment of the questionnaire survey studied in undergraduate programs. Students attending distance education programs prefer smaller groups of students (<30) and the like listening to the course material and taking notes. They are particularly fond of experimenting and focusing on one thing at a given time. It is very interesting that they particularly like to work independently on projects. The study also identified a number of interesting correlations.

Keywords: Serbian Students, Distance Education, Learning Preferences, Teaching Preferences.

1 INTRODUCTION

One of the biggest challenges of every society today is how to make education possible for every individual as a main part of everyday life. With the rapid development of information technologies, which find their application in almost all areas of human activity, education becomes independent of space and time, leaving the framework of traditional teaching. New approaches to teaching can contribute to a better vertical integration of the entire educational process and the labor market.

The Education Agenda 2030 [1] and Sustainable Development Goal 4, even before the COVID 19 virus pandemic, recognized that there is a need for more flexible education systems, which should enable different ways of learning and support equality and lifelong learning. However, efforts to support education globally on the one hand, as well as the current crisis caused by the corona virus pandemic, have shown that commitment to these goals has never been more relevant [2].

There are more than 130 million online students in the world today, and the annual growth rate of the number of students is estimated to be around 20%. The worldwide market size of online learning is approximately $187.87 billion in 2019, a 400% increase over what it was just six years ago [3]. This fascinating data changes every day, as the number of participants is constantly increasing. The data revealing the growth and application of eLearning, no matter how surprising, reflect the real needs of modern civilization. eLearning, the most common form of distance learning, has proven to be the only way of learning that enables individuals and groups to successfully master knowledge from various fields, in any place and at any time. Users of eLearning are found all over the world, they are from the private and social sector, from students, through the working population, to special groups.

Although there is great interest in distance learning in the world, this form of education is still not widely represented in Serbia. There are numerous reasons why this type of education is not widely applied in Serbia: lack of knowledge and skills of students, lack of adequate software and technological basis, unavailability of adequate literature, concern regarding equivalence to traditional learning, mistrust of professors and students regarding the quality of teaching, lack of information among students about the

concept of distance education. Precisely during the pandemic of the COVID 19 virus, distance learning received a full and massive practical application in Serbia.

The paper is structured as follows. After the introduction, the advantages of distance learning from the students' point of view are presented. This is followed by a presentation of the methodology and results of research on the topic of distance learning, conducted among the student population in the Republic of Serbia.

2 DISTANCE LEARNING ADVANTAGES FOR STUDENTS

Definitions of distance learning are not unique and have changed over time, often depending on the development of the technology used to realize them, but also to include the science of distance learning, especially in the field of higher education, where distance learning appeared [4]. According to the some authors [5], distance learning is a set of modern technologies that can provide information delivery interactively through information and communication technologies. When the term *Distance Learning* is mentioned, it usually evokes two conflicting reactions. One is very positive, because it is associated with modern education, the democratization of education, the application of multimedia technologies, an excellent chance to establish contact with teachers that you would otherwise not be able to reach. In a word, this reaction is pedagogically and technologically optimistic. The second, completely opposite reaction is usually very negative, because it casts doubt on the very concept of distance education and learning, does not believe in its quality, is afraid of "cheating and copying", does not accept distance education as equal to classical learning. This reaction sums up technological and pedagogical pessimism.

For sure, as a result of distance education, the same quality of skills and diplomas are obtained as during traditional attendance of classes. Diploma and practical skills are equally recognized. Instead of listening to classes and occasionally responding to the professor's questions, distance learning participants receive information in three separate ways - by listening, watching and reading, while simultaneously completing mandatory tests and assignments. Thus, they engage between three and four times more than traditional schooling. Adding to that the full support of professors, it becomes clearer how real skills are acquired. Thus, with one to two hours a day, a huge improvement can be made. Successful distance learning programs begin with careful planning and complete by understanding the subject requirements and needs of students [6]. Appropriate technology can choose only after these elements have been thoroughly analyzed. Materials are not created spontaneous; they are created by the joint work of individuals and organizations. In fact, successful distance learning programs are based on systematic and joint work of students, teachers and support staff [7].

The task of distance learning at the university is to provide students with the opportunity to exercise the constitutional rights to education and professional qualification, advanced training regardless of gender, race, nationality, social and property status, etc. [8] With the help of the Internet, as a global computer network, and information and communication technology, today students who could not study in a traditional way due to some kind of disability, employment, geographical distance or time limit can study. There are several factors that are important in distance learning situations: a high level of student motivation, a strong work ethic, and strong student support measures usually result in success for distance learners [9].

3 METHODOLOGY

Survey of students' attitudes about distance learning, results of which are presented in this paper, was conducted in 2023. For the purposes of the research, a questionnaire was created via Google Forms. Potential respondents were students of all levels of study in the Republic of Serbia. The survey was conducted by convenience sampling method and all responses are anonymous and exclusively used for research purposes. In addition to general questions related to gender, age, level of study, material status, the questionnaire contained questions related to students' attitudes and preferences related to learning methods, teaching materials, learning tasks and projects.

4 RESULTS

The results presented are based on a sample of 51 students, where more than half of the respondents are female students (54.9%) The structure of the sample according to the basic characteristics is shown in Table 1. The average age of students who participated in the survey is 23.22 (SD=4.07), with the largest number of students surveyed being 21-23 years old (51%).

Table 1. Socio-demografic characteristics of respondents

Characteristics	Total (%)
Gender	
Female	54.9
Male	45.1
Age range	
<20	21.6
21-23	51.0
24-26	13.7
27-29	7.8
>30	3.9
Level of Education at present	
PhD	13.7
Master of Science	7.8
Undergraduate	78.4
Occupational status	
Student	80.4
Unemployed	2.0
Employed in Private Sector	2.0
Employed in Public Sector	15.6

The survey was mostly answered by undergraduate students. Their participation in the sample is 78.4%, while master's students are the least represented (7.8%). Also, 17.6% of respondents are employed, both in the private and in the public sector.

Regarding technical readiness for distance education, most respondents have average to good and good level of computer expertise, or precisely 74%. (Figure 1).

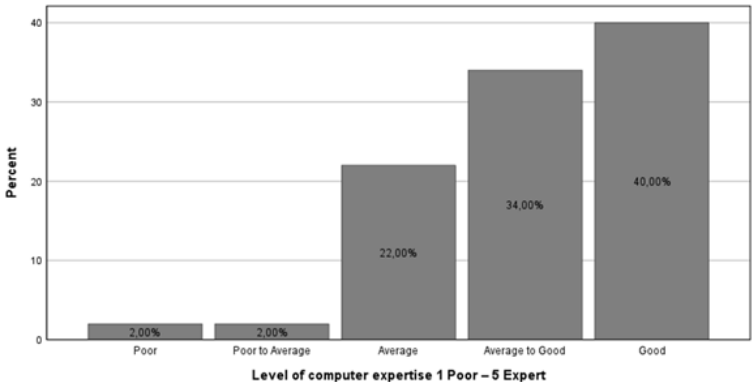

Figure 1. Level of computer expertise of respondents

The largest number of students (25.5%) declared that they participated in distance learning during four semesters. Students who had the opportunity to participate in distance learning evaluated the effectiveness of this form of education, whereby 48% of them rated the effectiveness of distance learning as averagely efficient to most efficient. (Figure 2).

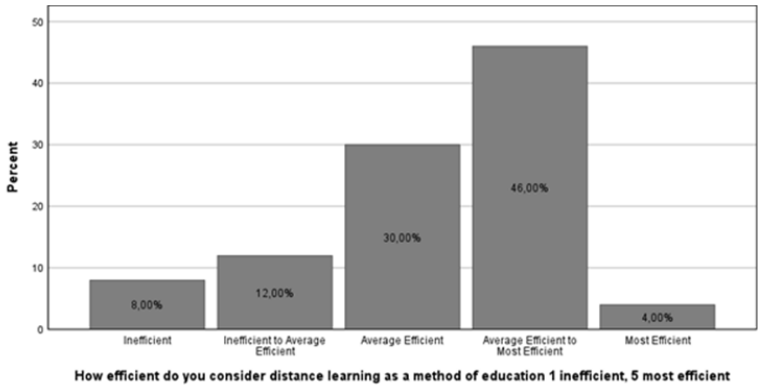

Figure 2 Evaluations of the effectiveness of distance learning

In order to examine the existence of interdependence between students' level of computer expertise and their ratings of distance learning efficiency, correlation analysis was applied. The obtained results, (Spearman's rho correlation coefficient equals 0,028; Sig. 0.849) point to the conclusion that the correlation between those two variables is direct, but weak and statistically insignificant.

Of the total number of respondents, 90% prefer face-to-face educational methods, while only 10% prefer distance learning. It is interesting to point out that all students (100%) at higher levels of study (PhD and Master of Science) prefer face-to-face methods of learning. 85.7% of students attending distance education programs prefer smaller groups of students (<30) and 41.2% of all respondents completely agree with the statement that they better learn the teaching materials through taking notes and reading the written contexts and texts.

5 CONCLUSIONS

The results of the conducted research show that, in addition to the dominance of classical learning methods, in the Republic of Serbia there is also an interest and need for organizing distance learning or combining it with the classical form of education. Distance learning is a challenge and a means to improve educational processes, as well as one of the foundations for new and better ways of managing knowledge. Intensive introduction of information technologies into educational processes has become a priority of modern higher education institutions around the world. The priority of higher education institutions in the Republic of Serbia must be the inclusion of information technologies into the education system, because there is an increasingly widespread awareness that the internet has greatly changed education. In the time to come, new technologies will make distance learning even better and more popular.

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